



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
Non-Executive Director
Philip Clifford
Non-Executive Director
James Allchurch
Non-Executive Director
Justin Nelson
Company Secretary

CONTACT

PepinNini Minerals Limited
ABN 55 101 714 989

Level 1, 6/68 North Terrace
Kent Town SA 5067
TEL: +61 (0)8 8218 5000
FAX: +61 (0)8 8212 5717
EMAIL: admin@pepinnini.com.au

FURTHER INFORMATION

Ms Rebecca Holland-Kennedy
Managing Director
TEL: +61 (0)8 8218 5000
www.pepinnini.com.au

SEPTEMBER 2019 QUARTER ACTIVITIES AND CASH FLOW REPORTS

- **Pink Slipper Ni-Cu Prospect progress** Anangu Pitjantjatjara Yankunytjatjara (APY) Executive Board has requested that PepinNini participate in consultation with the traditional owners for agreement of an Exploration Deed for Exploration Licence Application (ELA) 2015/214 in the Musgrave Province of South Australia. The execution of an Exploration Deed is required to enable the ELA, which contains the Pink Slipper Ni-Cu sulphide target, (Figure 1), to be granted.
- **Argentine Lithium Brine Project** – Brine sampling from 15 surface trenches on the Incahuasi Salar Project indicate that brine is very close to the surface with lithium grades of up to 203mg/l. Blended brine studies using brine from Rincon and Incahuasi indicated an enriched brine evaporate with a concentration of 3.05% (30,500 parts per million(ppm)) lithium and very low magnesium (1.6:1 Mg:Li) could be expected.

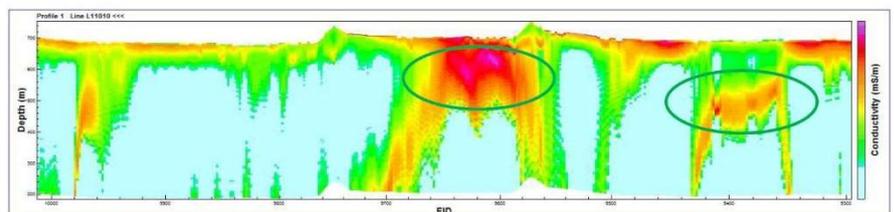


Figure 1 – Pink Slipper Geophysical Target on ELA 2015/214 (courtesy CSIRO Spectrem EM Survey Mar 2019 ref: PepinNini ASX announcement 31 July 2019)

- **Corporate** – successfully retained all Board members against a Corporations Act 249D notice from a small group of shareholders not based in Australia..
- **Share Purchase Plan** announced ASX 29 October for eligible shareholders to subscribe for new shares up to the value of \$30,000.
- **Board Restructure** – Director appointment (announced 24 June 2019) and change of Director role (announced 29 October 2019) transforming the PepinNini board to a low cost, Non-executive Director majority board, while retaining gender balance and compliance with Corporate Governance Principles of best practice.

AUSTRALIA



ARGENTINA



Musgrave Province Projects

PepinNini Lithium Ltd, (PepinNini, PNN, the Company) hold 100% of the Musgrave Project which includes 8 exploration licence applications and 2 granted exploration licences in the name of NiCul Minerals Ltd (NiCul), a wholly owned subsidiary of the company. The tenure covers 14,003 km² of the Musgrave Province within South Australia. (see Figure 2). NiCul are targeting Nickel- Copper-Cobalt and PGE 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.

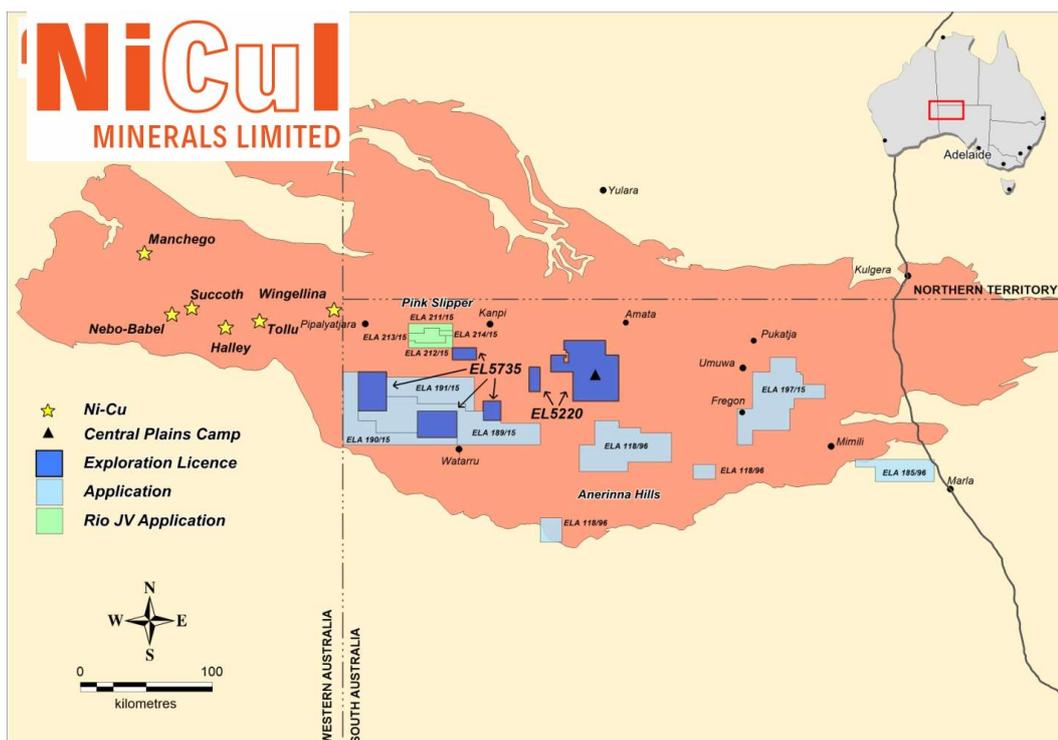


Figure 2: Musgrave Project locations, South Australia

Rio Tinto Farm-in(South Australia)

PepinNini also participate in the Rio Tinto Exploration Pty Ltd(Rio Tinto) Farm-in Joint Venture (FJVA) which commenced in June 2009. Under the agreement NiCul will earn 51% of four redesigned exploration licence areas covering 614 km² which includes the Pink Slipper Target (Figure 2). The Pink Slipper geophysical target that was first recognised in 2000 and recently re-flown by CSIRO in March 2019, (Figure 1). The redesigned blocks (ELAs 2015/211-214) were configured to better accommodate indigenous heritage issues with the aim to improve land access negotiation with Traditional Owners, the Anangu Pitjantjatjara Yankunytjatjara (APY).

During the quarter PepinNini presented to the APY Executive Board in Umuwa on behalf of the FJVA and has been informed by the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands Executive Board that they have approved progressing exploration licence application ELA2015/214 to facilitate the granting of an exploration deed with the traditional owners. This ELA covers 37km² and includes the Pink Slipper geophysical target (Figure 1).

Salta Province Projects

PepinNini's 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 (Table 1). 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 completed 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)

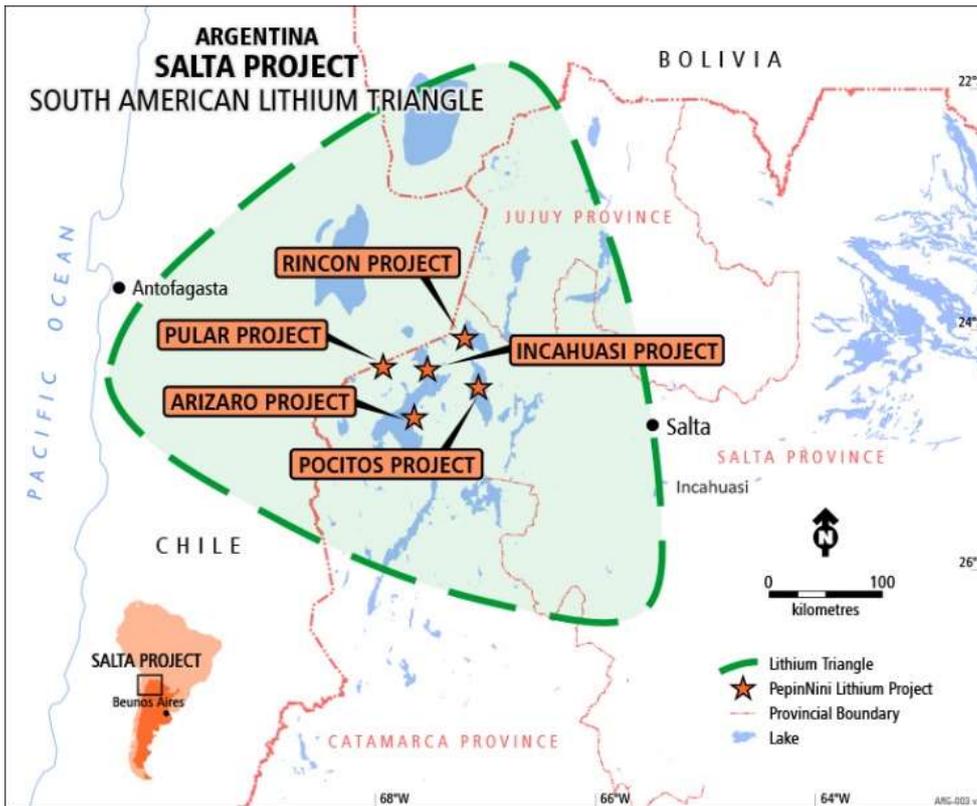


Figure 3 - The Lithium Triangle of South America

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)

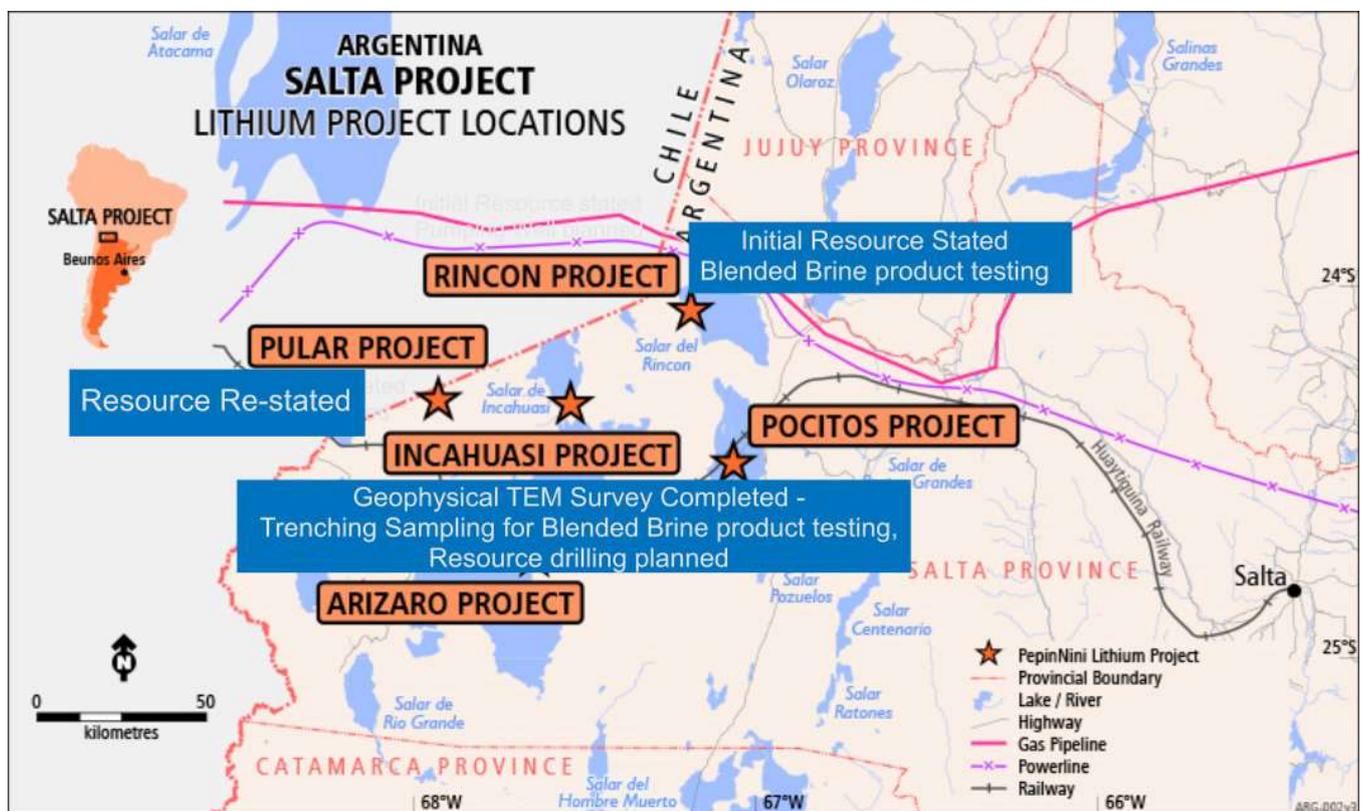


Figure 4 - Lithium Projects - Salta Province, Argentina.

Evaporation Studies – Rincon and Incahuasi Projects

During the September 2019 quarter, brine sampling from 15 surface trenches on the Incahuasi Salar Project was completed (Photo 1). Brine is very close to the surface (0.37 to 0.5m) within a coarse halite layer of high porosity up to 0.85m thick. Analysis of the brine returns lithium grades up to 203mg/l (Figure 7).



Photo 1 – Brine Sampling Incahuasi Salar

Blended brine simulations of brine from the Rincon and Incahuasi Projects (Figures 5 and 6) were repeated by the chemical engineering consultancy Door2Design (Salta) confirming and improving the results announced ASX:16 July 19 which indicate an enriched brine evaporate with a concentration of 3.05% (30,500 parts per million(ppm)) lithium and very low magnesium contaminate at 1.6:1 Mg:Li (Table 2).

These results confirm the potential of a high grade lithium product from blended brines using conventional evaporation:concentration methodology (Figure 8). The next step will be wind tunnel evaporation testing using the brine samples taken from Rincon and Incahuasi projects.

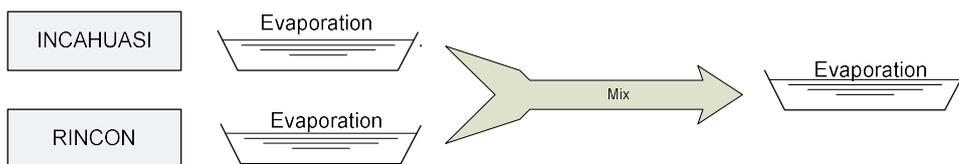


Figure 5 Concentrated Brine Mix Pathway



Figure 6 – Rincon and Incahuasi Projects

Table 2 - Final Brine Composition – Rincon Incahuasi Blend

	H ₂ O Water %	Li Lithium %	Na Sodium %	K Potassium %	Ca Calcium %	Mg Magnesium %	Cl Chloride %	SO ₄ Sulphate %	BO ₂ Borate %
Final Brine	59.61	3.05	0.12	0.11	0.47	5.04	31.42	0.005	0.00003

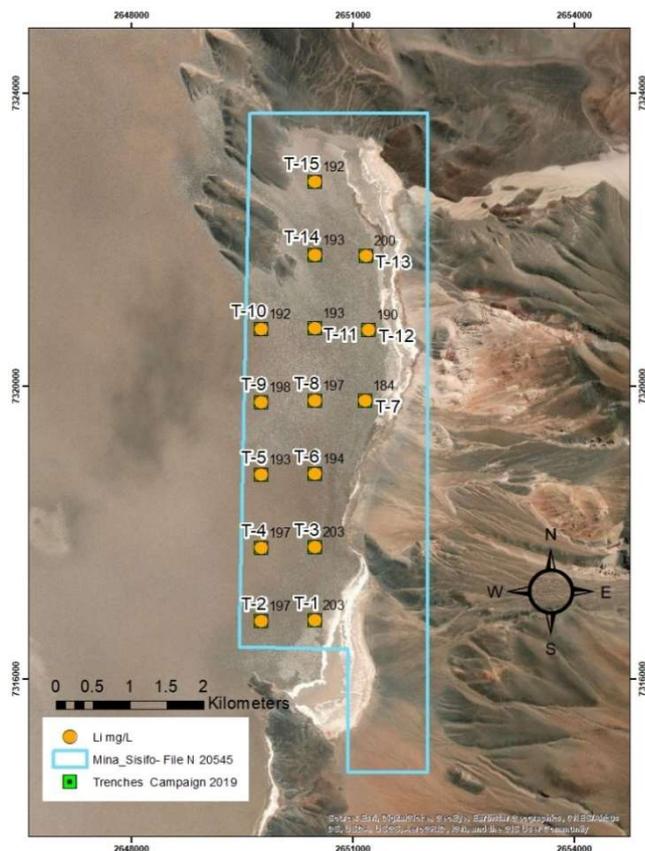


Figure 7 – Brine Trenching locations and results



Figure 8 – Examples of Evaporation Ponds and Harvesting of Concentrate

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
September 2019	Computer simulations brine blending for evaporation/concentration	Trench sampling for laboratory testing of blended brine evaporation and concentration process	Computer simulations brine blending for evaporation/concentration	Evaluation of Computer brine blending simulations and project potential
December 2019	Project evaluation	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
March 2020	Project evaluation	Exploration drilling and pumping testing and Resource statement	Pumping testing	Scoping study for two or three projects combined
June 2020	Pilot testing for LCE test production	Pilot testing for LCE test production	Pilot testing for LCE test production	Seek strategic partner for offtake agreement and Project funding Pre-Feasibility study for LCE production -
September 2020	Pilot evaporation pond construction	Pilot evaporation pond construction	Pilot evaporation pond construction	Production plant construction transport planning and roadway construction -
December 2020	Evaporation & concentration	Evaporation & concentration	Evaporation & concentration	Production plant construction
March 2021	Evaporation & concentration	Evaporation & concentration	Evaporation & concentration	Production plant construction
June 2021	Evaporation & concentration	Evaporation & concentration	Evaporation & concentration	Marketing LCE
September 2021	Evaporation & concentration	Evaporation & concentration	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.

TENEMENT SCHEDULES

Australia

Tenement	Tenement Name	Area Km ²	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 1996/118	Anerinna Hills	2,415		100%	application
ELA 1996/185	Willugudinna	823		100%	application
ELA 2009/367	Mt Caroline West	46		100%	application
ELA 2009/368	Hanging Knoll	34		100%	application
ELA 2015/189	Katalina	2,360		100%	application
ELA 2015/190	Mt Agnes	1,342		100%	application
ELA 2015/191	Krewinkel Hill	1,256		100%	application
ELA 2015/197	Ironwood Bore	2,202		100%	application
ELA 2015/211	Tjintalka	184	JV02	earning 51%	application
ELA 2015/212	Kapura	160	JV02	earning 51%	application
ELA 2015/213	Jalukana	234	JV02	earning 51%	application
ELA 2015/214	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	27-Sep-10	20-Sep-11	18	PNN SA 100%
	Cu-Au	Mina	Santa Ines	18-Jul-13	28-Aug-14	3,000	PNN SA 100%
	Cu-Au	Mina	Santa Ines	11-Oct-14	30-Nov-15	2,609	PNN SA 100%
	Cu-Au	Mina	Santa Ines	11-Oct-14	9-Sep-15	511	PNN SA 100%
						6,138	
	Li Brine	Mina	Salar de Pular	2-Jun-16	22-Feb-17	657	PNN SA 100%
	Li Brine	Mina	Salinas Grandes	2-Jun-16	22-Jun-16	2,495	PNN SA 100%
	Li Brine	Mina	Salar de Arizaro	2-Jun-16	22-Jun-16	3,004	PNN SA 100%
	Li Brine	Mina	Salina del Rincon	2-Jun-16	22-Jun-16	1,586	PNN SA 100%
	Li Brine	Mina	Salar Pocitos	2-Jun-16	22-Jun-16	2,970	PNN SA 100%
	Li Brine	Mina	Salar Pocitos	17-Aug-16	19-Sept-16	3,000	PNN SA 100%
	Li Brine	Mina	Salar de Arizaro	4-Aug-17	17-Oct-14	3,000	PNN SA 100%
	Li Brine	Mina	Incahuasi Salar	22-Feb-18	13-Jun-18	2,000	PNN SA 100%
	Li Brine	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.

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:

Rebecca Holland-Kennedy
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 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	September 2019
-----------------------	-----------------------

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation	(251)	(251)
(b) development		
(c) production		
(d) staff costs	(65)	(65)
(e) administration and corporate costs	(147)	(147)
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	(462)	(462)

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 (3 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	-	-
3.2 Proceeds from issue of convertible notes	-	-
3.3 Proceeds from exercise of share options	-	-
3.4 Transaction costs related to issues of shares, convertible notes or options		
3.5 Proceeds from borrowings		
3.6 Repayment of borrowings	(122)	(122)
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	(122)	(122)

4. Net increase / (decrease) in cash and cash equivalents for the period		
4.1 Cash and cash equivalents at beginning of period	918	918
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(462)	(462)
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)	(122)	(122)
4.5 Effect of movement in exchange rates on cash held		
4.6 Cash and cash equivalents at end of period	334	334

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	334	418
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)	334	918

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	101
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	\$92,005.22
2. Chairman, Managing, Finance and Non-Executive Directors' Superannuation	\$8,574.27

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	

Mining exploration entity and oil and gas exploration entity quarterly report

8. Financing facilities available <i>Add notes as necessary for an understanding of the position</i>	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 October 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.