



#### 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

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 ASX RELEASE

27 November 2019

Pe

ASX:PNN

INN

## EXPLORATION UPDATE Lithium Project Argentina

Following announcements made by PepinNini(PNN, the Company) on ASX PNN:16 July 2019 and subsequently on ASX PNN:4 October 2019, a total of 400litres of brine from the Incahuasi Project has been prepared for laboratory bench testing of brine blending.

Subject to funding, samples from monitoring boreholes from Rincon Salar will be taken early in 2020. The actual laboratory testing would follow for a period of 3 months.



Photo 1 – Wind Tunnel and Evaporation Testing

The testing will involve a laboratory scale wind tunnel to create accelerated evaporation conditions to enrich brine samples. It is critical to calculate the optimum pre-concentration point for blend composition which will optimise the lithium concentration for blending the brines and reduce the transport cost of brine to the evaporation ponds. The testing is to approximate actual evaporation and concentration of lithium brine to produce lithium carbonate and the aim is to provide actual data on a blended product following computer simulations of blended brine product reported ASX PNN:16 July and 4 October 2019.

The simulated brine blend product is high grade due to the unique chemistry of the two projects, see below for results reported ASX:4 October 2019.

# Table 1 - Final Simulation Brine Composition - Rincon IncahuasiBlend

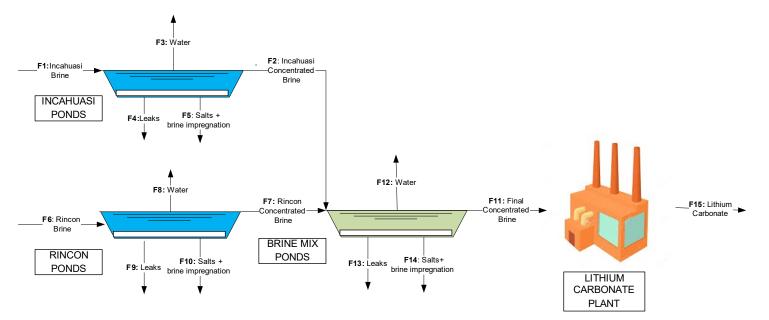
	H₂O	Li	Na	K	Ca	Mg	CI	SO₄	BO₂
	Water	Lithium	Sodium	Potassium	Calcium	Magnesium	Choride	Sulphate	Borate
	%	%	%	%	%	%	%	%	%
Final Brine	59.61	3.05	0.12	0.11	0.47	5.04	31.42	0.005	0.00003

The computer simulation studies using the concentrated brine composition from Incahuasi and Rincon Projects demonstrated a potential evaporation pathway to optimise the mix and achieve the highest lithium concentration. (ASX PNN: 16 July and 4 October 2019)

Figure 2 presents the prospective process flow diagram for a production of lithium carbonate from brines, where brines are concentrated by evaporation in solar ponds and then they are fed to a lithium carbonate plant.

The proposed process of brine concentration in solar evaporation ponds is divided into three areas: Incahuasi Ponds, Rincon Ponds and Mix Brine Ponds.

### Figure 2 Flow diagram for the proposed process



### Figure 3 – Examples of Evaporation Ponds and Harvesting of Concentrate



This announcement regarding 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.

### 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 <u>www.pepinnini.com.au</u>



27 November 2019