Catalogue of **Advanced Lithium Projects**

Argentina unida

Ministerio de Desarrollo Productivo Argentina

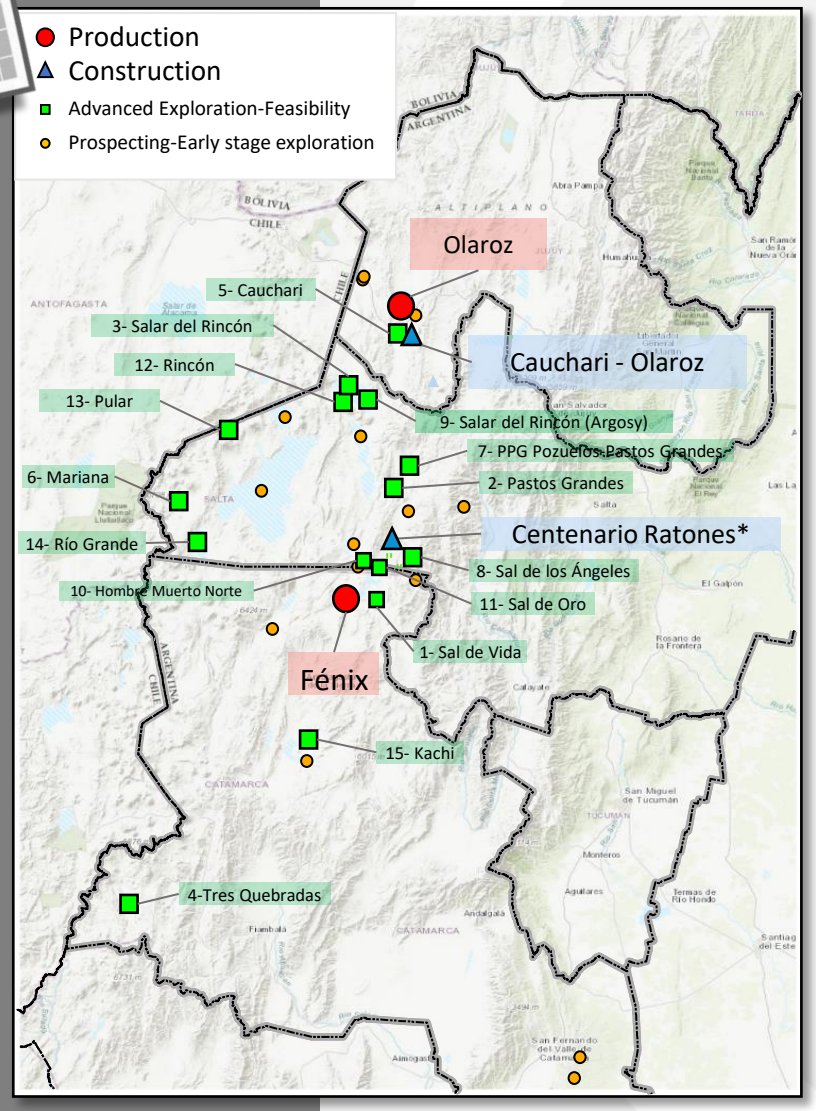
Disclaimer

This publication of the National Government aims to display information from third parties on the exploratory results of advanced projects and the mining geological potential of the country. The information is obtained through diverse sources, mainly from public access portals of the operator/controller companies and from technical reports published by them on various websites under international standards aimed at guaranteeing a greater degree of reliability. In some cases the data are estimates, when this is the case, it is pointed out and indicated in the footer.

For more information on the legal, social and / or environmental status of the projects, the interested parties should consult the corresponding provincial authorities since the mines are private assets of the Nation or of the Provinces, depending on the territory in which they are located (according to Articles 124 and 75 subsection 12 of the NATIONAL CONSTITUTION, and Article 7 and concordant of the NATION MINING CODE, approved by Law No. 1919).

The SECRETARY OF MINING is not responsible for the misuse of this information.

Catalogue of
ADVANCED LITHIUM PROJECTS



*Construction on hold

1- Sal de Vida
2- Pastos Grandes
3- Salar del Rincón
4- Tres Quebradas
5- Cauchari
6- Mariana
7- PPG (Pozuelos Pastos Grandes)
8- Sal de los Ángeles
9- Salar del Rincón (Argosy)
10- Hombre Muerto Norte
11- Sal de Oro
12- Rincón
13- Pular
14- Río Grande
15-Kachi

SAL DE VIDA

Antofagasta de la Sierra Catamarca

4025 m.a.s.l.

LOCATION

25° 19' 48" Latitude South

66° 52' 48" Longitude West

COMMODITY

Li

MINERALIZATION TYPE

Brine deposit

LOCAL OPERATOR

Galaxy Lithium (Sal de Vida) S.A.

COMPANY

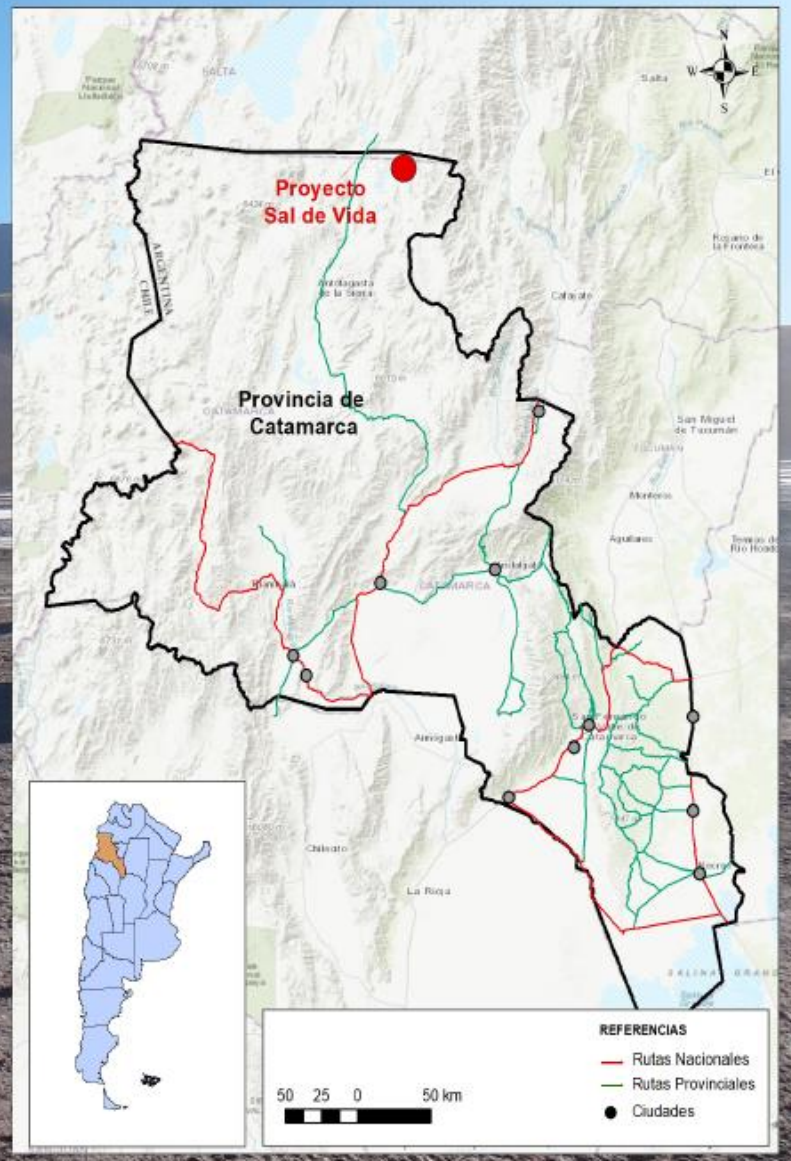
Galaxy Resources Ltd.

RESERVES

	GRADE (%)	MINERAL CONTENT (Tons)
Proven	770	2,198,000
Probable	-	-

RESOURCES

	GRADE (ppm)	MINERAL CONTENT (Tons)
Measured	770	2,198,000
Indicated	717	2,583,000
Inferred	706	376,000



SAL DE VIDA

LOCATION (*25° 19′ 58′′ Lat. S; 66° 52′ 44′′ Long. W*)

The Sal de Vida project is located about 1,400 km northwest of Buenos Aires, Argentina, at 4025 m.a.s.l. It is located east of Salar del Hombre Muerto, between Catamarca (Department Antofagasta) and Salta (Department Los Andes).

PROPERTY DATA

- **OWNER/CONTROLLER: Galaxy Resources LTD.**
- **OPERATOR: Galaxy Lithium (Sal de Vida) S.A.**
- **AREA: 4.391 ha**

PROJECT STATUS - REINGEENIERING

LAST PUBLIC TECHNICAL REPORT

- PROSPECTING
- INITIAL EXPLORATION
- ADVANCED EXPLORATION
- PREL. ECON. ASSES. (PEA)
- PREFEASIBILITY
- **FEASIBILITY**
- CONSTRUCTION
- OPERATION

COMPANY'S LAST ANNOUNCEMENT

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The Sal de Vida Salt-Brine Project is located in northwestern Argentina in high altitude basins of the Puna environment. From the end of the Oligocene, compression movements, elevation and volcanic activity caused the isolation of the Puna basins, causing them to have centripetal drainage. Volcanic activity from magmatic chambers of a high level of the earth's crust (> 4 km depth) may be the ultimate source of abnormally high concentrations of lithium in the region. Sediments with ages from the Pleistocene to the Recent make up the aquifers that are part of the internal drainage and then produce the concentration by evaporation to produce brines highly enriched in potassium, lithium and boron. On the border between Catamarca and Salta, the almost 650 square kilometers of the Salar del Hombre Muerto could be the largest and most important of these basins in the Argentine Puna. In the western sub-basin, Minera del Altiplano, is producing lithium on a commercial scale.

DEPOSIT GEOLOGY

The area is underlain by an extensive magma chamber at depths of only 4km and this could be the ultimate source, lithium being transported to the surface via volcanic activity, especially hydrothermal vents. It is not known whether the transfer was as a result of the leaching of lithium-bearing volcano clastic sediments or by the recycling of trapped lithium-bearing solutions. The Sal de Vida brines average about 780mg/L Li. They also have potassium concentrations averaging around 0.87mg/L K, low magnesium and sulphate. In addition to the brines, the Salar hosts near surface deposits of ulexite, a sodium-calcium borate mineral mainly used for the production of boric acid.

SAL DE VIDA

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		25.000 t/year LCE 95.000 t/year KCl

PRODUCT TO OBTAIN: Lithium Carbonate (Li_2CO_3)
Potassium Chloride (KCl)

CAPEX: 474 M USD

Estimated annual employment: 973

Estimated LOM: 40 years

Mining Method: Pumping-Evaporation

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade		Metal Content	
		Li (mg/l)	K (mg/l)	LCE(t)	KCl (t)
Measured	540	770	8.307	2.198.000	8.494.000
Indicated	680	717	8.051	2.583.000	10.385.000
Inferred	100	706	6.747	376.000	1.289.000

SOURCES CONSULTED

www.galaxylithium.com.ar

CONTACT

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Diego Mendilaharzu (Vicepresidente)
Diego.mendilaharzu@galaxylithium.com

PASTOS GRANDES

Los Andes
Salta

3785
m.a.s.l.

LOCATION
24° 34' 48" Latitude South
66° 40' 48" Longitude West

COMMODITY
Li

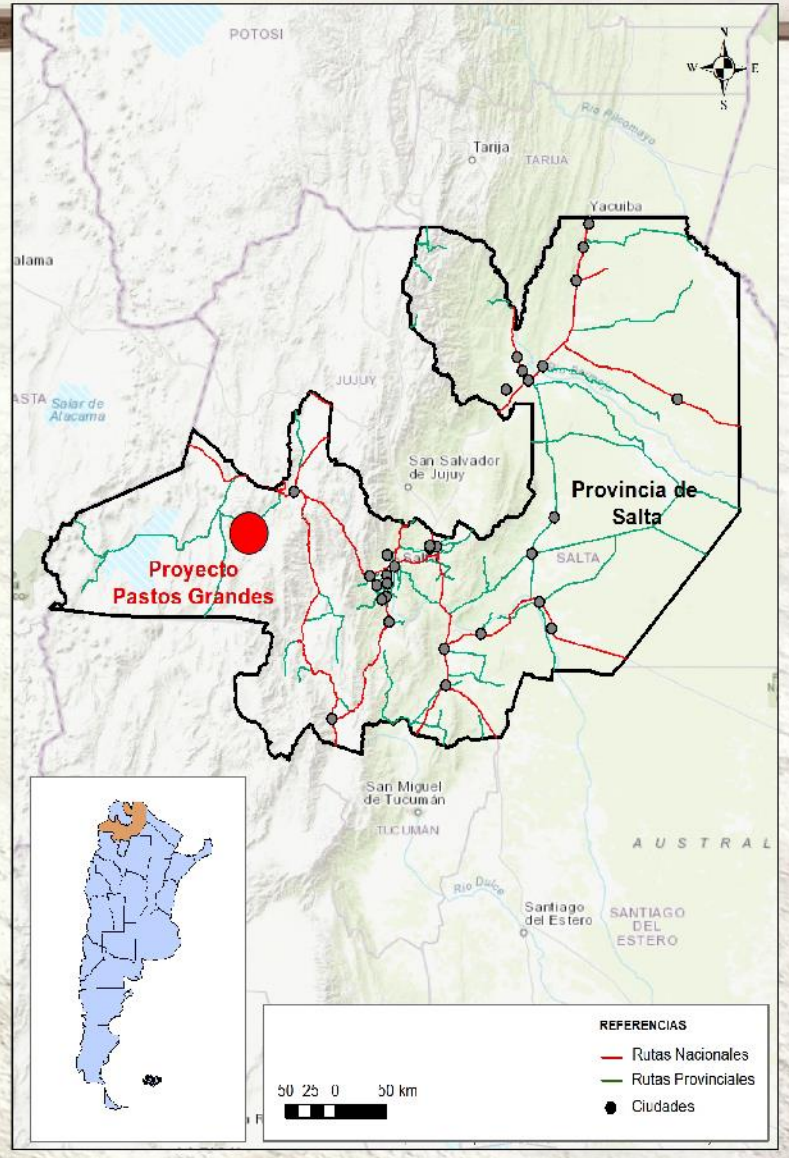
MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
Proyecto Pastos Grandes S.A

COMPANY
Millennial Lithium Corp.

RESERVES	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	-	-

RESOURCES	GRADE (%)	MINERAL CONTENT (Tons)
Measured	446	2,262,000
Indicated	406	1,858,000
Inferred	428	798,000



PASTOS GRANDES

LOCATION (24° 34′ 48′′ Lat. S; 66° 40′ 48′′ Long. W)

The property is located in the Los Andes Department, in the central portion of the Puna block of the Province of Salta, in the extreme northwest of Argentina. It extends over the basin called Salar de Pastos Grandes, 13 km southeast of the town of Santa Rosa de Pastos Grandes, 56 km southwest of the town of San Antonio de los Cobres and 154 km west-northwest of the city of Salta , capital of the province. The altitude is 3785 meters above sea level.

PROPERTY DATA

- **OWNER/CONTROLLER: Millenial Lithium Corporation.**
- **OPERATOR: Proyecto Pastos Grandes S.A.**
- **AREA: 1.219 ha**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

- PROSPECTING
- INITIAL EXPLORATION
- ADVANCED EXPLORATION
- PREL. ECON. ASSES. (PEA)
- PREFEASIBILITY
- **FEASIBILITY**
- CONSTRUCTION
- OPERATION

COMPANY'S LAST ANNOUNCEMENT

"Feasibility Study of the Pastos Grandes Project, Salta Province, Argentina" July 29, 2019

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

The salar is the current expression of a larger sedimentary basin, known as Sijes developed since the Miocene. The Sijes Formation is composed by sandstones, clays, tuffs and evaporites (Halite and Gypsum) and travertine. This unit is a potential aquifer and can store brines rich in Lithium.

The Salar Pastos Grandes is filled with seamless clastics (clay and silt), organic material and fine-grained sediments. The evaporites are represented by Halite, gypsum and ulexite. The age of these sediments is late Quaternary to recent and 30 m thick.

The stratification is horizontal and covers the pre-existing formations and the geological characteristics indicate erosion and dissolution of older rocks and subsidence in the central part of the salt flat. The sediments harbor brines rich in Lithium which has been demonstrated by exploration work.

PASTOS GRANDES

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		25.000 t/year LCE

PRODUCT TO OBTAIN: Lithium Carbonate (Li_2CO_3)

CAPEX: 410 M USD

Estimated annual employment: 841

Estimated LOM: 25 years

Mining Method: Pumping-Evaporation

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade		Metal Content	
		Li (mg/l)	K (mg/l)	LCE(t)	KCl (t)
Measured	950	446	4.734	2.262.000	8.597.000
Indicated	860	406	4.114	1.858.000	6.745.000
Inferred	350	428	4.457	798.000	2.973.000

SOURCES CONSULTED

"Feasibility Study of the Pastos Grandes Project, Salta Province, Argentina" July 29, 2019

CONTACT

1177 West Hastings Street Suite 2310
Vancouver, BC Canada V6E 2K3
Email: info@millenniallithium.com

SALAR DEL RINCÓN

Los Andes
Salta

3700
m.a.s.l.

LOCATION
24° 04' 12" Latitude South
67° 06' 00" Longitude West

COMMODITY
Li

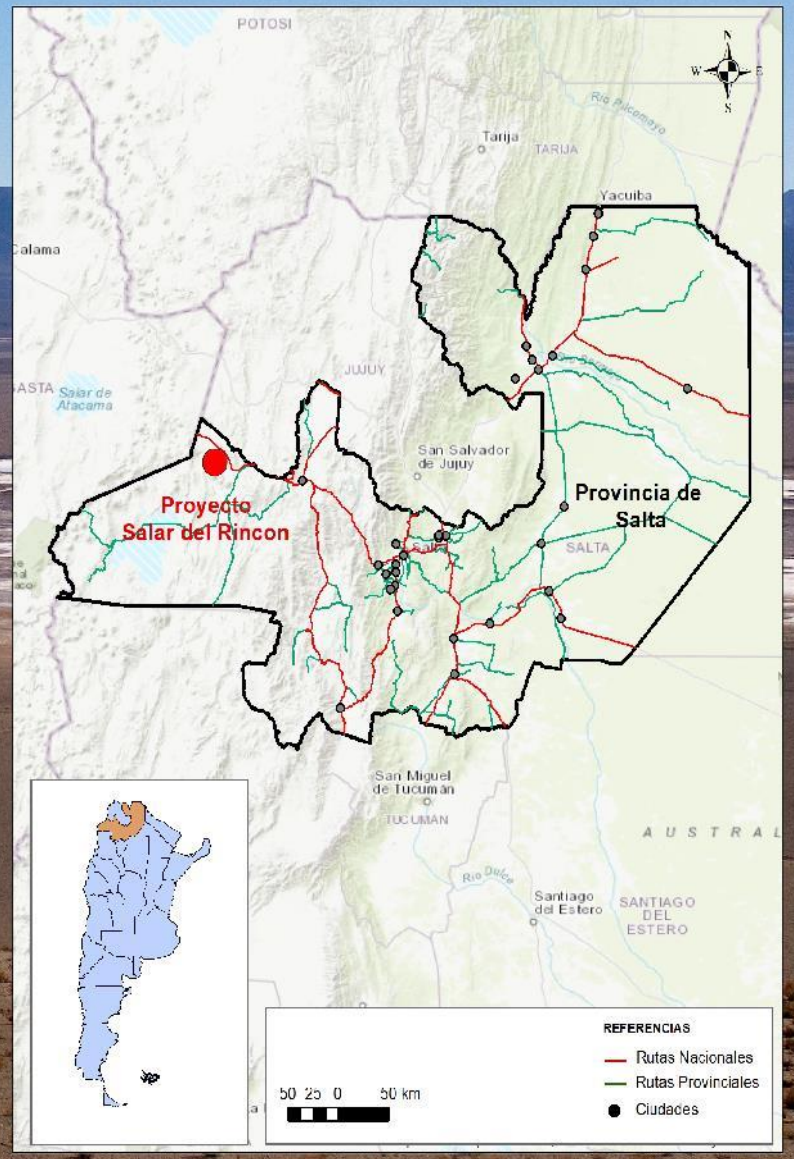
MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
Rincon Mining Limited

COMPANY
Rincon Ltd.

RESERVES	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	371	1,081,419

RESOURCES	GRADE (%)	MINERAL CONTENT (Tons)
Measured	398	1,108,332
Indicated	397	2,511,332
Inferred	411	4,327,955



SALAR DE RINCÓN

LOCATION *(24° 04' 12'' Lat. S; 67° 06' 00'' Long. W)*

The Salar de Rincón is a saline body located in the Los Andes Department, in Salta, at 3,760 m.a.s.l. It is located about 280 km northwest of the city of Salta and is accessed by National Route 51; it is near the town of Olacapato Chico and 40 km from the international border with Chile

PROPERTY DATA

- **OWNER/CONTROLLER: Rincón LTD.**
- **OPERATOR: Rincon Mining Limited**
- **AREA: 36.000 ha**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

- PROSPECTING
- INITIAL EXPLORATION
- ADVANCED EXPLORATION
- PREL. ECON. ASSES. (PEA)
- PREFEASIBILITY
- **FEASIBILITY-REENGINEERING**
- CONSTRUCTION
- OPERATION

COMPANY'S LAST ANNOUNCEMENT

NOTICIAS

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

The geological framework is given by a southern volcanic range (Tul Tul - Del Medio and Pocitos volcanoes) and the Guayaos mountain range (Ordovicico) in the north, while the rest is comprised by alluvial fields. It shows an almost continuous layer of salt on the surface that reaches variable thicknesses. Borate is 20-30 cm below a layer of halite that makes up the escape. Borates are ulexite and tincal. Ulexite is up to 50 cm thick and is both solid and nodular. It shows strong contamination with chlorides and sulphates. Tincal occurs at the NE edge of the salt flats and was mined in the old Carolina mine. It occurs in various morphologies, some of which are known to miners as greaves or corn grains. It occurs mainly with a reddish lime-clay ganga.

SALAR DE RINCÓN

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		25.000 t/year LCE

PRODUCT TO OBTAIN: Lithium Carbonate (Li_2CO_3)

CAPEX: 720 M USD

Estimated annual employment: 1,477

Estimated LOM: 25 years

Mining Method: Pumping-Chemical adsorption

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade	Metal Content
		Li (mg/l)	LCE(t)
Measured	521,5	398	1.108.332
Indicated	1.183	397	2.511.465
Inferred	1.973	411	4.327.955

Reserves	Tonnage (Mm^3)	Grade	Metal Content
		Li (mg/l)	LCE(t)
Proven	1.692,2	371	1.081.419

SOURCES CONSULTED

www.adyargentina.com.ar
info@rinconltd.com
www.rinconltd.com

CONTACT

Ing. Alejandro Moro (Gerente General) amoro@enirgi.com
Rodrigo Frías (Representante Legal) rfrias@enirgi.com

TRES QUEBRADAS

Tinogasta
Catamarca

4100
m.a.s.l.

LOCATION
27° 27' 00" Latitude South
68° 39' 36" Longitude West

COMMODITY
Li

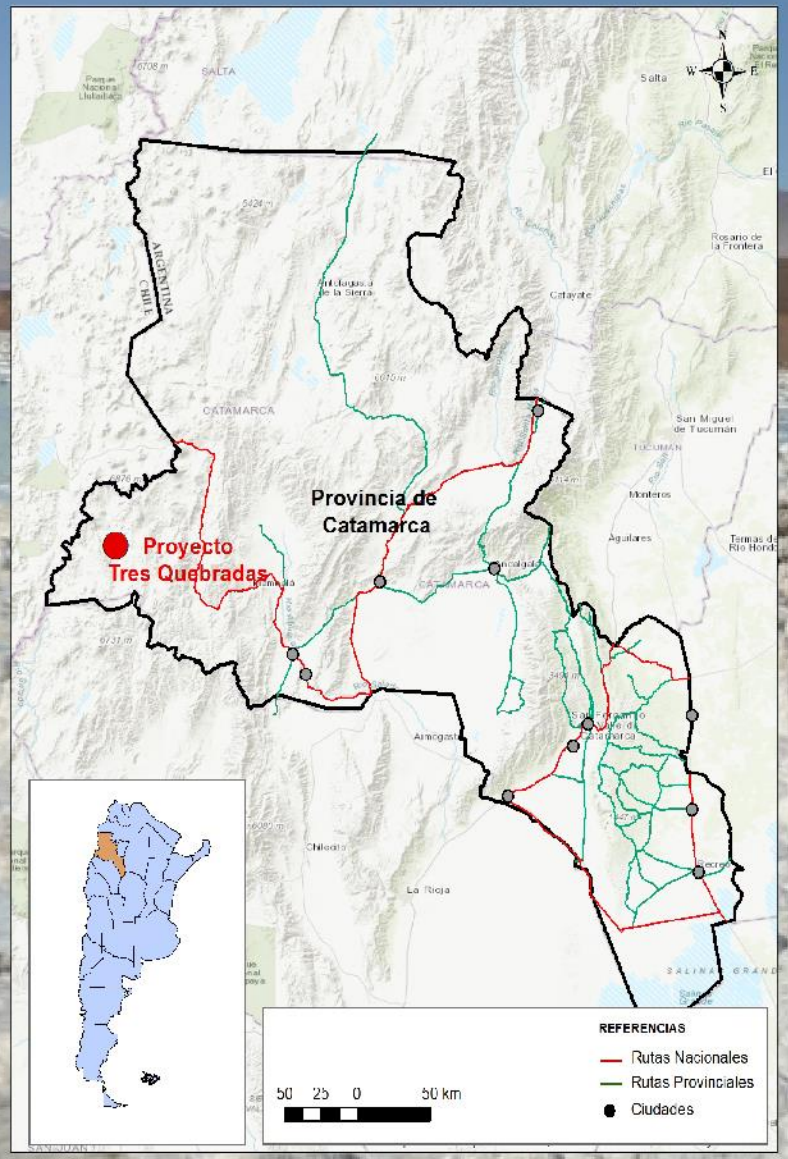
MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
Liex S.A.

COMPANY
Neo Lithium Ltd.

RESERVES	GRADE (%)	MINERAL CONTENT (Tons)
Proven	912	228,089
Probable	912	532,280

RESOURCES	GRADE (ppm)	MINERAL CONTENT (Tons)
Measured	701	569,000
Indicated	602	3,436,000
Inferred	584	2,917,000



TRES QUEBRADAS

LOCATION *(27° 27' 00'' Lat. S; 68° 39' 36'' Long. W)*

It is located in the Municipality of Fiambalá, 30 km from the border with Chile, 200 km from the Caldera port (Chile), 90 km north of the place Cortaderas, about 4.100 m.a.s.l.

PROPERTY DATA

- **OWNER/CONTROLLER: Neo Lithium Ltd**
- **OPERATOR: Liex S.A.**
- **AREA: 16.000 ha**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

- PROSPECTING
- INITIAL EXPLORATION
- ADVANCED EXPLORATION
- PREL. ECON. ASSES. (PEA)
- **PREFEASIBILITY**
- FEASIBILITY
- CONSTRUCTION
- OPERATION

COMPANY'S LAST ANNOUNCEMENT

NOTICIAS

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

The project includes the "Tres Quebradas" lagoon, which is not freshwater, but a reservoir of super-saturated brine in sodium, calcium and chlorine. The density of the brine is 1.22 (25% heavier than fresh water). It is black in color due to its content of manganese and other metals.

There are two large salars within the area, they are formed by a very rough surface, which suggests that it is a mature salt formed mostly by a sodium chloride core. The contribution of fresh water to the salt is limited to the extreme south where the Valle Ancho River and the Piscis River enter. All the rivers at the northern end of the complex provide thermal waters laden with metals. The waters that enter the salt flats are, on the one hand, alkaline and carbonated, and acidic with a high metallic content. There are more than a dozen thermal contributions and some have lithium contents of up to 1,000 mg / l, which is a worldwide record. These contributions go directly to the salt flat and the "Tres Quebradas" lagoon where they are concentrated by evaporation.

TRES QUEBRADAS

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		20.000 t/year LCE

PRODUCT TO OBTAIN: Lithium Carbonate (Li_2CO_3)

CAPEX: 319 M USD

Estimated annual employment: 654

Estimated LOM: 35 years

Mining Method: Pumping-Evaporation

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade	Metal Content
		Li (mg/l)	LCE(t)
Measured	152	701	569.000
Indicated	1.072	602	3.436.000
Inferred	939	584	2.917.000

Reserves	Tonnage (Mm^3)	Grade	Metal Content
		Li (mg/l)	LCE(t)
Proven+Probable	360	790	1.294.000

SOURCES CONSULTED

www.liex.com.ar

CONTACT

Tomas de Pablo Souza (Presidente)
tdepablos@liex.com.ar

CAUCHARI

Susques
Jujuy

3900
m.a.s.l.

LOCATION
23° 40' 48" Latitude South
66° 43' 48" Longitude West

COMMODITY
Li

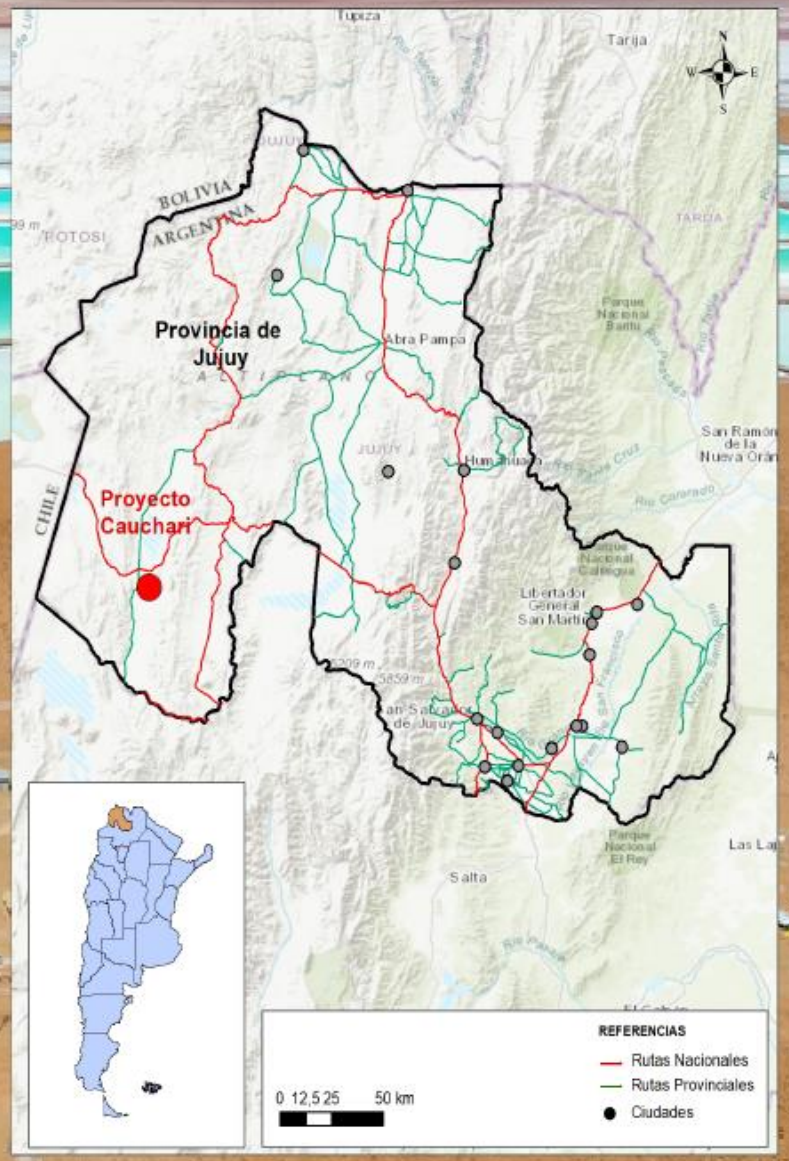
MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
South American Salars S.A.

COMPANY
Orocobre Limited Pty Ltd.

RESERVES	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	-	-

RESOURCES	GRADE (ppm)	MINERAL CONTENT (Tons)
Measured	527	1,850,000
Indicated	452	2,950,000
Inferred	473	1,500,000



CAUCHARI

LOCATION *(23° 40' 32'' Lat. S; 66° 43' 33'' Long. W)*

The Cauchari project is located in Jujuy, at an altitude of 3,900 m.a.s.l. and 230 km west of the capital city of Jujuy. The project is placed near the international border with Chile, about 80 kilometers by road from the Jama pass. This road continues to the main center of Calama and the port of Mejillones in northern Chile, an important port for the export of mineral products.

PROPERTY DATA

- **OWNER/CONTROLLER: Orocobre Limited Pty Ltd.**
- **OPERATOR: South American Salars S.A.**
- **AREA: 28.194 ha**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

- PROSPECTING
- INITIAL EXPLORATION
- ADVANCED EXPLORATION
- PREL. ECON. ASSES. (PEA)
- **PREFEASIBILITY**
- FEASIBILITY
- CONSTRUCTION
- OPERATION

COMPANY'S LAST ANNOUNCEMENT

NOTICIAS

Prefeasibility study of the Cauchari jv lithium project Jujuy province, Argentina. 2019-10-22

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

The Cauchari salar has characteristics both of an immature salt, dominated by clastic sediments, and of a mature salt, dominated by halite, in the classification of Houston et al., 2011. The two main units are divided into a number of subunits, such as follow:

A1 - Sequence of reddish brown mud and clay, with very small sand

A2 - Brown slime unit and locally black to gray and clay in the north part of the salar

A3 - Unit of reddish brown silt and clay.

A4 - Reddish-brown silt and clay with a unit of medium grain sand near the top of the unit.

B1 - Transition unit with the first appearance of halite with silt and clay

B2 - A unit of coarse halite that continues to the base of the hole at 249 m, with at least 12 markers showing discrete sedimentary cycles of silt and clay within the halite.

Units A and B harbor the brine resource, although the brine concentrations in Unit A are generally lower than in Unit B.

CAUCHARI

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		25.000 t/year LCE

PRODUCT TO OBTAIN: Lithium Carbonate (Li_2CO_3)

CAPEX: 340 M USD

Estimated annual employment: 698

Estimated LOM: 30 years

Mining Method: Pumping-Evaporation

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade		Metal Content	
		Li (mg/l)	K (mg/l)	LCE(t)	KCl (t)
Measured	600	527	4.438	1.850.000	5.400.000
Indicated	1.200	452	4.145	2.950.000	9.600.000
Inferred	600	473	3.867	1.500.000	4.600.000

SOURCES CONSULTED

Prefeasibility study of the Cauchari jv lithium project Jujuy province, Argentina. 2019-10-22

CONTACT

https://www.advantagelithium.com/
789-999 West Hastings. Vancouver BC, Canada. V6C 2W2
P 604-423-4499
F 604-423-4498

KACHI

Antofagasta de la Sierra
Catamarca

4000 m.a.s.l.

LOCATION
26° 31' 12" Latitude South
67° 25' 48" Longitude West

COMMODITY
Li

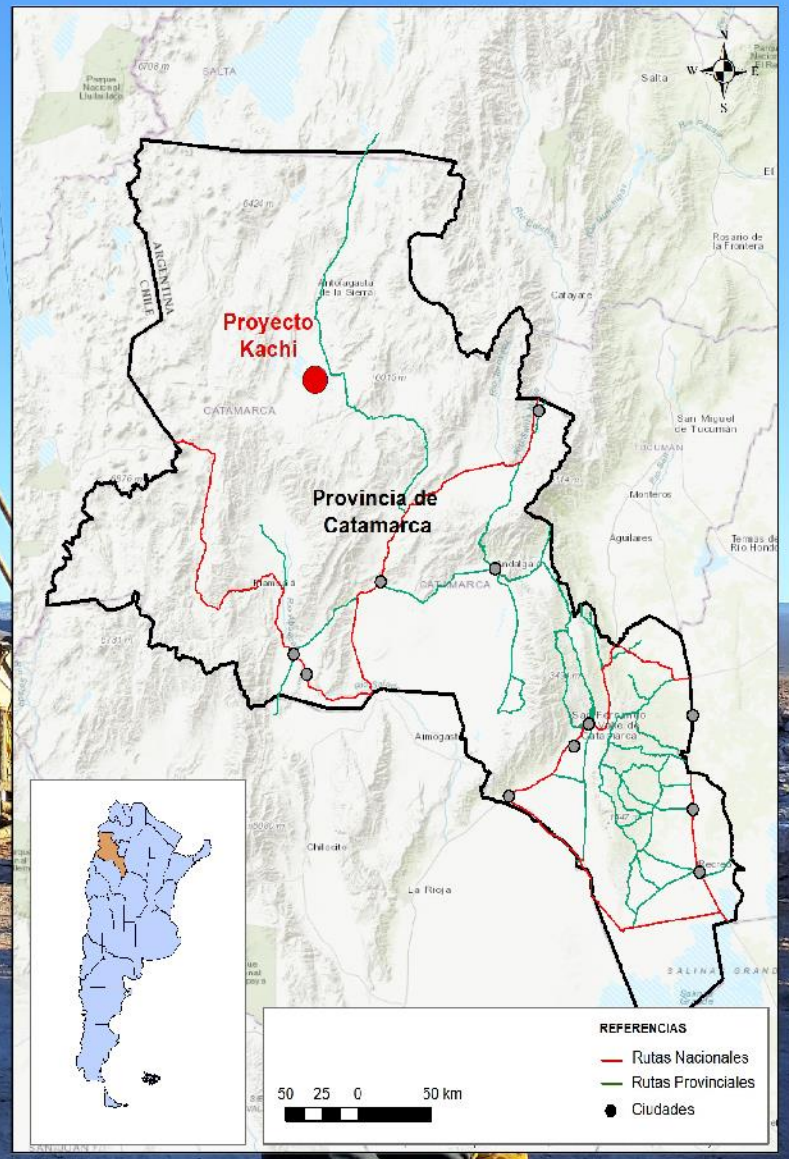
MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
Morena del Valle S.A.

COMPANY
Lake Resources

RESERVES	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	-	-

RESOURCES	GRADE (ppm)	MINERAL CONTENT (Tons)
Measured	-	-
Indicated	298	1,005,000
Inferred	209	3,394,000



KACHI

LOCATION (23° 31’ 12” Lat. S; 67° 25’ 48” Long. W)

The Kachi Project is located in the province of Catamarca, approximately 100 km south of the Livent’s Hombre Muerto Salar Operation (former FMC).

PROPERTY DATA

- **OWNER/CONTROLLER: Lake Resources**
- **OPERATOR: Morena del Valle Minerals S.A**
- **AREA: 49.000 ha**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

- PROSPECTING
- INITIAL EXPLORATION
- ADVANCED EXPLORATION
- PREL. ECON. ASSES. (PEA)
- **PREFEASIBILITY**
- FEASIBILITY
- CONSTRUCTION
- OPERATION

COMPANY'S LAST ANNOUNCEMENT

Compelling Pre-feasibility Study For Lake’s Kachi Project- 30 April 2020

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

The drills show that the filling of the Kachi basin is predominantly sand dominated by silt and intercalated clays. The surface halite is variable. This leads to a classification of Kachi as an immature salar system. There are ignimbrites inside the sediment of the basin, but of limited distribution and thickness. A conglomerate would form the basis of the sedimentary sequence of the basin that contains brine.

Several depositional geomorphological units can be recognized, including: salar Carachi Pampa; Laguna Carachi Pampa which is a body of salt water fed by volcanic springs on the northeast margin of the salt flat; Vega Carachi Pampa, an ephemeral wetland plain north of the lagoon; and Barreal Carachi Pampa, a clay depression located on the western and northern margins of the salar. These units are partially covered by even more recent alluvial and colluvial sediments and wind sand dunes.

KACHI

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		25,500 t/year LCE

PRODUCT TO OBTAIN: Lithium Carbonate (Li_2CO_3)

CAPEX: 544 M USD

Estimated annual employment in operation: n/a
Estimated annual employment in construction stage: n/a

Estimated LOM: 25 years

Mining Method: Pumping-Evaporation

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade		Metal Content	
		Li (mg/l)	K (mg/l)	LCE (t)	KCl (t)
Indicated	650	650	5.880	1.005.000	6.705.000
Inferred	3.200	3.200	4.180	3.394.000	24.000.000

SOURCES CONSULTED

http://www.lakeresources.com.au/home/
Compelling Pre-feasibility Study For Lake's Kachi Project- 30 April 2020

CONTACT

Stephen Promnitz (Manager)
steve@lakeresources.com.au
lakeresources@lakeresources.com.au
Website http://www.lakeresources.com.au/home/

MARIANA

Los Andes
Salta

3754
m.a.s.l.

LOCATION
24° 48' 36" Latitude South
68° 18' 00" Longitude West

COMMODITY
Li

MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
Mariana Lithium Co. Ltd.

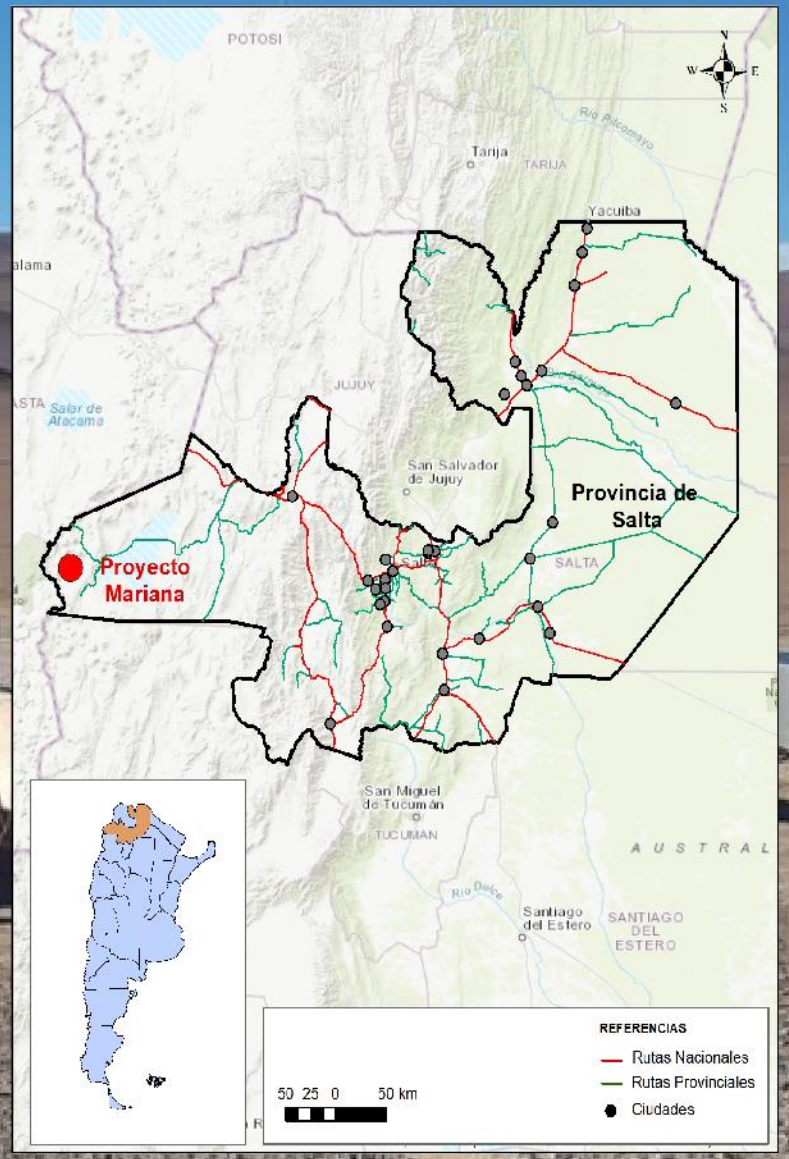
COMPANY
Jiangxi Ganfeng Lithium Co., Ltd.
International Lithium Corp.

RESERVES

	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	-	-

RESOURCES

	GRADE (ppm)	MINERAL CONTENT (Tons)
Measured	-	-
Indicated	306	1,248,000
Inferred	322	618,000



MARIANA

LOCATION (24° 48’ 27” Lat. S; 68° 17’ 59” Long. W)

The Mariana project is located in the west of the Province of Salta in the Llullaillaco Salt Flat.
In a straight line it is located 280 km west of the capital city of Salta

PROPERTY DATA

- **OWNER/CONTROLLER: Ganfeng Lithium Co., Ltd.-International Lithium**
- **OPERATOR: Litio Minera Argentina.**
- **AREA: 16.000 ha**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

- PROSPECTING
- INITIAL EXPLORATION
- ADVANCED EXPLORATION
- **PREL. ECON. ASSES. (PEA)**
- PREFEASIBILITY
- FEASIBILITY
- CONSTRUCTION
- OPERATION

COMPANY'S LAST ANNOUNCEMENT

Preliminary Economic Assessment of the Mariana Lithium Brine Project Salar de Llullaillaco, Salta Province, Argentina NI 43-101 Technical Report 15-Nov-2018

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

Drilling and hydrogeological information indicate that the Mariana Project in the Llullaillaco Salt Flat is a sedimentary filling complex of a basin, carrying unconfined and interconnected aquifers. They are brine carriers and are found at depths of 328 meters or more. Preliminary geological observation of the boreholes made it possible to recognize 8 lithological types in the well cores carried out in the western, eastern and southern sectors of the basin. The volume of the aquifer is still open in depth since only in two of the boreholes were the volcanic lithologies attributed to the Mesozoic basement intercepted.

MARIANA

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		10.000 t/year LCE 84.000 t/year SOP ("sulphate of potash")

PRODUCT TO OBTAIN: Lithium Carbonate (Li_2CO_3)
Potassium sulfate (K_2SO_4)

CAPEX: 243 M USD

Estimated annual employment: 499

Estimated LOM: 25 years

Mining Method: Pumping-Evaporation

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade		Metal Content	
		Li (mg/l)	K (mg/l)	LCE(t)	KCl (t)
Indicated	766	306	9.456	1.248.000	13.800.000
Inferred	361	322	10.316	618.000	7.100.000

SOURCES CONSULTED

Preliminary Economic Assessment of the Mariana Lithium Brine Project Salar de Llullaillaco, Salta Province, Argentina NI 43-101 Technical Report 15-Nov-2018

CONTACT

gfsale@ganfenglithium.com
http://www.ganfenglithium.com/about_en
Kirill Klip President and CEO (C-Level) en Jiangxi Ganfeng Lithium Co.,Ltd.
Anthony Kovacs - COO (Operations/Exploration/Engineering) en Jiangxi Ganfeng Lithium Co.,Ltd.

PPG

Los Andes
Salta

3800
m.a.s.l.

LOCATION
24° 34' 48" Latitude South
66° 42' 36" Longitude West

COMMODITY
Li

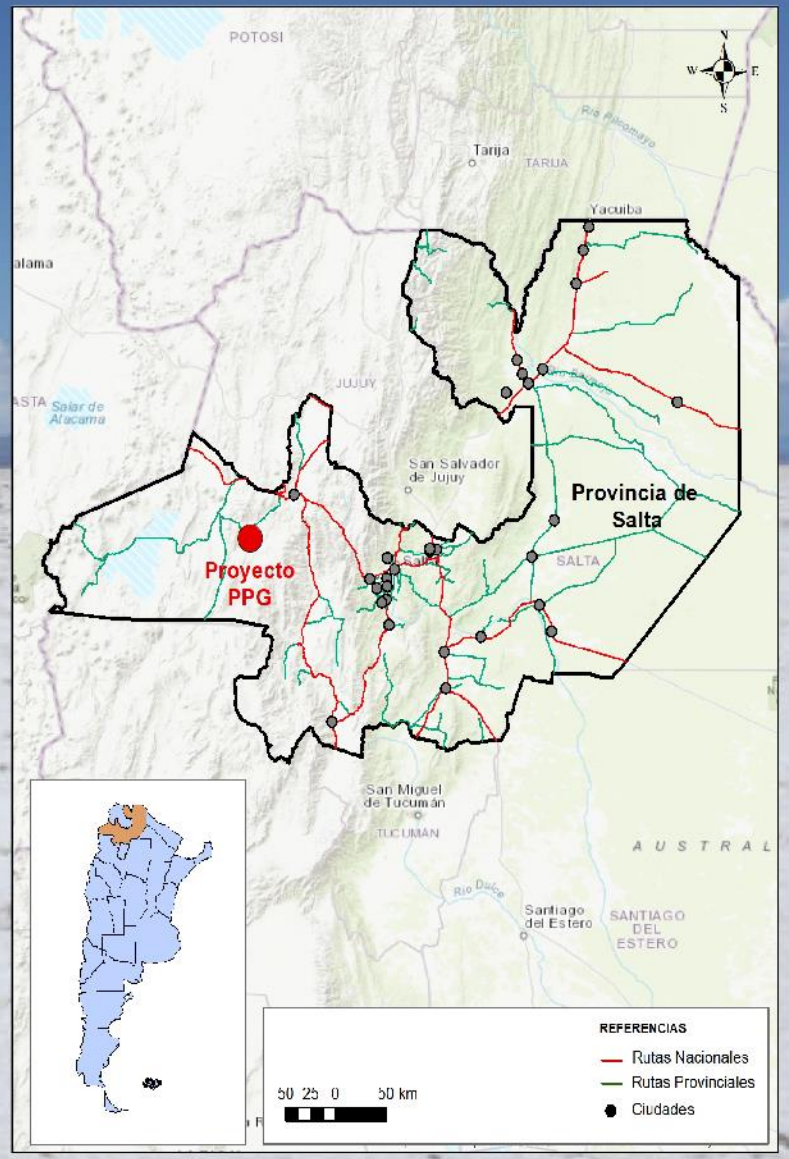
MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
Lithea Inc.
Sucursal
Argentina

COMPANY
Plus
Petrol

RESERVES	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	-	-

RESOURCES	GRADE (%)	MINERAL CONTENT (Tons)
Measured	468	1,852,860
Indicated	538	763,860
Inferred	500	938,500



PPG (Pozuelo-Pastos Grandes)

LOCATION (24° 34' 48" Lat. S; 66° 42' 36" Long. W)

The PPG Project is constituted by the union of the Pastos Grandes and Pozuelos projects. They are located in the Department of Los Andes, in the central portion of the Puna block of the Province of Salta. They extend over the Salar de Pastos Grandes and Salar de Pozuelos basins, 13 km to the south and southwest of the town of Santa Rosa de Pastos Grandes, 56 km southwest of the town of San Antonio de los Cobres and 154 km west-northwest of the city of Salta, capital of the province. The altitude is 3785 m.a.s.l.

PROPERTY DATA

- **OWNER/CONTROLLER: LSC Lithium Corp. (Pluspetrol Resources Corp.)**
- **OPERATOR: Lithea Inc. (Suc. Argentina)**
- **AREA: 11.819 ha**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

- PROSPECTING
- INITIAL EXPLORATION
- ADVANCED EXPLORATION
- **PREL. ECON. ASSES. (PEA)**
- PREFEASIBILITY
- FEASIBILITY
- CONSTRUCTION
- OPERATION

COMPANY'S LAST ANNOUNCEMENT

Preliminary Economic Assessment (PEA) - Pozuelos - Pastos Grandes Project NI 43-101 Technical Report Salta, Argentina January 2019

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

The salt flats of Pozuelos and Pastos Grandes share the same local stratigraphy. The basins are separated in the northeast of Pozuelos by the Pozuelos and Geste formations.

Quaternary rocks are observed in the form of accumulations of evaporites such as halite and borates, carbonates and sulphates that occupy the intermontane depression. The Pastos Grandes salt flats are the current expression of a larger sedimentary basin, known as Sijes developed since the Miocene. The Sijes Formation is made up of sandstones, clays, tuff and evaporites (Halite and Gypsum) and travertine. This unit is a potential aquifer and can store lithium-rich brines. The Lilac White Formation represents a larger ancient salt flat than the current one and is a potential aquifer that can store lithium-rich brines. The Salar de Pastos Grandes is filled with unconsolidated classics (clays and silts), organic material and fine-grained sediments. The age of these sediments is late to recent Quaternary and 30 m thick. The sediments contain lithium-rich brines, which has been demonstrated by exploration work.

PPG (Pozuelo-Pastos Grandes)

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		25.000 t/year LCE

PRODUCT TO OBTAIN: Lithium Carbonate (Li_2CO_3)

CAPEX: 500 M USD

Estimated annual employment: 1,026

Estimated LOM: 20 years

Mining Method: Pumping-Evaporation

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade		Metal Content	
		Li (mg/l)	K (mg/l)	LCE(t)	KCl (t)
Measured	751	468	4.445	1.852.860	6.368.159
Indicated	266	538	2.876	763.760	1.462.020
Inferred	350	500	3.116	938.500	2.079.613

SOURCES CONSULTED

Preliminary Economic Assessment (PEA) - Pozuelos - Pastos Grandes
Project NI 43-101 Technical Report Salta, Argentina January 2019

CONTACT

Corporate Head Office: 40 University Avenue, Suite 605
Toronto, ON Canada M5J 1T1
info@lsclithium.com

SAL DE LOS ÁNGELES

Antofagasta de la Sierra
Salta

4000 m.a.s.l.

LOCATION
25° 14' 24" Latitude South
66° 45' 36" Longitude West

COMMODITY
Li

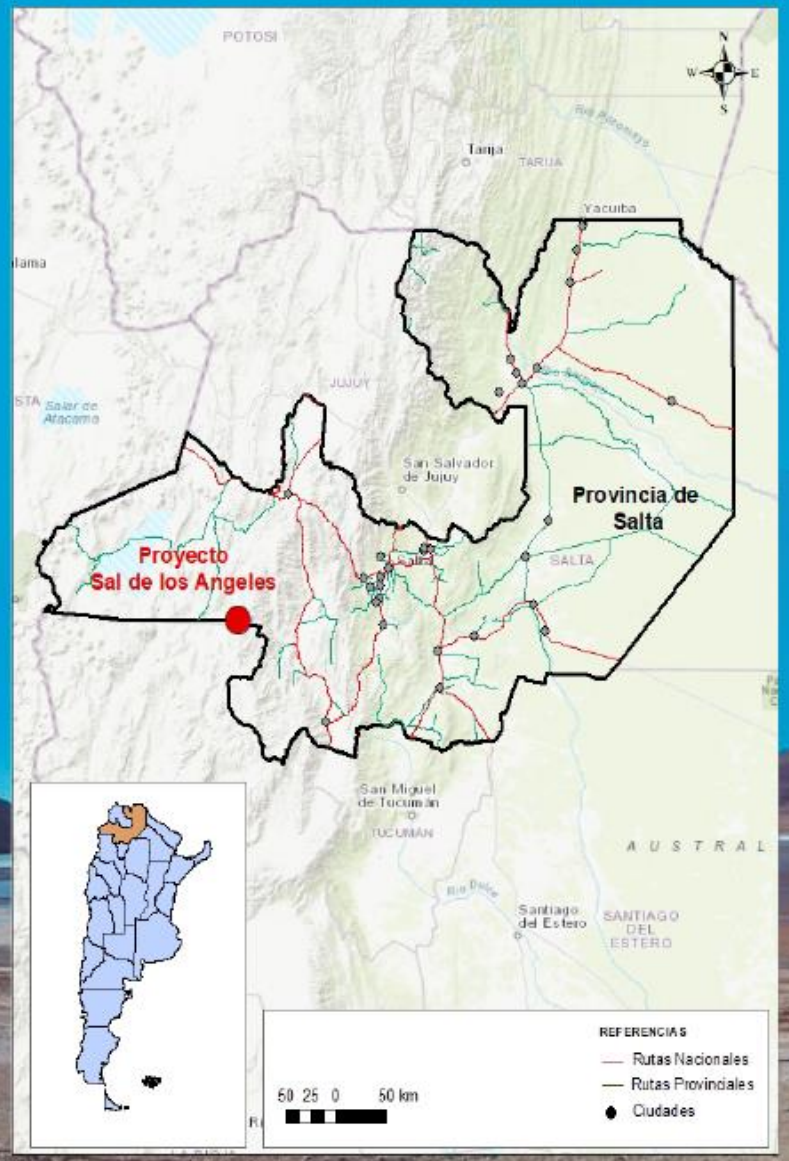
MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
Potasio y Litio de Argentina S.A.

COMPANY
Tibet Summit

RESERVES	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	-	-

RESOURCES	GRADE (ppm)	MINERAL CONTENT (Tons)
Measured	770	2,198,000
Indicated	0.48	2,583,000
Inferred	0.33	376,000



SAL DE LOS ÁNGELES

LOCATION (24° 14’ 08” Lat. S; 66° 45’ 18” Long. W)

The property is located approximately 145 km SW of the city of Salta, a few kilometers north of the provincial border with Catamarca. The whole property is in Salta territory. The average elevation is 4,000 m.a.s.l. It is accessed from the city of Salta via San Antonio de los Cobres by route 51 and then by provincial route 129 (gravel road) to the town of Santa Rosa de los Pastos Grandes.

PROPERTY DATA

- **OWNER/CONTROLLER: Tibet Summit**
- **OPERATOR: Potasio y Litio de Argentina S.A. (PLSA)**
- **AREA: 5.786 ha**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT | **COMPANY'S LAST ANNOUNCEMENT**

- PROSPECTING
- INITIAL EXPLORATION
- ADVANCED EXPLORATION
- **PREL. ECON. ASSES. (PEA)**
- PREFEASIBILITY
- FEASIBILITY
- CONSTRUCTION
- OPERATION

NOTICIAS

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

The deposit is in Salar de Diablillos, which has particular characteristics: 1- it is the only depression of the Puna on crystalline basement, 2- it is Quaternary, 3- it shows a quadrangular area to present framed between fractures, 4- it presents borates in all its surface, 5- it does not have a crust of salt or halite layer, reason why its content of chlorides is low and benefits the quality of the borate, 6- it shows a direct relation of origin of the borate from extinguished thermal sources that worked in the border and interior of the depression, and therefore represents a key salar with respect to the genetic aspects.

The profile of the deposit shows a superficial layer of ulexite (1m thick), followed by 10 cm of caliche, followed by a succession of greenish, greyish and yellowish sandstones and pelites up to 30 m, followed by quartz-feldespatic micaceous sands and a thick basal conglomerate

SAL DE LOS ÁNGELES

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		25.000 t/year LCE

PRODUCT TO OBTAIN: Lithium Carbonate (Li_2CO_3)

CAPEX: 144 M USD

Estimated annual employment: 295

Estimated LOM: 20 years

Mining Method: Pumping-Evaporation

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade		Metal Content	
		Li (mg/l)	K (mg/l)	LCE (t)	KCl (t)
Measured	540	770	8.307	2.198.000	8.494.000
Indicated	680	717	8.051	2.583.000	10.385.000
Inferred	100	706	6.747	376.000	1.289.000

SOURCES CONSULTED

http://www.lithium-x.com/sal-de-los-angeles/

SALAR DEL RINCÓN ARGOSY

Los Andes
Salta

3700
m.a.s.l.

LOCATION
24° 07' 12" Latitude South
66° 58' 48" Longitude West

COMMODITY
Li

MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
Puna Mining S.A.

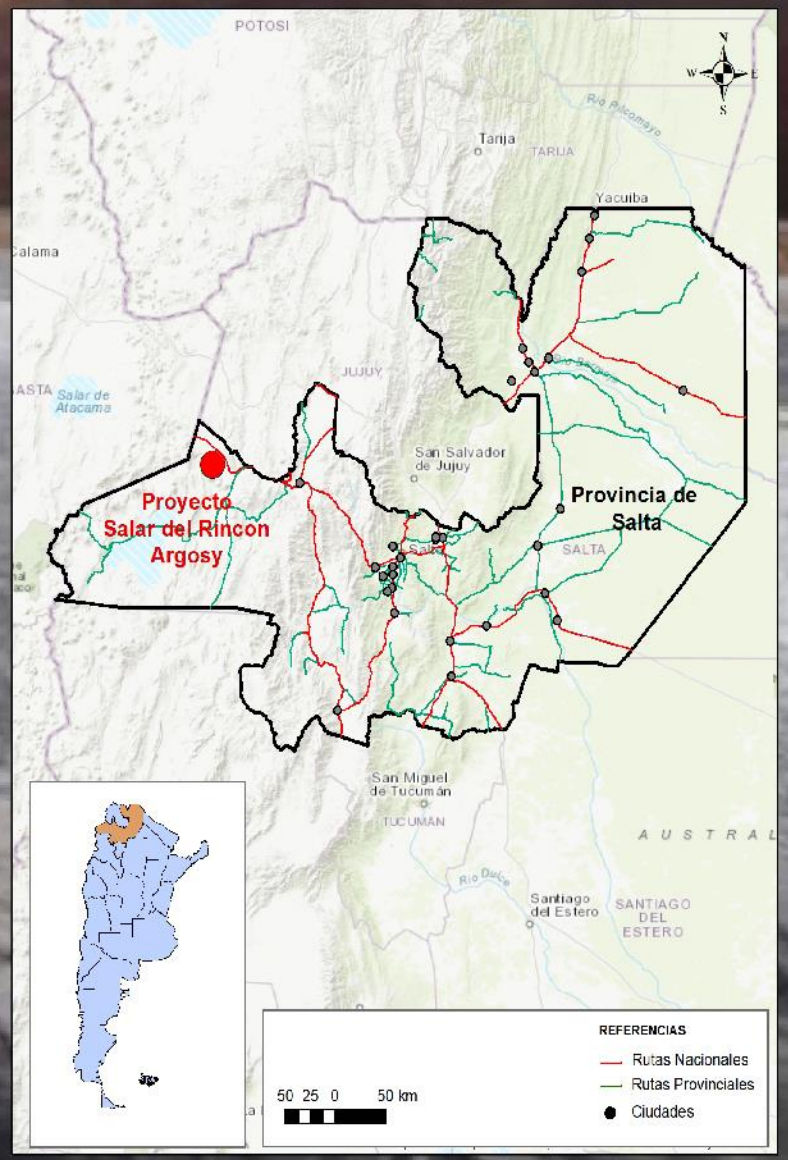
COMPANY
Argosy Minerals

RESERVES

	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	-	-

RESOURCES

	GRADE (ppm)	MINERAL CONTENT (Tons)
Measured	-	-
Indicated	-	-
Inferred	233	245,120



SALAR DE RINCÓN (Argosy)

LOCATION (24° 12' 13" Lat. S; 66° 59' 24" Long. W)

The Salar de Rincón is a saline body located in the Los Andes Department, in Salta, at 3,760 m.a.s.l. It is located about 280 km northwest of the city of Salta and is accessed by National Route 51; it is near the town of Olacapato Chico and 40 km from the international border with Chile

PROPERTY DATA

- **OWNER/CONTROLLER: Argosy Minerals.**
- **OPERATOR: Puna Mining S.A.**
- **AREA: 2.572 ha**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

- PROSPECTING
- INITIAL EXPLORATION
- ADVANCED EXPLORATION
- **PREL. ECON. ASSES. (PEA)**
- PREFEASIBILITY
- FEASIBILITY
- CONSTRUCTION
- OPERATION

COMPANY'S LAST ANNOUNCEMENT

PEA Results Rincon Lithium Project. November 2018

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

The geological framework is given by a southern volcanic range (Tul Tul - Del Medio and Pocitos volcanoes) and the Guayaos mountain range (Ordovicico) in the north, while the rest is comprised by alluvial fields. It shows an almost continuous layer of salt on the surface that reaches variable thicknesses. Borate is 20-30 cm below a layer of halite that makes up the escape. Borates are ulexite and tincal. Ulexite is up to 50 cm thick and is both solid and nodular. It shows strong contamination with chlorides and sulphates. Tincal occurs at the NE edge of the salt flats and was mined in the old Carolina mine. It occurs in various morphologies, some of which are known to miners as greaves or corn grains. It occurs mainly with a reddish lime-clay ganga.

SALAR DE RINCÓN (Argosy)

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		10.000 t/year LCE

PRODUCT TO OBTAIN: Lithium Carbonate (Li_2CO_3)

CAPEX: 141 M USD

Estimated annual employment: 289

Estimated LOM: 17 years

Mining Method: Pumping-Evaporation

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade Li (mg/l)	Metal Content LCE (t)
Indicated	144	233	245.120

SOURCES CONSULTED

PEA Results Rincon Lithium Project. November 2018

CONTACT

Contact: Jerko Zuvela (Managing Director)
E-mail: admin@argosyminerals.com.au
Sitio web: http://www.argosyminerals.com.au

HOMBRE MUERTO NORTE

Los Andes
Salta

4000
m.a.s.l.

LOCATION
25° 13' 12" Latitude South
67° 04' 12" Longitude West

COMMODITY
Li

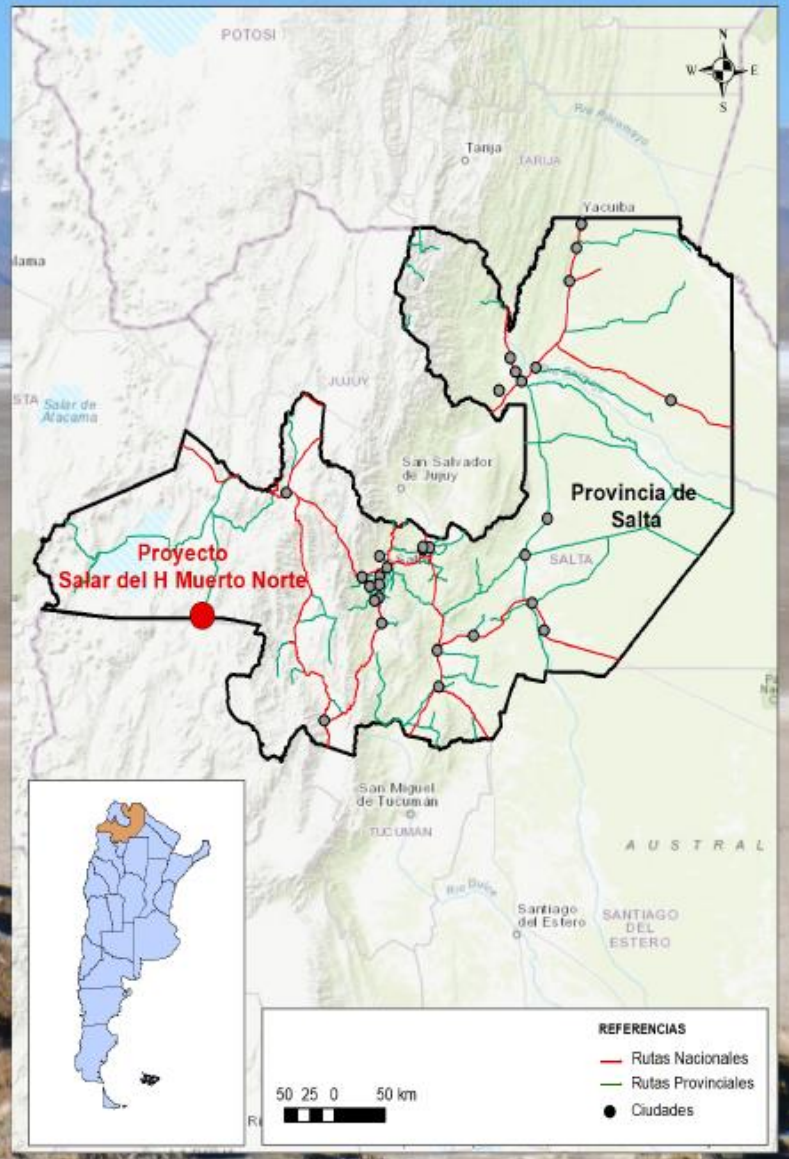
MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
NRG Metals Argentina S.A.

COMPANY
NRG Metals Inc.

RESERVES	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	-	-

RESOURCES	GRADE (ppm)	MINERAL CONTENT (Tons)
Measured	797	509,000
Indicated	534	62,000
Inferred	-	-



SALAR DEL HOMBRE MUERTO NORTE

LOCATION (25° 13’ 12” Lat. S; 67° 04’ 12” Long. W)

The project is located in the northern part of the Hombre Muerto Salar, in the border area of the provinces of Catamarca and Salta, 170 km southeast of the city of Salta.
The HMN Project is strategically located in the Hombre Muerto Salar, an active lithium production area of Livent Corp. (former FMC) in the Fenix lithium mine, about 12 miles south of the project area.

PROPERTY DATA

- **OWNER/CONTROLLER: NRG Metals Inc.**
- **OPERATOR: NRG Metals Argentina S.A.**
- **AREA: 3.237 ha**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

- PROSPECTING
- INITIAL EXPLORATION
- ADVANCED EXPLORATION
- **PREL. ECON. ASSES. (PEA)**
- PREFEASIBILITY
- FEASIBILITY
- CONSTRUCTION
- OPERATION

COMPANY'S LAST ANNOUNCEMENT

NI 43-101 PRELIMINARY ECONOMIC ASSESSMENT REPORT For The HOMBRE MUERTO NORTE PROJECT Salta Province, Argentina. 3 June 2019

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

The local geology of the Hombre Muerto Salar includes a basement of intrusive, sedimentary and metamorphic rocks from the Precambrian and early Paleozoic, thick sequences of Ordovician marine sedimentary rocks with a roof of continental Mesozoic sedimentary units.
These are superimposed by the Miocene to Pliocene volcanic deposits, which are common characteristics of the salt flats in the sedimentary basins of the region.

SALAR DEL HOMBRE MUERTO NORTE

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		5.000 t/year LCE

PRODUCT TO OBTAIN: Lithium Carbonate (Li_2CO_3)

CAPEX: 93 M USD

Estimated annual employment: 191

Estimated LOM: 30 years

Mining Method: Pumping-Evaporation

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade		Metal Content	
		Li (mg/l)	K (mg/l)	LCE (t)	KCl (t)
Indicated	119	797	7.039	509.000	1.609.000
Inferred	21,9	534	5.517	62.000	231.000

SOURCES CONSULTED

-https://www.nrgmetalsinc.com/
-NI 43-101 PRELIMINARY ECONOMIC ASSESSMENT REPORT For The HOMBRE MUERTO NORTE PROJECT
Salta Province, Argentina. 3 June 2019

CONTACT

750 West Pender Street, Suite 804- Vancouver BC, Canada
V6C-2T7
INVESTOR RELATIONS:
info@nrgmetalsinc.com

SAL DE ORO

Los Andes
Salta

4000
m.a.s.l.

LOCATION
25° 13' 12" Latitude South
67° 04' 12" Longitude West

COMMODITY
Li

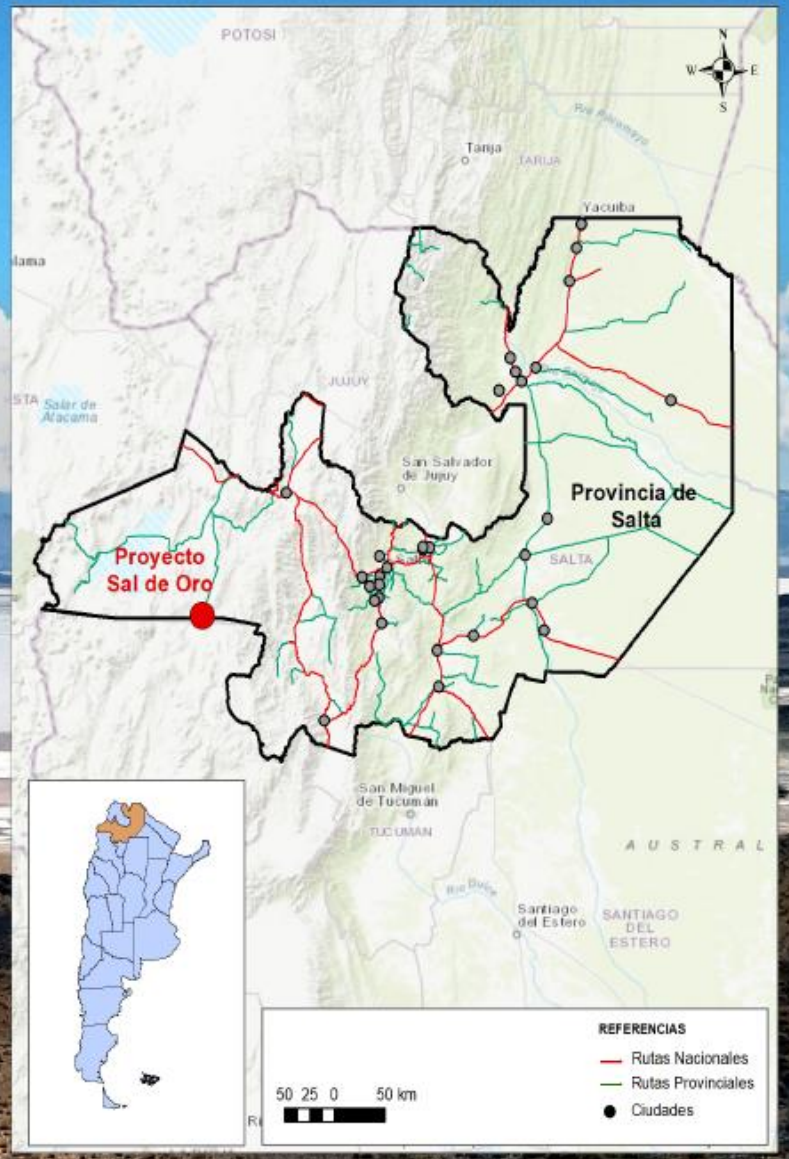
MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
Posco Argentina S.A.U.

COMPANY
Posco

RESERVES	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	-	-

RESOURCES	GRADE (ppm)	MINERAL CONTENT (Tons)
Measured	-	-
Indicated	-	1,580,000
Inferred	-	495,000



SAL DE ORO

LOCATION (25° 13’ 12” Lat. S; 67° 04’ 12” Long. W)

The project is located in the northern part of the Hombre Muerto Salar, in the border area of the provinces of Catamarca and Salta, 170 km southeast of the city of Salta.
The project is strategically located in the Hombre Muerto Salar, an active lithium production area of Livent Corp. (former FMC) in the Fenix lithium mine, about 12 miles south of the project area.

PROPERTY DATA

- **OWNER/CONTROLLER: POSCO**
- **OPERATOR: POSCO ARGENTINA S.A.U.**
- **AREA: n/a**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

COMPANY'S LAST ANNOUNCEMENT

- PROSPECTING
- INITIAL EXPLORATION
- **ADVANCED EXPLORATION**
- PREL. ECON. ASSES. (PEA)
- PREFEASIBILITY
- FEASIBILITY
- CONSTRUCTION
- OPERATION

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

The local geology of the Hombre Muerto Salar includes a basement of intrusive, sedimentary and metamorphic rocks from the Precambrian and early Paleozoic, thick sequences of Ordovician marine sedimentary rocks with a roof of continental Mesozoic sedimentary units.
These are superimposed by the Miocene to Pliocene volcanic deposits, which are common characteristics of the salt flats in the sedimentary basins of the region.

SAL DE ORO

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		30.000 t/year LCE

PRODUCT TO OBTAIN: Lithium Carbonate (Li_2CO_3)

CAPEX: 450 M USD

Estimated annual employment: 923

Estimated LOM: 30 years

Mining Method: Pumping-Evaporation

RESOURCES AND RESERVES - ESTIMATION

Resources	Metal Content	
	LCE (t)	KCl (t)
Indicated	1.580.000	6.239.034
Inferred	495.000	1.875.878

CONTACT

- Lizardo González (Gerente administrativo) lgonzalez@poscoargentina.com
- Chung Sungkook (Gerente de Operaciones) skch1@poscoargentina.com
- Kihyo Jin (Gerente de Proyectos) kihyojin@poscoargentina.com

RINCÓN

Los Andes
Salta

3700
m.a.s.l.

LOCATION
24° 07' 12" Latitude South
66° 58' 48" Longitude West

COMMODITY
Li

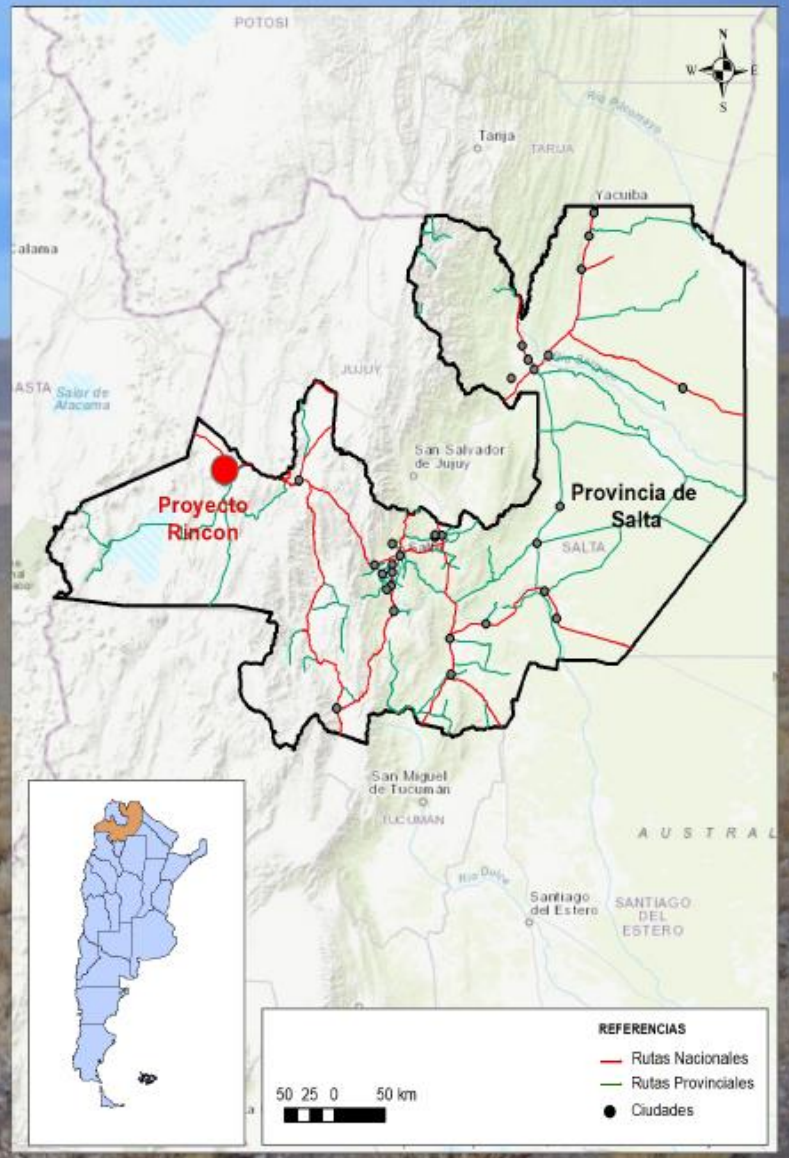
MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
Pepinnini S.A.

COMPANY
Pepinnini Lithium Limited

RESERVES	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	-	-

RESOURCES	GRADE (%)	MINERAL CONTENT (Tons)
Measured	252	36,000
Indicated	233	24,000
Inferred	288	6,000



RINCÓN

LOCATION (24° 07’ 12” Lat. S; 66° 58’ 48” Long. W)

The Salar de Rincón is a saline body located in the Los Andes Department, in Salta, at 3,760 m.a.s.l. It is located about 280 km northwest of the city of Salta and is accessed by National Route 51; it is near the town of Olacapato Chico and 40 km from the international border with Chile

PROPERTY DATA

- **OWNER/CONTROLLER: Pepinnini Lithium Limited**
- **OPERATOR: PEPINNINI S.A**
- **AREA: n/a**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

- PROSPECTING
- INITIAL EXPLORATION
- **ADVANCED EXPLORATION**
- PREL. ECON. ASSES. (PEA)
- PREFEASIBILITY
- FEASIBILITY
- CONSTRUCTION
- OPERATION

COMPANY'S LAST ANNOUNCEMENT

Salta Lithium Rincon Project initial JORC Resource. Pepinnini June 27th 2018

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

The geological framework is given by a southern volcanic range (Tul Tul-Del Medio and Pocitos volcanoes) and the Guayaos (Ordovician) mountain range in the north, while the rest is comprised of alluvial fields. It shows a practically continuous layer of surface salt that reaches variable thicknesses. The borate is 20-30 cm below a layer of halite that forms the encape. Borates are ulexite and tincal. The ulexite is up to 50 cm thick and comes in both solid and nodules. It shows strong contamination with chlorides and sulfates. The tincal occurs on the NE edge of the salt flat and was exploited in the former Carolina mine. It occurs in several morphologies, some of these known to miners as tincal type pork rind or corn grain. It occurs mainly with a reddish slime-clay bargain.

RINCÓN

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		n/a

PRODUCT TO OBTAIN: n/a

CAPEX: n/a

Estimated annual employment in operation: n/a
Estimated annual employment in construction stage: n/a

Estimated LOM: n/a

Mining Method: n/a

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade		Metal Content	
		Li (mg/l)	K (mg/l)	LCE (t)	KCl (t)
Measured	27	252	6.040	36.000	307.000
Indicated	19	233	5.512	24.000	208.000
Inferred	3,7	288	7.001	6.000	49.000

SOURCES CONSULTED

-Salta Lithium Rincon Project initial JORC Resource. Pepinnini June 27th 2018
-Pepinnini Lithium Limited, Annual Report 2019

CONTACT

Marcela Casini
Exploration Manager (Operations/Exploration/Engineering)
admin@pepinnini.com.au
http://www.pepinnini.com.au/projects/sou

PULAR

Los Andes
Salta

4025
m.a.s.l.

LOCATION
24° 17' 24" Latitude South
67° 55' 48" Longitude West

COMMODITY
Li

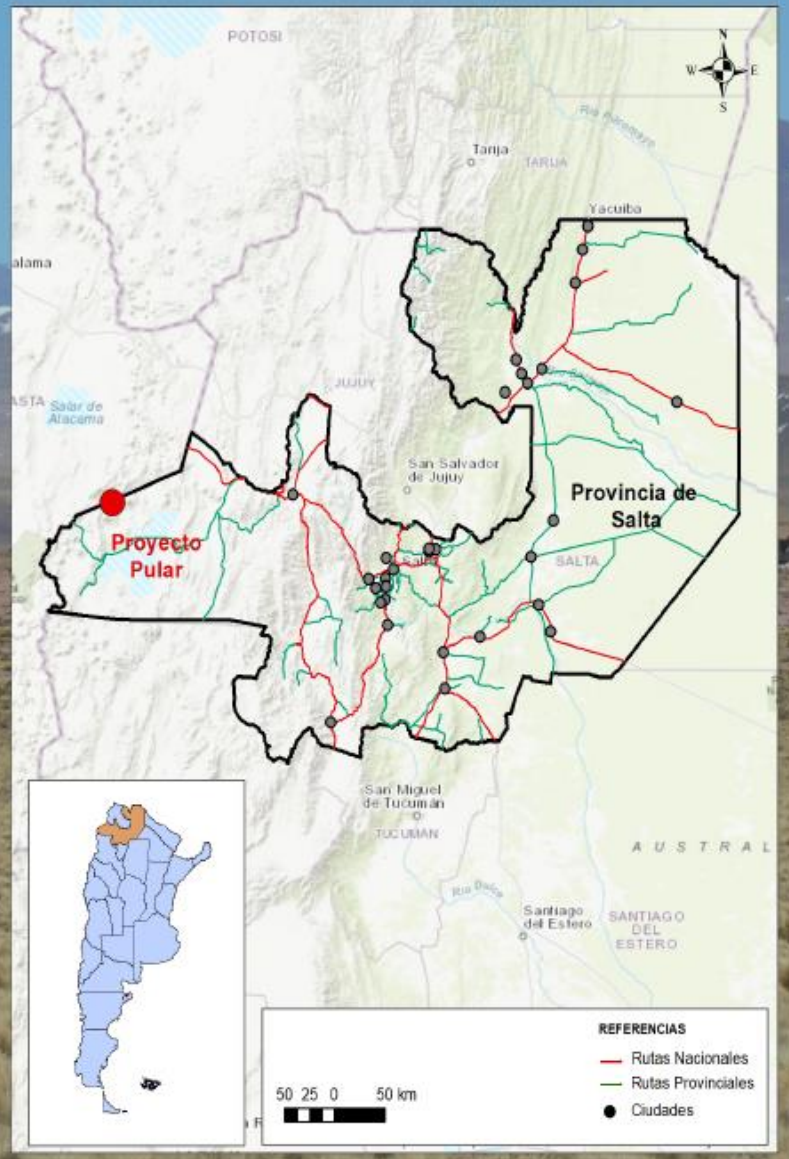
MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
Pepinnini S.A.

COMPANY
Pepinnini Lithium Limited

RESERVES	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	-	-

RESOURCES	GRADE (%)	MINERAL CONTENT (Tons)
Measured	85	366,000
Indicated	-	-
Inferred	77	113,000



PULAR

LOCATION (24° 17’ 23’’ Lat. S; 67° 55’ 48’’ Long. W)

The project is located in northwestern Argentina in what is known as the "Lithium Triangle. The Salar is located in the province of Salta, approximately 250 km from the capital city and about 1,400 kilometers from Buenos Aires, 4,025 meters above sea level. You can access from the city of Salta through the National 51, Provincial 17 and Provincial 27 routes.

PROPERTY DATA

- **OWNER/CONTROLLER: Pepinnini Lithium Limited**
- **OPERATOR: PEPINNINI S.A**
- **AREA: n/a**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

- PROSPECTING
- INITIAL EXPLORATION
- **ADVANCED EXPLORATION**
- PREL. ECON. ASSES. (PEA)
- PREFEASIBILITY
- FEASIBILITY
- CONSTRUCTION
- OPERATION

COMPANY'S LAST ANNOUNCEMENT

-Salta Lithium Pular Exploration Update . May 30th 2018

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

The Salar de Pular is developed on lithologies of Pleistocena-Holocenas ages, it contains a superficial layer of Sodium Sulfate (formerly considered of economic importance), it presents intercalations of evaporitic deposits and fine sediments.
The results of the perforations indicate that the filling of the salt flat can be divided into hydrogeological units that are dominated by three main lithologies: silty sands with some clays, fine to medium unconsolidated to moderately consolidated sands and sandy to burden some gaps.

PULAR

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		n/a

PRODUCT TO OBTAIN: n/a

CAPEX: n/a

Estimated annual employment in operation: n/a
Estimated annual employment in construction stage: n/a

Estimated LOM: n/a

Mining Method: n/a

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade		Metal Content	
		Li (mg/l)	K (mg/l)	LCE (t)	KCl (t)
Indicated	810	85	4.480	366.000	6.904.000
Inferred	270	77	4.280	113.000	2.246.000

SOURCES CONSULTED

-Salta Lithium Pular Exploration Update . May 30th 2018
-Pepinnini Lithium Limited, Annual Report 2019

CONTACT

Marcela Casini
Exploration Manager (Operations/Exploration/Engineering)
admin@pepinnini.com.au
http://www.pepinnini.com.au/projects/sou

RÍO GRANDE

Los Andes
Salta

3630
m.a.s.l.

LOCATION
25° 07' 12" Latitude South
68° 16' 12" Longitude West

COMMODITY
Li

MINERALIZATION TYPE
Brine deposit

LOCAL OPERATOR
Lithea Inc.
Sucursal
Argentina

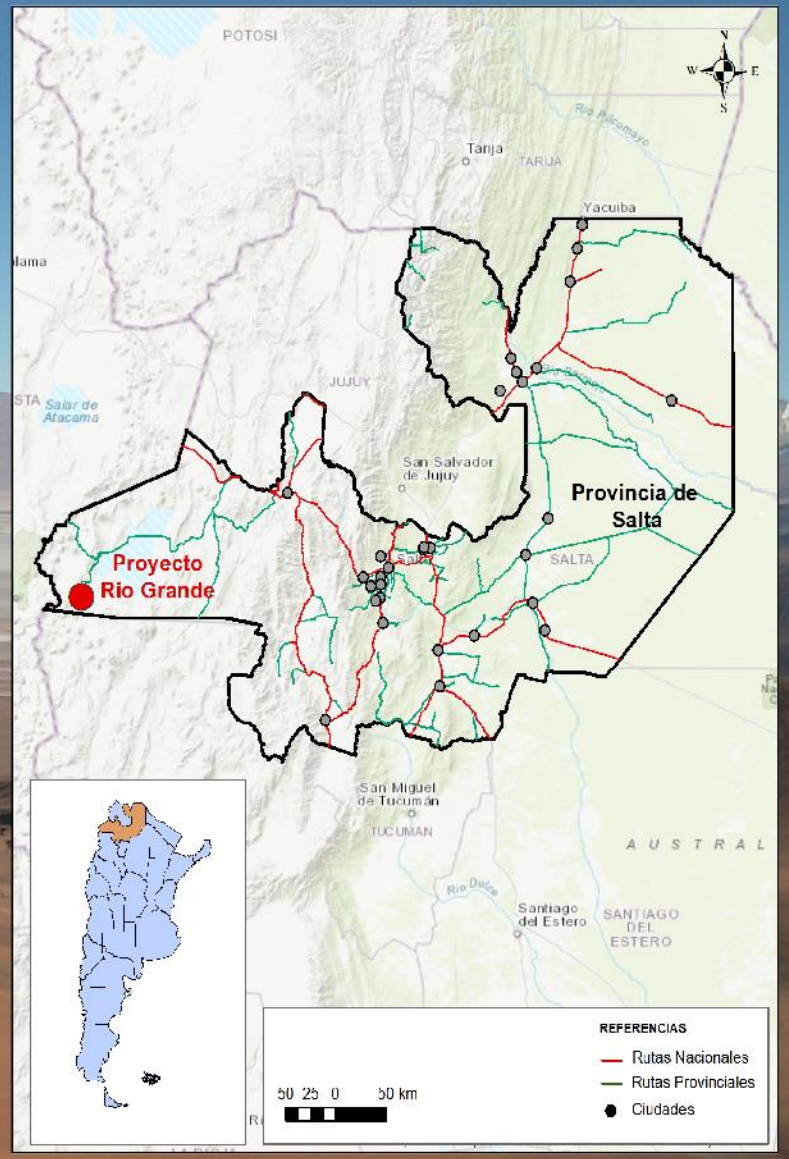
COMPANY
Plus
Petrol

RESERVES

	GRADE (%)	MINERAL CONTENT (Tons)
Proven	-	-
Probable	-	-

RESOURCES

	GRADE (ppm)	MINERAL CONTENT (Tons)
Measured	-	-
Indicated	-	-
Inferred	379	2,190,000



RÍO GRANDE

LOCATION (25° 07' Lat. S; 68° 16' Long. W)

Located in the southwestern sector of the Province of Salta, Argentina, in an area known as the Puna region, Salar de Rio Grande is located at an altitude of 3,630 meters above sea level and covers an area of approximately 180 square kilometers . The Rio Grande Project is approximately 500 km from the city of Salta and close to key infrastructure such as roads and rail lines

PROPERTY DATA

- **OWNER/CONTROLLER: PLUSPETROL**
- **OPERATOR: Lithea Inc. Sucursal Argentina**
- **AREA: 26.865 ha**

PROJECT STATUS

LAST PUBLIC TECHNICAL REPORT

- PROSPECTING
- INITIAL EXPLORATION
- **ADVANCED EXPLORATION**
- PREL. ECON. ASSES. (PEA)
- PREFEASIBILITY
- FEASIBILITY
- CONSTRUCTION
- OPERATION

COMPANY'S LAST ANNOUNCEMENT

Technical Report On The Salar De Rio Grande Project, Salta Province, Argentina- Report for NI 43-101. February 15, 2018

PROJECT GEOLOGY

TYPE OF DEPOSIT: Brine

REGIONAL GEOLOGY

The salt flats are the result of a long paleoenvironmental evolution, which begins with the formation of freshwater lakes during the Pleistocene, which are salinized early until their desiccation in the Holocene. The congenital development with the volcanism led to a massive transfer of ions to the basins, whose result is expressed in important volumes of diverse salts, with a predominance of sodium chlorides. The volumetric share of salts in the total fill defines two major types of salt flats: 1) crystalline and 2) earthy. In general terms, the crystalline surfaces admit a concentric zonation of facies (Alonso, 1992). The crystalline salars are impregnated with interstitial brine of diversified ionic content. Almost all the brines are carriers of chemical elements of economic importance, especially boron and lithium.

DEPOSIT GEOLOGY

Within the basin, three zones can be distinguished: one north with older sediments, a central area rich in sulfates and a south zone containing younger sediments.

The sediments of the Quaternary foothills surround the basin. They can be divided into a number of units:

- The pedemontan deposits (descent, beach, dune formations) that cover the surroundings, source of the sand and silt facies dragged by the wind that are in the area of saline deposits.
- Alluvial cones that carry water to the basin
- Two terrace levels surrounding the basin
- Mud slips and escarpments
- Delta Beach Sands

The central area is rich in sulfates. It is a belt 9 km long EW and 8 km NS. This central area is the place where the water table is closest to the surface (0.4 m to 1 m deep)

Under a surface layer of sodium chloride rich in gypsum and sand crystals, there are mirabilite lenses 0.5 m to 2.5 m thick, lengthening in the EW direction.

RÍO GRANDE

TECHNICAL / ECONOMIC INFORMATION OF THE PROJECT

AVERAGE ANNUAL PRODUCTION

Li		n/a

PRODUCT TO OBTAIN: n/a

CAPEX: n/a

Estimated annual employment in operation: n/a
Estimated annual employment in construction stage: n/a

Estimated LOM: n/a

Mining Method: n/a

RESOURCES AND RESERVES - ESTIMATION

Resources	Tonnage (Mm^3)	Grade	Metal Content
		Li (mg/l)	LCE (t)
Inferred	1.137,7	374	2.190.000

SOURCES CONSULTED

Technical Report On The Salar De Rio Grande Project, Salta Province, Argentina- Report for NI 43-101. February 15, 2018

CONTACT

Web: www.pluspetrol/argentina/operaciones.php