PepinNini Lithium Limited

ASX RELEASE 31 July 2019 **ASX:PNN**

JUNE 2019 QUARTER ACTIVITIES AND CASH FLOW REPORTS

- **Argentine Lithium Brine Project –** Evaporation simulation studies of a blended brine product from the Rincon and Incahuasi projects indicate the product would be an enriched brine evaporate with a concentration of 2.24% (22,400 parts per million(ppm)) lithium. The study used existing brine analytical results to simulate the blended product of the conventional evaporation process. Results are highly encouraging as 22,400ppm lithium is a high grade lithium product. An assessment of the blending potential is ongoing.

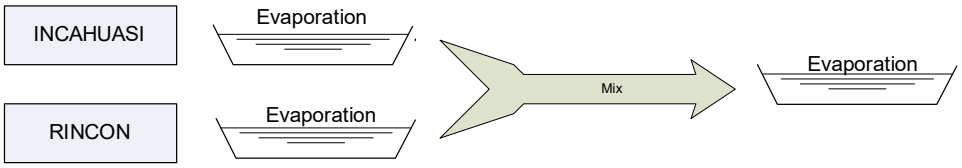

Figure 1 – Concentrated Brine Mix Pathway

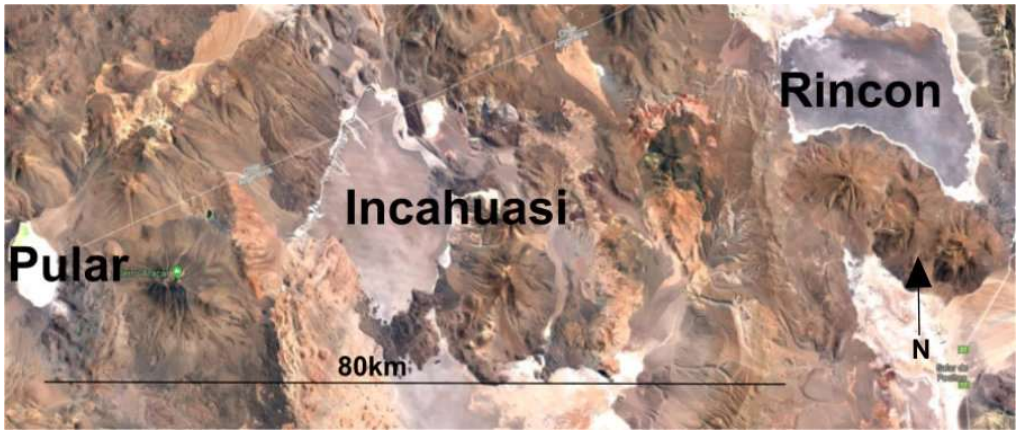

Figure 2 – Pular, Rincon and Incahuasi Projects

- **NiCul Minerals Musgrave Project –** negotiations have commenced to access highly prospective nickel targets prompted by renewed market interest in nickel
- Subject to certain conditions, an extension to the farm-in period until 31 December 2020 has been agreed with Rio Tinto
- **Corporate –** completion of fully underwritten entitlement issue raises $1.2m before costs
- **James Allchurch** - Non-executive Director appointed

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
James Allchurch
Non-Executive Director
Justin Nelson
Company Secretary

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Salta Province Projects

PepinNini Lithium Ltd's (PNN or the Company) wholly owned Argentine subsidiary PepinNini SA(PNN SA) holds nine mining licences (*mina*) totalling 20,840 hectares in the western part of Salta Province, NW Argentina. The properties are considered prospective for lithium brine aquifers associated with dried *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	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, brine simulation studies completed – blended brine testing to be undertaken
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, surface trenching sampling to be undertaken for blended brine testing, resource 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.

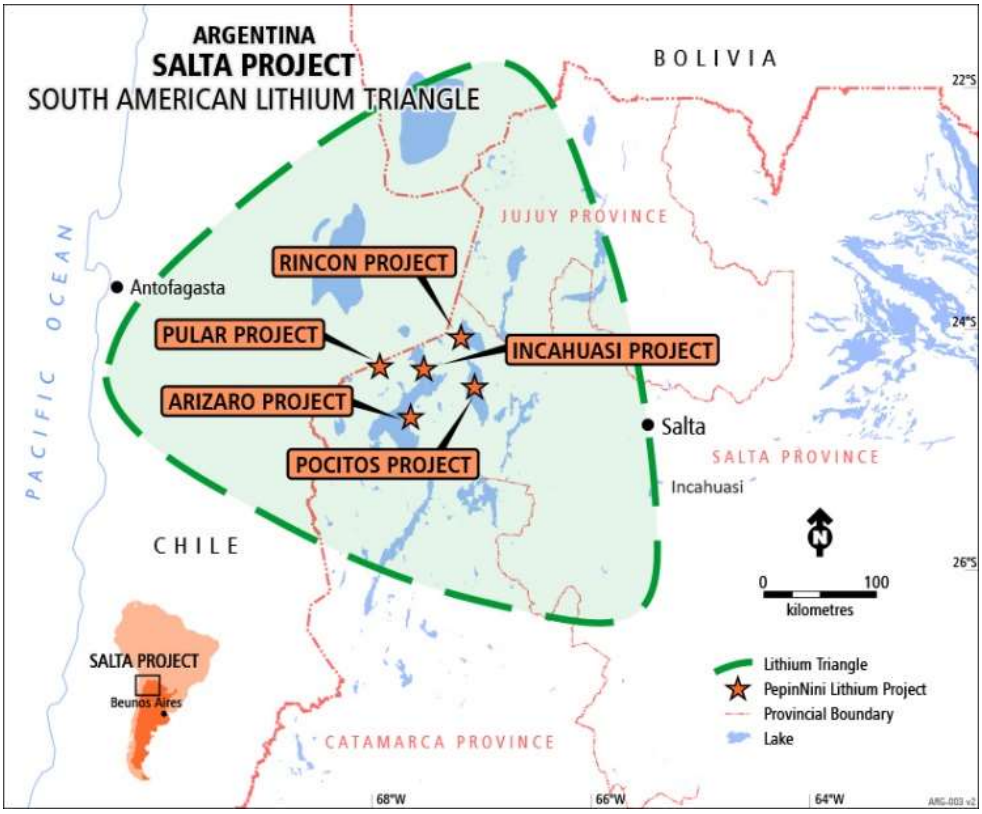

Figure 3 - The Lithium Triangle of South America

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.

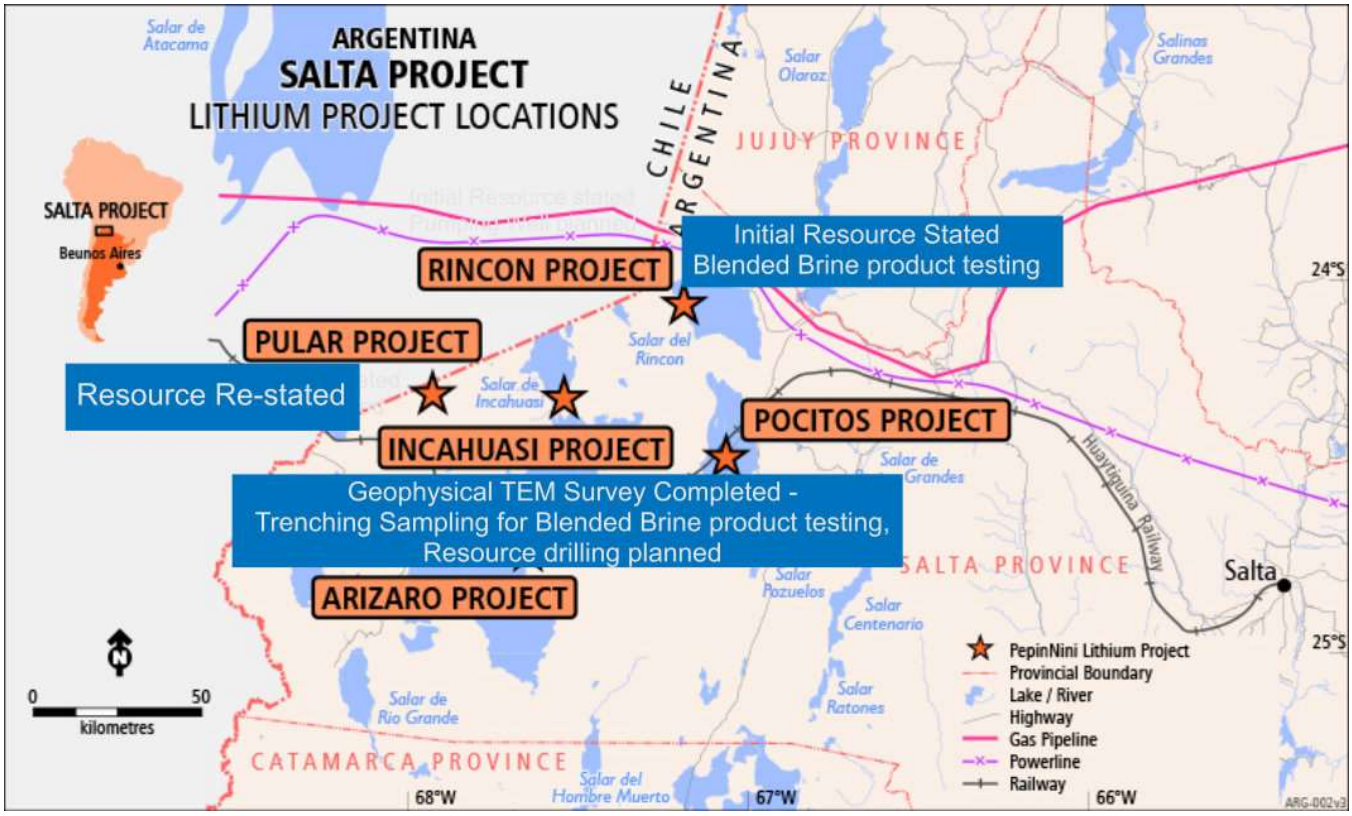

Figure 4 - Lithium Projects - Salta Province, Argentina.

Evaporation Studies – Rincon and Incahuasi Projects

During the June 2019 quarter, brine from the Rincon project was re-sampled and analysed. Analytical results of brine from this salar and results from previous owners of the Incahuasi project were used to simulate the product of conventional evaporation and concentration methodology. The shallow pit brine samples from Incahuasi Salar were collected by previous explorer Latin American Minerals Inc(TSX-V:LAT13 Nov 2008 - Canadian National Instrument 43-101)([1]) and Lithea Inc reported by Ekeko August 2011([2]).

The study indicated and existing sample results confirm that Incahuasi brine has the highest calcium concentration and Rincon brine has the highest sulphate concentration. A mix of Incahuasi and Rincon brines was simulated resulting in precipitation of calcium sulphate($CaSO_4$) or gypsum. The simulation indicates that contaminates reduced in this way would create an enriched brine of 2.24% Lithium (22,400ppm lithium) with a very low magnesium:lithium ratio of 1.02:1.

Table 1 - Final Brine Composition – Rincon Incahuasi Blend

	H_2O Water %	Li Lithium %	Na Sodium %	K Potassium %	Ca Calcium %	Mg Magnesium %	Cl Choride %	SO_4 Sulphate %	BO_2 Borate %
Final Brine	52.09	2.24	0.09	0.21	8.87	2.28	33.79	0.05	0.34

Figure 5 – Examples of Evaporation Ponds and Harvesting of Concentrate

The study commenced with evaporation pathway testing by computer simulation for each salar project using the Company's brine sample results and environmental data from the geographic area. Next, three scenarios of different brine proportion mixes were undertaken. Scenario 1 brine blend of the most compatible brines from Rincon and Incahuasi Salares was simulated resulting in a dramatic increase in the lithium recovery due to the respective brine chemistry. Brine from the Pular project was not considered to have a suitable chemistry for blending. The comparison results are tabulated below:

Table 2 – Project Results Brine Evaporation and Concentration Simulations

Brine	Li Lithium %	Na Sodium %	K Potassium %	Ca Calcium %	Mg Magnesium %	Cl Choride %	SO_4 Sulphate %	BO_2 Borate %	Mg:Li
Rincon	0.82	1.94	3.81	<0.01	2.44	3.78	29.79	3.16	8:1
Incahuasi	0.60	<0.10	2.17	12.00	2.80	30.00	-	1.10	5:1
Blend – Scenario 1	2.24	0.09	0.21	8.87	2.28	33.79	0.05	0.34	1.02:1

The study was carried out by International Expert Engineers Ad-Infinitum who have contributed amongst others to the feasibility study by Galaxy for the Sal de Vida project, Salar del Hombre Muerto(ASX:GXY 15 May 2018) and Scoping Study for Salt Lake Potash(ASX:SO4, 28 August 2016).

During the next quarter, surface brine samples from trenches(Figure 6) on Incahuasi Salar will be collected and blended with brine samples from Rincon Salar under laboratory conditions using a wind tunnel to validate the simulation pathway results.

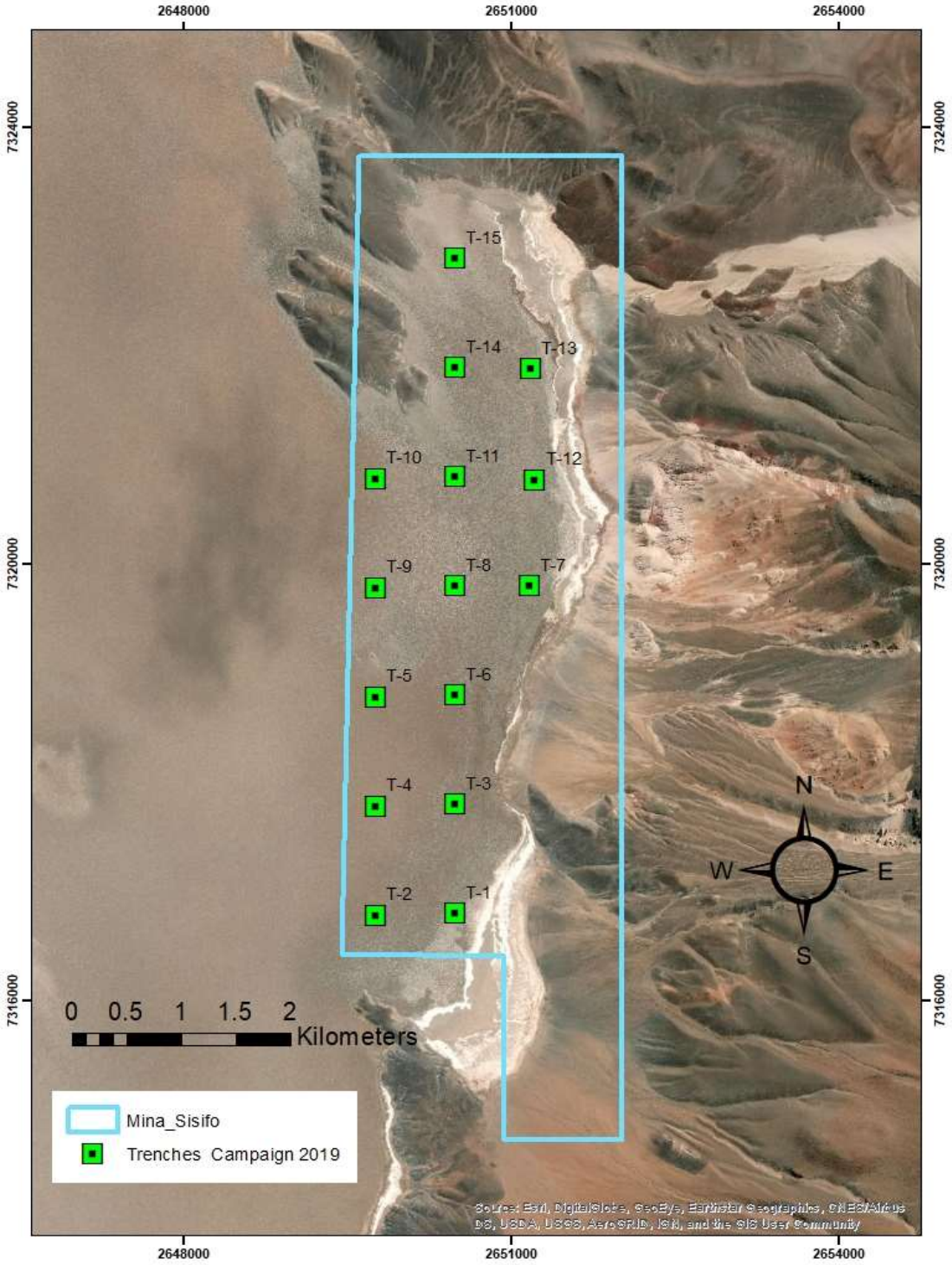

Figure 6 – Incahuasi Salar – Proposed Trench sample locations

Lithium Project Schedule

Tabulated below are exploration activities achieved to 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
June 2019	Evaporation Concentration simulation studies	Evaporation Concentration simulation studies	Evaporation Concentration simulation studies	Blended brine concentration simulation studies for project viability and planning
September 2019	Pumping testing	Trench sampling for laboratory testing of blended brine evaporation and concentration process	Laboratory testing of blended brine evaporation and concentration process	Evaluation of brine blend laboratory testing of evaporation process -
December 2019	Conversion to production well from pumping testing	Exploration drilling and pumping testing	Pilot testing for LCE test production	Scoping study three projects combined
March 2020	Pilot testing for LCE test production	Resource statement	Pilot evaporation pond construction	Seek strategic partner for offtake agreement and Project funding Pre-Feasibility study for LCE production -
June 2020	Pilot evaporation pond construction	Pilot testing for LCE test production	Evaporation & concentration	Production plant construction -
September 2020	Evaporation & concentration	Pilot evaporation pond construction transport planning and roadway construction	Evaporation & concentration	Production plant construction -
December 2020	Evaporation & concentration	Evaporation & concentration	Evaporation & concentration	Production plant construction
March 2021	Evaporation & concentration	Evaporation & concentration	Evaporation & concentration	
June 2021	Evaporation & concentration	Evaporation & concentration	LCE production	Marketing LCE
September 2021	LCE production	Evaporation & concentration		Marketing LCE
December 2021	LCE production	LCE production	LCE production	Sale LCE

Argentina Copper-Gold Project

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 7). 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.

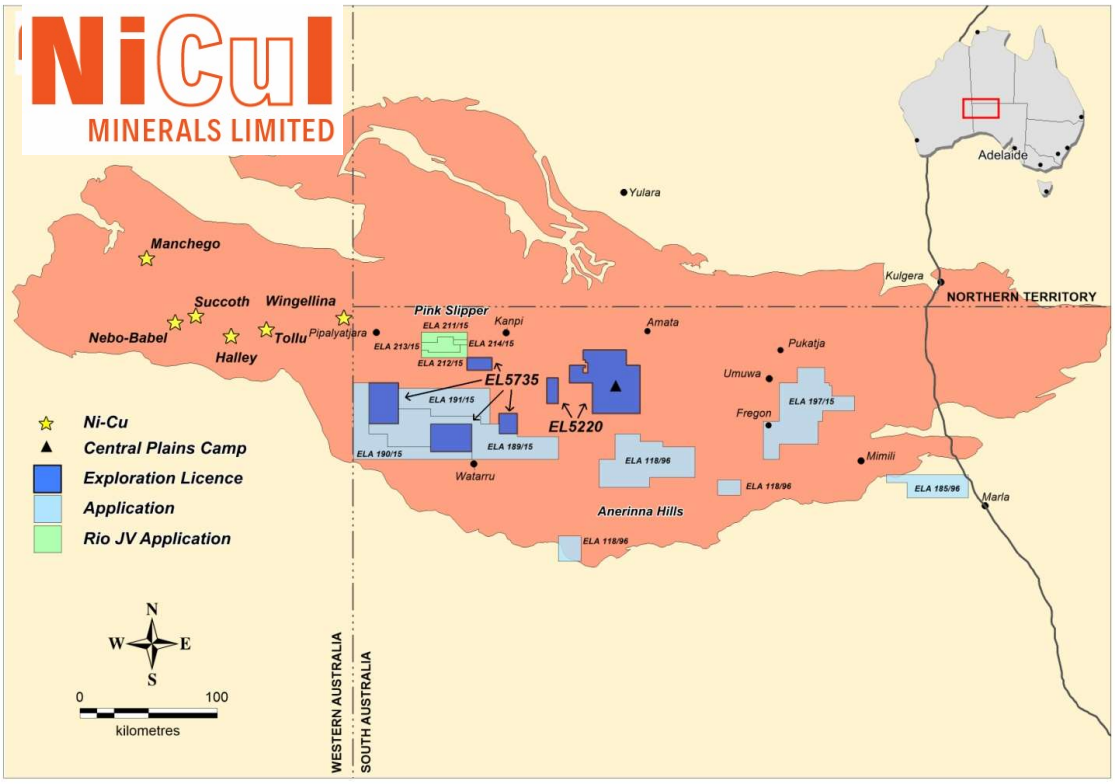

Figure 7: Musgrave Project locations, South Australia

Farm-in to Rio Tinto (South Australia)

NiCul Minerals Ltd as operator on behalf of the project participants have been informed by the Anangu Pitjantjatjara Yankunytjatjara(APY) Lands Executive Board that they have approved progressing exploration licence application ELA2015/00214 to facilitate the granting of an exploration deed with the traditional owners. This ELA covers 37km^2 and includes the Pink Slipper geophysical target. Subject to certain conditions, an extension to the farm-in period to 31 December 2020 has been agreed with Rio Tinto to provide additional time for the agreement of the exploration deed and to drill test the Pink Slipper geophysical target(Figure 8).

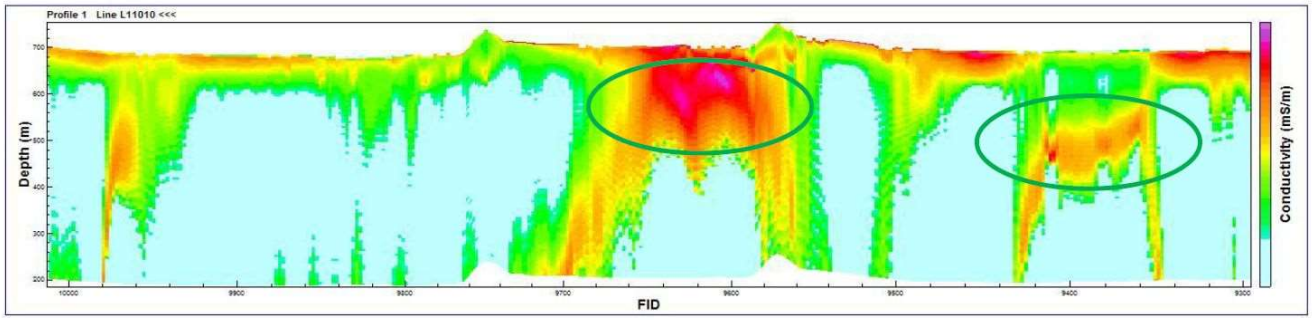

Figure 8 – Pink Slipper Geophysical Target ELA 2015/214*(courtesy CSIRO Spectrem EM Survey Mar 2019([3]))*

TENEMENT SCHEDULES

Australia

Tenement	Tenement Name	Area Km²	JV	PepinNini Interest	Grant Date
South Australia					
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	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	La Maderita	*Mina*	Salar de Arizaro	4-Aug-17	17-Oct-14	3,000	PNN SA 100%
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**	

References:

([1])TSX-V:LAT 13 Nov 2008 – Latin American Minerals Inc. acquires Lithium project in Argentina following positive initial sampling program - Sampling and Analytical Protocols: Sampling and analytical protocols were implemented and supervised by or under the direction of Dr. Waldo Perez, the Corporation's internal Qualified Person as defined by National Instrument 43-101. All of the lithogeochemical samples were collected by geologists taking into account the nature of the material being sampled. The crust sample was collected with a hammer from surface, weighted between 2 to 4 kilograms and was collected in a plastic bag, tagged with a pre-numbered ticket and tightly closed with plastic tape. The brines samples were collected in a brand new plastic bottle filled atop containing 1 litre of brine and tightly closed. All samples were tagged with a prenumbered ticket and stored in a secured location at the base camp for no more than 10 days. The brines were stored in a dark room. The samples were shipped by courier to Alex Stewart Assayers Argentina S.A. ("ASAA") laboratories in Mendoza (Argentina). ASAA is an ISO 9001-2000-certified laboratory with headquarters in England. The crust samples were grinded to #200 mesh, then split and dissolved in hot water. A total of 500 ml of sample have been separated for ICP analysis. The brine samples were filtered and read directly by ICP analysis. All samples were assayed for 13 elements by ICP. Accuracy and precision of results is tested through the systematic inclusion of blanks and duplicates.

([2])Technical Report Salar de Incahuasi, Salta Argentina, Dr Ricardo N Alonso MAusIMM, Walter R Rojas, August 2011 – Lithea Inc.

([3]) June 2018 reference to AEM survey Musgrave Province in which PepinNini participated(ASX:30 January 2017) https://www.researchgate.net/publication/328138882_Peeling_back_the_cover_on_an_ancient_landscape-AEM_in_the_Musgrave_Province_South_Australia

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.

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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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

+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	June 2019

Consolidated statement of cash flows		**Current quarter $A'000**	**Year to date (12 months) $A'000**
1.	**Cash flows from operating activities**		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(201)	(1,432)
	(b) development		
	(c) production		
	(d) staff costs	(56)	(225)
	(e) administration and corporate costs	(73)	(311)
1.3	Dividends received (see note 3)		
1.4	Interest received	1	1
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**	**(329)**	**(1,967)**

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 (12 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	1,140	2,645
3.2	Proceeds from issue of convertible notes	-	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
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**	**1,140**	**2,847**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	107	38
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(329)	(1,967)
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)	1,140	2,847
4.5	Effect of movement in exchange rates on cash held		
4.6	**Cash and cash equivalents at end of period**	**918**	**918**

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	418	107
5.2	Call deposits	500	
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)**	**918**	**107**

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	98
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 $89,622.44
2. Chairman, Managing, Finance and Non-Executive Directors' Superannuation $8,454.29

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	175
9.2	Development	
9.3	Production	
9.4	Staff costs	
9.5	Administration and corporate costs	125
9.6	Other (provide details if material)	
9.7	**Total estimated cash outflows**	**300**

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	-			-
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: ...31 July 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.