



ASX RELEASE

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ASX: PNN



ABOUT:

PepinNini Minerals Limited is a diversified ASX listed Exploration Company focused on developing and discovering major new mineral deposits. The Company has secured strategically located exploration tenements in the Musgrave Province of South Australia and the Georgetown Inlier of North Queensland. A portfolio of prospective exploration tenements has been established in Argentina with targets of Lithium, Copper and Gold

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EXPLORATION COMMENCES SALTA LITHIUM PROJECT ARGENTINA

PepinNini Minerals is pleased to announce that field exploration activity has commenced within three mining leases(Mina) of the eight granted Mina comprising the Salta Lithium Project in Salta Province Argentina.

Salar(Salt Lake)	Mina
Salar de Pular	Sulfa 1
Salar de Arizaro	Ariza sur 1
Salar Pocitos	Tabapocitos 02

PepinNini has established an exploration team based in Salta and preliminary brine samples will be collected from pits dug into the salars according to pre-designed and agreed methods with control and duplicate samples to ensure sample integrity. Samples and duplicates will be analysed at internationally registered laboratories.



Figure 1 - Brine Sample Locations Preliminary Exploration - Lithium Project - Salta Province, Argentina.











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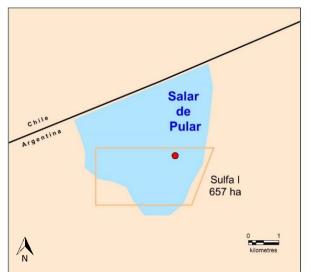




Figure 2:Mina Sulfa 1 on Salar de Pular to be sampled

Mina Sulfa 1(*Figure 2*) located on Salar de Pular is to be sampled. There have been historic Lithium Brine grades of 560 and 1,620 mg/l reported from samples taken from the Salar in 1980⁽¹⁾. Red dots indicate historic lithium brine occurrence locations.

This preliminary sampling will assist prioritising and planning of exploration programs for each mina. It is anticipated that further exploration will commence in September and depending on the unique geology and hydrogeology of each salar could involve:

- Field reconnaissance, pit sampling and mapping
- Ground geophysics
- Trenching and groundwater (brine) sampling
- Drilling, core and groundwater analysis and downhole geophysics
- Aquifer testing for porosity and permeability
- Pump testing for aquifer flow and recharge rates

Saline-enriched aquifer layers will be the target of exploration; these can be very close to surface as is the case with mature (evaporite dominated) salars or at greater depth in the case of immature(clastic dominated) salars which may or may not display surface salts.

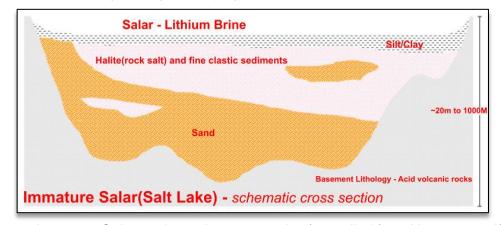


Figure 3: Immature Salar - schematic cross section (compiled from Houston et al(2010)⁽⁴⁾)











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Figure 3 shows a schematic cross-section over an immature salar, with thicker sedimentation covering the saline layers composed of rock salt and fine clastic sediments such as silt and clay.

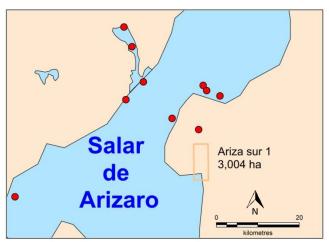




Figure 4: Mina Ariza Sur on Salar de Arizaro to be sampled

Samples will be taken from Salar de Arizaro. This salar is reported by Houston et al (2011)⁽²⁾ to be an immature salar(*as per figure 3*) sharing the same characteristics of Cauchari and Salinas Grandes to the north east. Lithium grades reported from this salar by Houston et al (2011)⁽²⁾ average 80mg/l and potassium 4,000 mg/l, however exploration on this very large salar (1,600sqkm) has been limited. This salar is also rimmed by active volcanoes that are believed by Ricardo Alonso⁽³⁾, Universidad Nacional de Salta, to create potential for brine concentration.

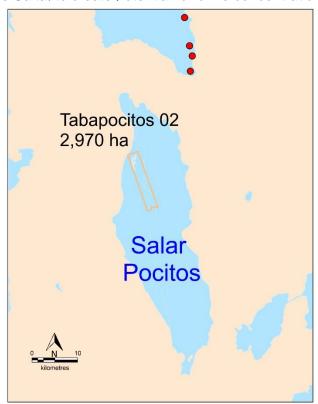




Figure 5 Mina Tabapocitos 02 located on Salar Pocitos to be sampled











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Mina Tabapocitos 02 located on Salar Pocitos will be sampled. This salar is considered an immature salar (*as per figure 3*) and historic data reported by Houston et al⁽²⁾ records average grades of lithium 90mg/l and potassium 4,800mg/l.

References

- ¹ Nicolli, H., Suriano, J., Kimsa, J. y Brodtkorb, A. (1980). *Geochemical characteristics of brines in evaporitic basins, Argentine Puna.* 26th. Int. Geol. Congr. Paris, S. 10, 1.0\.0094.
- ² John Houston, Andrew Butcher, Peter Ehren, Keith Evans and Linda Godfrey; *The Evaluation of Brine Prospects and the Requirement for Modifications to Filing Standards*, Society of Economic Geologists Inc 2011, *Economic Geology*. V106 pp 1225-1239.
- ³ Alberto Ovejero Toledo, Ricardo N. Alonso, Teresity del V.Ruiz y Alicia G Quiroga; *Evapofacies Halítica en el Salar del Rincón, Departmento Los Andes, Salta*. Revista de la Asociación Geologica Argentina 64 (3) 493 -500(2009)
- ⁴ Houston, J., Ehren, P., *NI43-101 Report on the Olaroz Project, Jujuy Province, Argentina for Orocobre Ltd*, April 30, 2010.

PepinNini acknowledges and wish to clearly advise investors that Lithium Brine Projects are a liquid resource and as such they are clearly NOT covered under the current JORC Code 2012 for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The company will however endeavour to report project results at the same professional standard expected in the spirit of the code.