

# PORTFOLIO OF ADVANCED PROJECTS

## Lithium



Ministerio de Economía  
Argentina

Secretaría de Minería

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# ADVANCED LITHIUM PROJECTS



## CAPEX

7,436 M USD

6

## CONSTRUCTION

- 1 - CAUCHARI - OLAROS
- 2 - CENTENARIO - RATONES
- 3 - MARIANA
- 4 - SAL DE ORO
- 5 - SAL DE VIDA
- 6 - TRES QUEBRADAS

2

## FEASIBILITY (FS)

- 7 - PASTOS GRANDES
- 8 - SALAR DEL RINCÓN



## IDENTIFIABLE RESOURCES

100.3 Mt

3

## PREFEASIBILITY (PFS)

- 9 - CAUCHARI
- 10 - KACHI
- 11 - SALAR DE CAUCHARI

20

## ADVANCED EXPLORATION

- 17 - ANCASTI
- 18 - ANTOFALLA NORTE
- 19 - ARIZARO
- 20 - GALLEGO
- 21 - INCAHUASI
- 22 - KARACHI SALAR ESCONDIDO
- 23 - LAGUNA VERDE
- 24 - LOS SAPITOS
- 25 - MINA SISIFO - MINA PATILLA
- 26 - PULAR
- 27 - RÍO GRANDE
- 28 - SAL DE LA PUNA
- 29 - SAL DE LOS ÁNGELES
- 30 - SALAR DE ANTOFALLA I A XIII Y BOLLAND VI
- 31 - SALAR DE ARIZARO (1)
- 32 - SALAR DE ARIZARO (2)
- 33 - SALAR TOLLILLAR
- 34 - SALINAS GRANDES
- 35 - SINCERA
- 36 - VIRGEN DEL VALLE LITIO



## POTENCIAL ADICIONAL PRODUCTION

LCE 328,500 tn/year

5

## PEA (Pref. Econ. Asses.)

- 12 - CANDELAS
- 13 - HOMBRE MUERTO NORTE
- 14 - HOMBRE MUERTO OESTE
- 15 - POZUELOS (PPG)
- 16 - RINCÓN

Mt: millions of tons - m3: cubic meters - Mm3: million cubic meters - Moz: million of ounces kt: thousands of tons- koz: thousand of ounces  
M USD: Million of dollars - e: Estimated





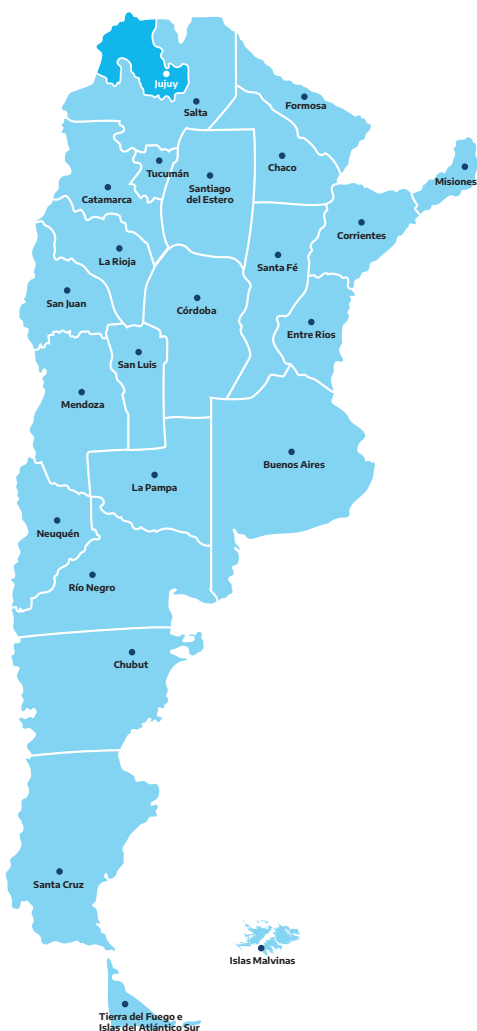
# CAUCHARI OLAROSZ

1





# CAUCHARI OLAROSZ



### LOCATION

(23° 41' 62" Lat. S; 66° 71' 31" Long. W)

Cauchari-Olaroz is located in Jujuy Province in north-west Argentina. The Project is situated in the Salar de Olaroz and Salar de Cauchari, adjacent to Olaroz facility, which has been in production since 2015. It is located at a distance of 1,600 km from Buenos Aires and 200 km from Jujuy Capital.



### MINERALIZATION TYPE

Brine



### PROPERTY DATA

#### OWNER / CONTROLLER

Ganfeng Lithium,  
Lithium Americas Corp, JEMSE



### OPERATOR

Minera Exar S.A.



### AREA

83,104 ha





# CAUCHARI OLAROS

## PROJECT GEOLOGY

Type of deposit - Brine

### Regional Geology

The salt flats are the result of a long paleoenvironmental evolution, which began with the formation of freshwater lakes during the Pleistocene, which were 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 was 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

Salar de Cauchari is a mixed style salar, with a halite nucleus in the center of the Salar overlain with up to 50 m of fine grained (clay) sediments. The halite core is interbedded with clayey to silty and sandy layers. The Salar is surrounded by relative coarse grained alluvial and fluvial sediments. These fans demark the perimeter of the actual Salar visible in satellite images and at depth extend towards the center of the Salar where they form the distal facies with an increase in sand and silt. At depth (between 300 m and 500 m) a deep sand unit has been intercepted in several core holes in the SE Sector of the Project area. The Salar de Olaroz Basin is one of a number of land locked salars (salt lakes) located high up in the Argentinian Puna Region. This basin is bounded by a pair of north-south reverse faults that thrust Andes Paleozoic sediment west to east as a result of the Pacific Plate colliding with the South American Plate. This results in the west side of the basin being continually pushed higher which replenishes the sediment fill within the basin.





# CAUCHARI OLAROZ

## Contact

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CP4600, Argentina  
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Comunicación institucional y prensa:  
comunicacion@exar.com.ar

## Project Status CONSTRUCTION

### Company's Last Announcement

March 2022. The company announced that construction continues to progress and a wellfield is also underway.

## Resources and Reserves

RESERVES	Avg. Li Grade (mg/l)	Brine (m <sup>3</sup> )	Lithium Metal (t)	LCE (t)
Proven	616	1.6 x 10 <sup>7</sup>	96,650	514,450
Probable	606	9.6 x 10 <sup>8</sup>	586,270	3,120,590
Total	607	1.1 x 10 <sup>9</sup>	682,920	3,635,040

## Technical and Economic Information

**Estimated average annual production:** 40,000 Tn LCE

**Product to obtain:** Lithium Carbonate (Li<sub>2</sub>CO<sub>3</sub>)

**CAPEX:** 741 M USD

**Estimated annual employment in operation:** + 2,100

**Estimated LOM:** 40 years

**Mining Method:** Pumping - Evaporation

### Sources Consulted

<https://www.lithiumamericas.com/argentina/cauchari-olaroz/>  
[https://www.lithiumamericas.com/\\_resources/news/nr\\_20220728.pdf](https://www.lithiumamericas.com/_resources/news/nr_20220728.pdf)

Lithium Americas Second Quarter 2022 Results Company Release - 07/28/2022



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# CENTENARIO RATONES

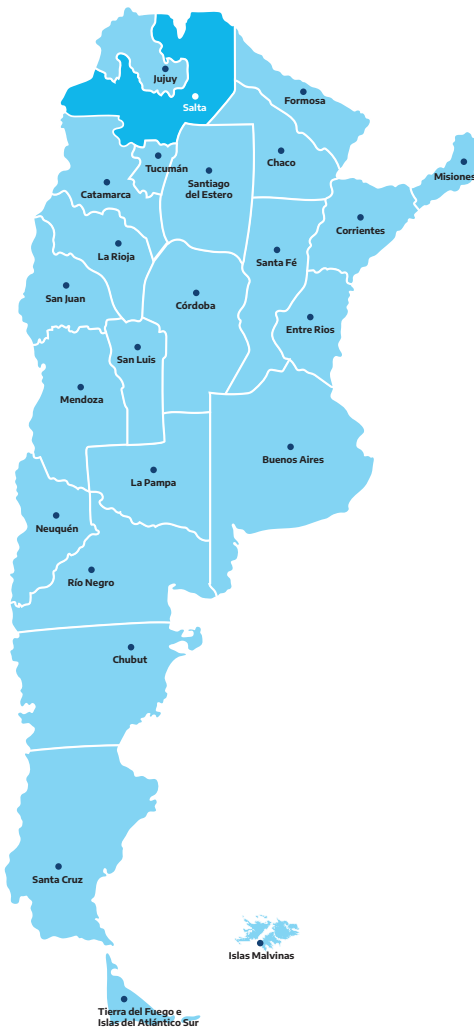
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# CENTENARIO RATONES



## LOCATION

(24° 52' 58" Lat. S; 66° 43' 58" Long. W)

The Centenario Ratones salt flat area is located 300 km west of the city of Salta, at 3,900 m.a.s.l. The project is accessed from San Antonio de Los Cobres along provincial route 129. Pastos Grandes, is located 60 km from the project, with a population of 100 inhabitants.



## MINERALIZATION TYPE

Brine



## PROPERTY DATA

### OWNER / CONTROLLER

Eramet (50,9%), Tsingshan (49,9%)



## OPERATOR

Eramine Sudamericanas S.A.



## AREA

50,000 ha





# CENTENARIO RATONES

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## PROJECT GEOLOGY

Type of deposit - Brine

### Regional Geology

The salt flats are the result of a long paleoenvironmental evolution, which began with the formation of freshwater lakes during the Pleistocene, which were 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 was 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 area is a hydrological basin containing two salt flats, Centenario and Ratones. The Ratones Salar is located to the N of C° Ratones. A mountainous island of metamorphic rocks emerges in the central eastern part of the salt flats, where it forms a wide bay in its southern sector. Within and around the bay is the borate concentration. The Salar de Centenario is the continuation of the previous one, from which it is separated by the confluence of two important alluvial cones that expand into the depression. Genetically, it is related to the development of an important alignment of extinct hot springs, whose travertine remains can be seen on the eastern edge of the salar, coinciding with the regional fracture that limits the depression.





# CENTENARIO RATONES

## Contact

Sandrine Nourry-Dabi  
Directrice des Relations Investisseurs  
Tel: + 33 (0)1 45 38 37 02  
E-mail: ir@eramet.com

## Project Status CONSTRUCTION

Company's Last Announcement

Press Kit - November 2021 Eramet in Argentina Lithium Project

## Resources and Reserves

RESOURCES	Brine (Mm <sup>3</sup> )	Grade	Metal Content
		Li (mg/l)	LCE (t)
Measured	916	408	1,991,000
Indicated	1,442	379	2,912,000
Inferred	3,010	311	4,987,000

## Technical and Economic Information

**Estimated average annual production:** 24,000 Tn LCE

**Product to obtain:** Lithium Carbonate (Li<sub>2</sub>CO<sub>3</sub>)

**CAPEX:** 595 M USD

**Estimated annual employment in operation:** 284

**Estimated employment in construction:** 800

**Estimated LOM:** 50 years

**Mining Method:** Pumping - Chemical adsorption

### Sources Consulted

Centenario Ratones Lithium Project. Informe de prensa noviembre 2021 Eramet in Argentina Lithium Project.

<https://www.eramet.com/en/eramine-world-class-lithium-production-project>

<https://www.eramet.com/sites/default/files/2021-11/Eramet-Press-kit-Lithium-project-Argentina-November2021.pdf>



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# MARIANA





# MARIANA



## LOCATION

(24° 48' 36" Lat. S; 68° 18' 00' Long. W)

The Mariana I, II and III project is located in the west of the Province of Salta in the Salar de Llullaillaco.

In a straight line it is located 280 km west of the capital city of Salta.



## MINERALIZATION TYPE

Brine



## PROPERTY DATA

### OWNER / CONTROLLER

Ganfeng Lithium Co., Ltd.



## OPERATOR

Litio Minera Argentina



## AREA

16,000 ha





# MARIANA

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## PROJECT GEOLOGY

Type of deposit - Brine

### Regional Geology

The salt flats are the result of a long paleoenvironmental evolution, which began with the formation of freshwater lakes during the Pleistocene, which were 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 was 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

## Contact

Samuel Pigott  
 E-mail: [samuel.pigott@ganfenglithium.com](mailto:samuel.pigott@ganfenglithium.com)  
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 250 University Ave #200, Toronto,  
 ON M5H 3E5, Canada

## Project Status CONSTRUCTION

### Resources

Resources	Average Lithium Grade (mg/l)	Brine (Mm3)	Lithium Metal (t)	LCE (t)
Measured	314	1,6831	528,000	2,810,000
Indicated	316	960	303,000	1,600,000
Inferred	328	470	154,000	786,000

### Technical and Economic Information

**Estimated average annual production:** 10,000 t/year LCE  
**Product to obtain:** Lithium Carbonate (Li<sub>2</sub>CO<sub>3</sub>)  
**CAPEX:** 243 M USD  
**Estimated annual employment in operation:** N/A  
**Estimated employment in construction stage:** N/A  
**Estimated LOM:** 25 years  
**Mining Method:** Pumping - Evaporation

Sources Consulted  
<http://www.ganfenglithium.com>



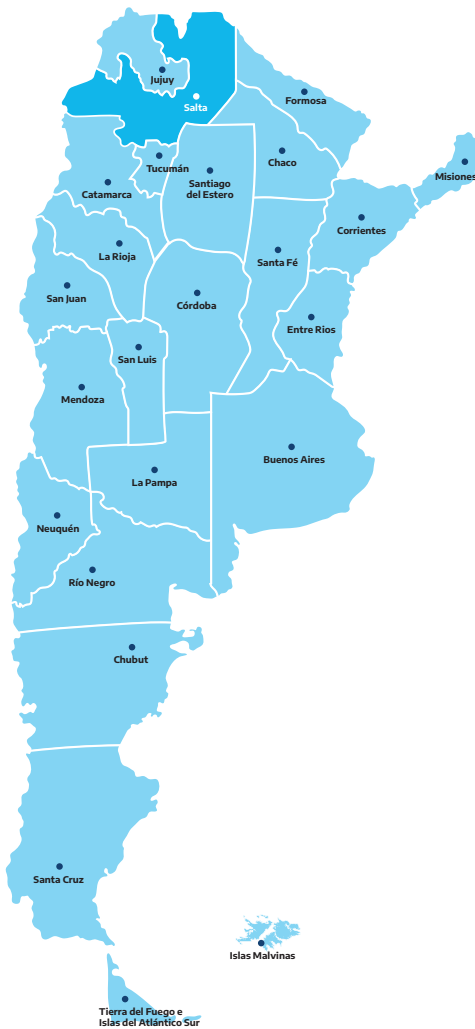
# SAL DE ORO







# SAL DE ORO



## LOCATION

(25° 13' 12" Lat. S; 67° 04' 12" Long. W)

The Sal de Oro project is located about 1,400 km northwest of Buenos Aires, Argentina, at an altitude of 4,025 m.a.s.l. It is located east of Salar de Hombre Muerto, in the provinces of Catamarca (Antofagasta Dept.) and Salta.



## MINERALIZATION TYPE

Brine



## PROPERTY DATA

**OWNER / CONTROLLER**

POSCO



## OPERATOR

POSCO ARGENTINA S.A.



## AREA

N/A





# SAL DE ORO

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## PROJECT GEOLOGY

Type of deposit - Brine

### Regional Geology

The salt flats are the result of a long paleoenvironmental evolution, which began with the formation of freshwater lakes during the Pleistocene, which were 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 was 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

## Contact

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

## Project Status CONSTRUCTION

### Resources and Reserves

RESOURCES	Metal Content	
	LCE (t)	KCI (t)
Indicated	1,580,000	6,239,034
Inferred	495,000	1,875,878

### Technical and Economic Information

**Estimated average annual production:** 25,000 t/year LCE

**Product to obtain:** Lithium Hydroxide (LiOH), (Li<sub>2</sub>CO<sub>3</sub>)

**CAPEX:** 830 M USD

**Estimated annual employment in operation:** N/A

**Estimated employment in construction stage:** N/A

**Estimated LOM:** 30 years

**Mining Method:** Pumping - Evaporation

#### Sources Consulted

<http://www.poscoargentina.com/>





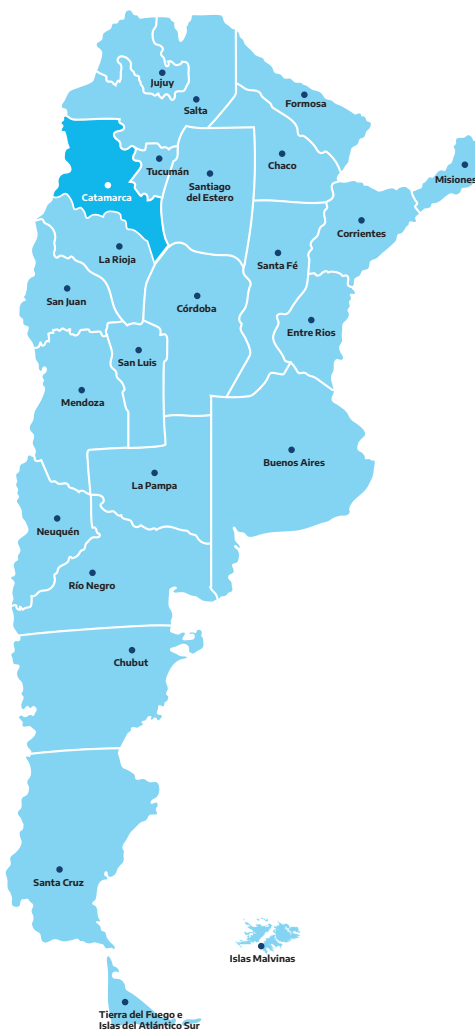
# SAL DE VIDA

5





# SAL DE VIDA



## LOCATION

(25° 19' 48" Lat. S; 66° 52' 48" 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.



## MINERALIZATION TYPE

Brine



## PROPERTY DATA OWNER / CONTROLLER

Allkem Limited



## OPERATOR

Galaxy Lithium



## AREA

4,391 ha





# SAL DE VIDA

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## PROJECT GEOLOGY

Type of deposit - Brine

### Regional Geology

The salt flats are the result of a long paleoenvironmental evolution, which began with the formation of freshwater lakes during the Pleistocene, which were 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 was 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 VIDA

## Contact

info@allkem.co  
Cell: +61 7 3064 3600  
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## Project Status CONSTRUCTION

Company's Last Announcement

4/4/2022 Capacity of the project increased to 45ktpa in 2 stages

## Resources and Reserves

Sal de Vida Resource Estimate (April 2022)				Sal de Vida Reserve Estimate (April 2022)		
Category	Averag Li (mg/L)	In situ Li (tonnes)	LCE (tonnes)	Category	Li Total Mass (tonnes)	LCE (tonnes)
Measured	757	467,235	2,487,000	Proven	50,725	270,000
Indicated	793	703,201	3,743,000	Probable	276,193	1,470,118
Measured and indicated	775	1,170,437	6,230,000	<b>Total</b>	<b>326,919</b>	<b>1,740,199</b>
Inferred	563	116,668	621			
<b>Total</b>	<b>752</b>	<b>1,287,105</b>	<b>6,851,000</b>			

## Technical and Economic Information

**Estimated average annual production:** 45 ktpa LCE  
**Product to obtain:** Lithium Carbonate (Li<sub>2</sub>CO<sub>3</sub>), Potassium chloride (KCl)  
**CAPEX:** 271 M USD (stage 1) + 524 M USD (Extension)  
**Estimated annual employment in operation:** 170 (stage 1)  
**Estimated employment in construction stage:** 430  
**Estimated LOM:** 40 years  
**Mining Method:** Pumping - Evaporation

### Sources Consulted

<https://www.allkem.co/investors/asx-announcements>  
<https://www.allkem.co/investors/asx-announcements>

Sal de Vida Project NI 43-101 Technical Report 31 March www.allkem.co



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# TRES QUEBRADAS

6







# 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.



### MINERALIZATION TYPE

Brine



### PROPERTY DATA

#### OWNER / CONTROLLER

Zijin Mining Company



### OPERATOR

Liex S.A.



### AREA

16,000 ha





# TRES QUEBRADAS

## PROJECT GEOLOGY

Type of deposit - Brine

### Regional Geology

The salt flats are the result of a long paleoenvironmental evolution, which began with the formation of freshwater lakes during the Pleistocene, which were 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 was 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

## Contact

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

## Project Status CONSTRUCTION | Company's Last Announcement

In March 2022, the company started construction of 3Q salt lake.

## Resources and Reserves

Summary of the Mineral Resource Estimate Tres Quebradas Project Cutt of value off 400 mg/L (October 2021)				
	Measured	Indicated	Measured and indicated	Inferred
<b>Averag Li (mg/l)</b>	792	576	637	561
<b>LCE (tonnes)</b>	1,897,000	3,472,000	<b>5,369,000</b>	2,261,000

Summary of the lithium Reserve Estimate Tres Quebradas Project (October 2021)				
Year	Averag Li grade (mg/L)	Proven (LCE Tonnes)	Probable (LCE Tonnes)	Resource recovered (%)
<b>Total 50 Years Reserve estimate</b>	786	<b>1,084,300</b>	<b>587,600</b>	31

## Technical and Economic Information

**Estimated average annual production:** 20,000 LCE/year

**Product to obtain:** Lithium Carbonate ( $\text{Li}_2\text{CO}_3$ )

**CAPEX:** 380 M USD

**Estimated annual employment in operation:** N/A

**Estimated employment in construction stage:** N/A

**Estimated LOM:** 35 years

**Mining Method:** Pumping - Evaporation

### Sources Consulted

<https://www.neolithium.ca/project.php>

<https://www.neolithium.ca/pdf/Feasibility-Study-3Q-Project-Nov-25-2021.pdf>

<https://www.zijinmining.com/news/news-detail-119238.htm>



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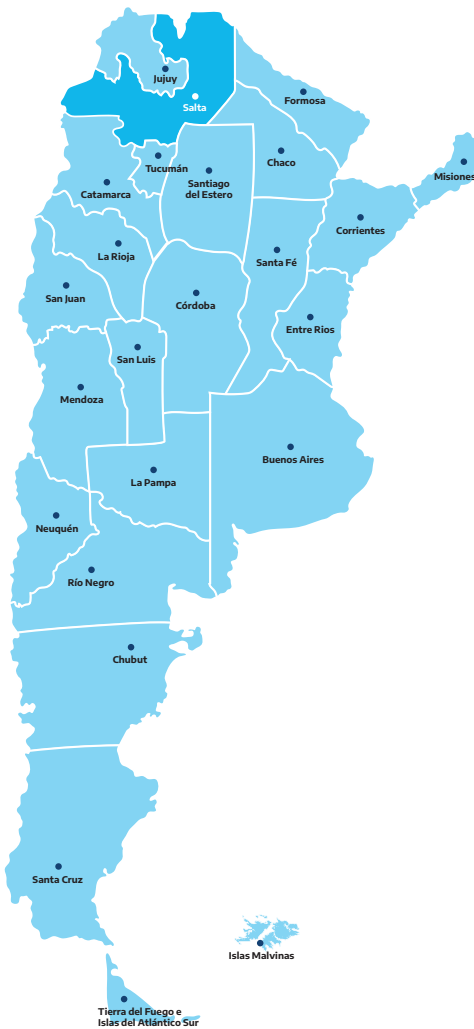
# PASTOS GRANDES

7





# 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.



## MINERALIZATION TYPE

Brine



**PROPERTY DATA  
OWNER / CONTROLLER**  
Lithium Americas



**OPERATOR**  
Proyecto Pastos Grandes S.A.



**AREA**  
12,619 ha





# PASTOS GRANDES

## PROJECT GEOLOGY

### Regional Geology

The salt flats are the result of a long paleoenvironmental evolution, which began with the formation of freshwater lakes during the Pleistocene, which were 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 was 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

## Contact

Canadá  
778-656-5820  
info@lithiumamericas.com

## Project Status FEASIBILITY

### Company's Last Announcement

June 2022. Lithium America approved a development plan to advance Pastos Grandes towards a construction decision.

## Resources and Reserves

Pastos Grandes Mineral Reserve Estimate (July 2019)				
Category	In situ Li (tonnes)	LCE (tonnes)	Time period (years)	Avg. Li (mg/L)
Proven	34,000	179,000	1-8 (8 years total)	470
Probable	143,000	764,000	9-40 (32 years total)	431
<b>Total</b>	177,000	<b>943,000</b>	40 years total	439

## Technical and Economic Information

**Estimated average annual production:** 24.000 t/yr. LCE

**Product to obtain:** Lithium Carbonate ( $\text{Li}_2\text{CO}_3$ )

**CAPEX:** 448 M USD

**Estimated annual employment in operation:** N/A

**Estimated employment in construction stage:** N/A

**Estimated LOM:** 40 years

**Mining Method:** Pumping - Evaporation

**Sources Consulted** "Feasibility Study of the Pastos Grandes Project, Salta Province, Argentina" July 29, 2019  
Lithium Americas Reports Second Quarter 2022 Results



Ministerio de Economía  
Argentina

Secretaría de Minería



# SALAR DEL RINCON

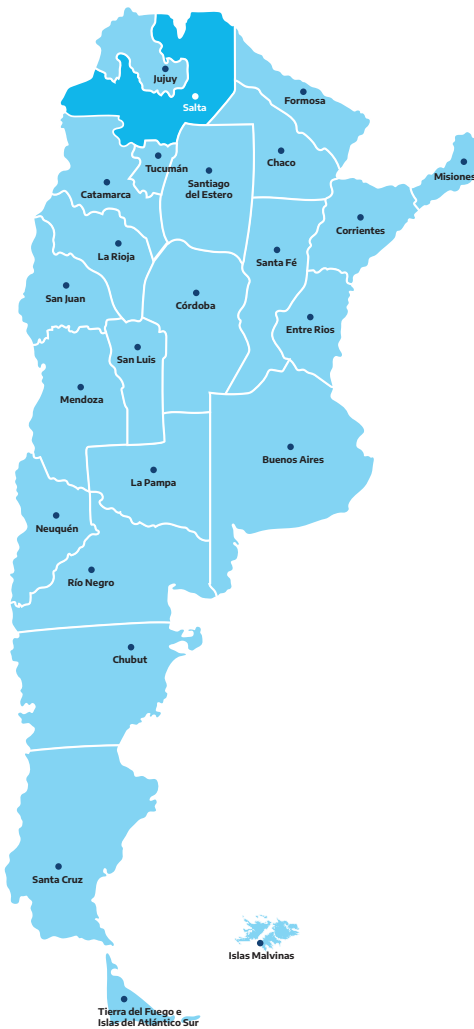
8







# SALAR DEL RINCON



## 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.



## MINERALIZATION TYPE

Brine



## PROPERTY DATA

### OWNER / CONTROLLER

Rio Tinto Group.



## OPERATOR

RIO TINTO MINING AND EXPLORATION LIMITED



## AREA

83,000 ha





# SALAR DEL RINCON

## 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 (Ordovician) 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 DEL RINCON

## Contact

Rio Tinto plc Head Office  
6 St James's Square  
London SW1Y 4AD UK  
Cell: +44 20 7781 2000

## Company's Last Announcement

June 2022. The company announced that the Board has approved to develop a small starter plant and first saleable production expected in 2024.

July 2022, Rio Tinto announced that it signed a non-binding Memorandum of Understanding (MOU) with Ford.

## Resources and Reserves

RESOURCES	Metal Content	RESERVES	Metal Content
	LCE (t)		LCE (t)
Measured	4,900,000	Proven	400,000
Indicated	900,000	Probable	1,580,000
Inferred	5,970,000		

## Technical and Economic Information

**Estimated average annual production:** 25,000 t LCE

**Product to obtain:** Lithium Carbonate ( $\text{Li}_2\text{CO}_3$ )

**CAPEX:** 769,6 M USD

**Estimated annual employment in operation:** N/A

**Estimated employment in construction stage:** N/A

**Estimated LOM:** 40 years

**Mining Method:** Pumping - Chemical adsorption

### Sources Consulted

<https://www.riotinto.com/-/media/Content/Documents/Invest/Financial-news-and-performance/Results/RT-Half-year-results-2022.pdf?rev=269da2285f3b4ec0909281a4ced0ee22>  
<https://www.riotinto.com/news/releases/2022/Ford-Rio-Tinto-sign-MOU-for-battery-and-low-carbon-materials-supply-to-support-net-zero-future>



Ministerio de Economía  
Argentina

Secretaría de Minería



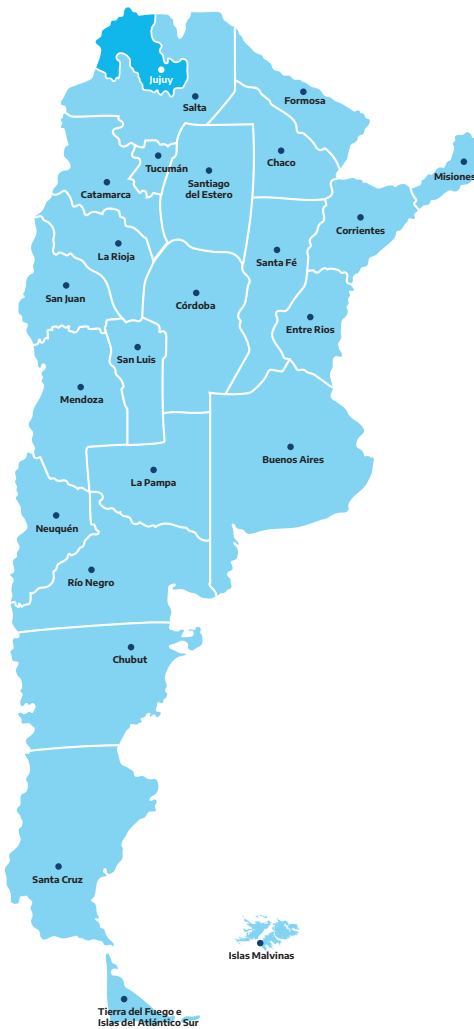
# CAUCHARI

9





# CAUCHARI



### LOCATION

(23° 43' 30.9" Lat. S; 66° 48' 39.9" Long. W)

The Cauchari project is located in Jujuy, Province in north-west Argentina. The Project is situated in the Salar de Olaroz. It is located at a distance of 1,600 km from Buenos Aires and 250 km from Jujuy Capital.



### MINERALIZATION TYPE

Brine



### PROPERTY DATA

#### OWNER / CONTROLLER

Lake Resources NL



### OPERATOR

MINERALES AUSTRALES S.A.



### AREA

3,980 ha





# CAUCHARI

## PROJECT GEOLOGY

Type of deposit - Brine

### Regional Geology

The salt flats are the result of a long paleoenvironmental evolution, which began with the formation of freshwater lakes during the Pleistocene, which were 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 was 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

Salar de Cauchari is a mixed style salar, with a halite nucleus in the center of the Salar overlain with up to 50 m of fine grained (clay) sediments. The halite core is interbedded with clayey to silty and sandy layers. The Salar is surrounded by relative coarse grained alluvial and fluvial sediments. These fans demark the perimeter of the actual Salar visible in satellite images and at depth extend towards the center of the Salar where they form the distal facies with an increase in sand and silt. At depth (between 300 m and 500 m) a deep sand unit has been intercepted in several core holes in the SE Sector of the Project area.





# CAUCHARI

## Contact

Telephone: +61 2 9188 7864  
Email: [hello@lakeresources.com.au](mailto:hello@lakeresources.com.au)

## Project Status PREFEASIBILITY

Company's Last Announcement

February 2022. Lake Resources started drill program and testing at Olaroz, Cauchari and Paso.

## Resources and Reserves

RESOURCES	Metal Content	
	(t) LCE	(t) KCL
Indicated	6,300,000	19,600

## Technical and Economic Information

**Estimated average annual production:**  
**Product to obtain:** Lithium Carbonate ( $\text{Li}_2\text{CO}_3$ )  
**CAPEX:** N/A  
**Estimated annual employment:** N/A  
**Estimated LOM:** N/A  
**Mining Method:** Pumping-Evaporation

### Sources Consulted

<https://lakeresources.com.au/>  
[https://lakeresources.com.au/wp-content/uploads/2022/02/lke\\_target-100\\_14-feb-22.pdf](https://lakeresources.com.au/wp-content/uploads/2022/02/lke_target-100_14-feb-22.pdf)



Li

KACHI

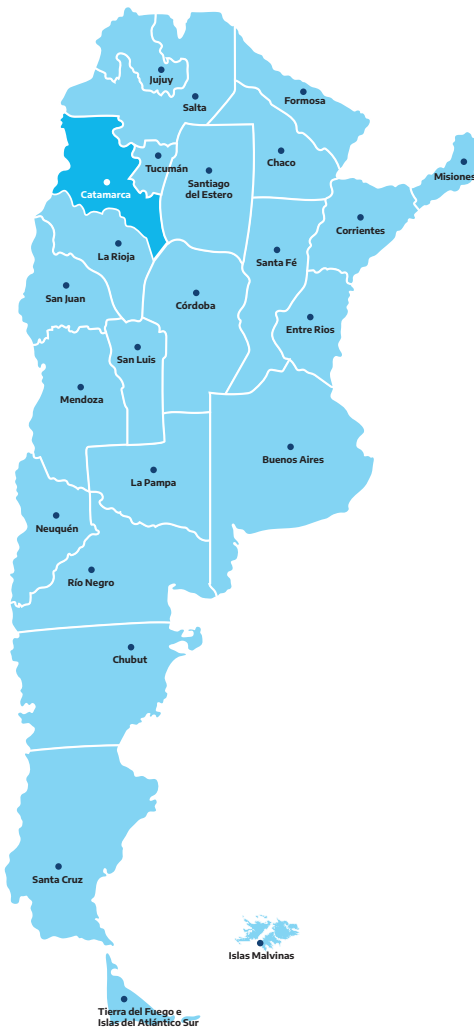
10







# KACHI



## LOCATION

(26° 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).



## MINERALIZATION TYPE

Brine



## PROPERTY DATA

### OWNER / CONTROLLER

Lake Resources



## OPERATOR

Morena del Valle Minerals S.A.



## AREA

74,000 ha





## KACHI

### PROJECT GEOLOGY

Type of deposit - Brine

#### Regional Geology

The salt flats are the result of a long paleoenvironmental evolution, which began with the formation of freshwater lakes during the Pleistocene, which were 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 was 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

## Contact

Telephone: +61 2 9188 7864  
 Email: hello@lakeresources.com.au

## Project Status PREFEASIBILITY

Company's Last Announcement

In June 2022, Lake started four hole DD programs.

## Resources and Reserves

RESOURCES	Grade		Metal Content	
	Li (mg/l)	K (mg/l)	LCE (t)	KCI (t)
Indicated	289	5,880	1,005,000	6,705,000
Inferred	209	4,180	3,394,000	24,000,000

## Technical and Economic Information

**Estimated average annual production:** 50,000 t/yr. LCE

**Product to obtain:** Lithium Carbonate ( $\text{Li}_2\text{CO}_3$ )

**CAPEX:** 544 M USD

**Estimated annual employment in operation:** N/A

**Estimated employment in construction stage:** N/A

**Estimated LOM:** 25 years

**Mining Method:** Pumping-Evaporation

### Sources Consulted

Quarterly Report For the quarter ended 30 June 2022. lakeresources.com.au  
<http://www.lakeresources.com.au/home/>  
[https://lakeresources.com.au/wp-content/uploads/2022/01/lke\\_kachi-output-increased\\_19-jan-22.pdf](https://lakeresources.com.au/wp-content/uploads/2022/01/lke_kachi-output-increased_19-jan-22.pdf)  
<https://lakeresources.com.au/wp-content/uploads/2019/09/02052872.pdf>  
[https://lakeresources.com.au/wp-content/uploads/2020/04/lke\\_compelling-pfs-for-kachi-project\\_30-apr-20.pdf](https://lakeresources.com.au/wp-content/uploads/2020/04/lke_compelling-pfs-for-kachi-project_30-apr-20.pdf)





# SALAR DE CAUCHARI

11





# SALAR DE CAUCHARI



## LOCATION

(23° 45' 26.6" S; 66° 47' 26.4" W)

The Cauchari JV is located in the Puna, 230 km west of the city of San Salvador de Jujuy in Jujuy Province of northern Argentina. The Project is at an altitude of 3,900 masl and sits just to the south of paved Hwy. 52 that connects with the international border with Chile (80 km to the west).



## MINERALIZATION TYPE

Brine



## PROPERTY DATA

### OWNER / CONTROLLER

Allkem Ltd.



## OPERATOR

South American Salars



## AREA

27,772 ha





# SALAR DE CAUCHARI

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## PROJECT GEOLOGY

Type of deposit - Brine

### Regional Geology

Based on the drilling campaigns carried out in the Salar between 2011 and 2018, six major geological units were identified and correlated from the logging of drill cuttings and undisturbed core to a general depth of over 600 m. No borehole has reached bedrock. Salar de Cauchari is a mixed style salar, with a halite nucleus in the center of the Salar overlain with up to 50 m of fine grained (clay) sediments. The halite core is interbedded with clayey to silty and sandy layers. The Salar is surrounded by relative coarse grained alluvial and fluvial sediments. These fans demark the perimeter of the actual Salar visible in satellite images and at depth extend towards the center of the Salar where they form the distal facies with an increase in sand and silt. At depth (between 300 m and 600 m) a deep sand unit has been intercepted in several core holes in the SE Sector of the Project area.

### Deposit Geology

The brine body defined extends ~12.5 km in the N-S direction and extends over 132 m vertically. Brine within the salar is formed by solar concentration, with brine hosted within the different sedimentary units. (Orocobre PR Jan 19, 2018) The Cauchari salar has characteristics of both an immature salar, dominated by clastic sediment, and a mature salar, dominated by halite. Modelling of a gravity and AMT geophysical survey line across the salar suggests the salar is 400 m plus deep, with drilling in adjacent properties to 450 m not intersecting the basement sediments interpreted to form the basement rock beneath the salar.





# SALAR DE CAUCHARI

## Contact

info@allkem.co  
Cell: +61 7 3064 3600  
Fax: +61 7 3064 3699

## Project Status PREFEASIBILITY

Last Announcement

## Resources and Reserves

RESOURCES	Tonnage (Mt)	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

## Technical and Economic Information

**Estimated average annual production:** 25.000 t/year LCE

**Product to obtain:** Lithium Carbonate ( $\text{Li}_2\text{CO}_3$ )

**CAPEX:** 446 M USD

**Estimated annual employment:** 698 jobs (e)

**Estimated LOM:** 30 years

**Mining Method:** Pumping-Evaporation

### Sources Consulted

<https://www.datocms-assets.com/53992/1635466306-190424techreportorocobreni-43-101cauchari-project.pdf>  
<https://www.capitaliq.spglobal.com/web/client?auth=inherit#metalsAndMiningProperty/ReservesAndResources?ID=40251>



Li

# CANDELAS

12







# CANDELAS



## LOCATION

(25° 47' 59" Lat. S; 67° 14' 36" Long. W)

The Project is located to the East and South of the Salar del Hombre Muerto. Candelas lies approximately 40km ESE of the Hombre Muerto West project. It is around 1,400 km northwest of the capital of Buenos Aires and 170 km west-southwest of the city of Salta (in a straight line).



## MINERALIZATION TYPE

Brine



## PROPERTY DATA

### OWNER / CONTROLLER

Galan Lithium Limited



## OPERATOR

GALAN EXPLORACIONES S.A



## AREA

24,072 ha





# CANDELAS

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## PROJECT GEOLOGY

Type of deposit - Brine

### Regional Geology

The salt flats are the result of a long paleoenvironmental evolution, which began with the formation of freshwater lakes during the Pleistocene, which were 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 was 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.



# CANDELAS

## Contact

(08) 9322 6283 within Australia  
+61 8 9322 6283 from overseas  
admin@galanlithium.com.au

## Project Status PRELIMINARY ECONOMIC ASSESSMENT (PEA 2021)

### Resources and Reserves

RESOURCES CATEGORY	In situ Li (kt)	Avg Li (mg/l)	LCE (kt)	Avg K (mg/l)	In situ K (kt)	KCl Equiv. (kt)
Indicated*	167	672	685	5,193	1,734	3,307

### Technical and Economic Information

**Estimated average annual production:** 14,000 t/yr

**Product to obtain:** Lithium Carbonate (Li<sub>2</sub>CO<sub>3</sub>)

**CAPEX:** 408 M USD

**Estimated annual employment in operation:** N/A

**Estimated employment in construction stage:** N/A

**Estimated LOM:** 25 years

**Mining Method:** Pumping-Evaporation

#### Sources Consulted

[www.galanlithium.com.au/projects/candelas/](http://www.galanlithium.com.au/projects/candelas/)





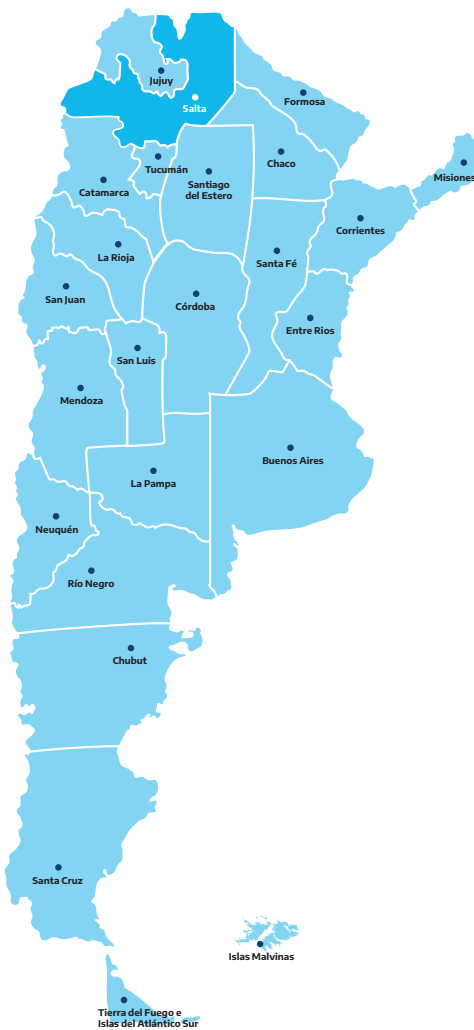
# HOMBRE MUERTO NORTE

13





# 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).



## MINERALIZATION TYPE

Brine



## PROPERTY DATA

### OWNER / CONTROLLER

Sino Lithium Materials Pty Ltd  
NRG Metals Inc.



## OPERATOR

Lithium South Development Corporation



## AREA

3,237 ha





# HOMBRE MUERTO NORTE

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## PROJECT GEOLOGY

Type of deposit - Brine

### Regional Geology

The salt flats are the result of a long paleoenvironmental evolution, which began with the formation of freshwater lakes during the Pleistocene, which were 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 was 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.



# HOMBRE MUERTO NORTE

## Contact

(08) 9322 6283 within Australia  
 +61 8 9322 6283 from overseas  
 admin@galanlithium.com.au

## Project Status PRELIMINARY ECONOMIC ASSESSMENT (PEA)

Company's Last Announcement

March 2022. The company finished Environmental Baseline Study.

## Resources and Reserves

RESOURCES	Brine (Mm <sup>3</sup> )	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

## Technical and Economic Information

**Estimated average annual production:** 5,000 t/yr. LCE

**Product to obtain:** Lithium Carbonate (Li<sub>2</sub>CO<sub>3</sub>)

**CAPEX:** 93 M USD

**Estimated annual employment in operation:** N/A

**Estimated employment in construction stage:** N/A

**Estimated LOM:** 30 years

**Mining Method:** Pumping-Evaporation

### Sources Consulted

<https://www.lithiumsouth.com/posts/lithium-south-completes-environmental-baseline-study/>





# HOMBRE MUERTO OESTE

14







# HOMBRE MUERTO OESTE



## LOCATION

(25° 13' Lat. S; 67° 04' Long. W)

The project is in the geological province of Puna, 90 km north of the town of Antofagasta de la Sierra, province of Catamarca. The HMW Project is located to the West and South of the Salar del Hombre Muerto. The HMW Project is in close proximity to other world class lithium projects owned by Galaxy Resources, Posco and Livent. It is around 1,400 km northwest of the capital of Buenos Aires and 170 km west-southwest of the city of Salta (in a straight line).



## MINERALIZATION TYPE

Brine



## PROPERTY DATA

### OWNER / CONTROLLER

Galan Lithium Limited



## AREA

9,493 ha





# HOMBRE MUERTO OESTE

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## 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.





# HOMBRE MUERTO OESTE

## Contact

(08) 9322 6283 within Australia  
 +61 8 9322 6283 from overseas  
 admin@galanlithium.com.au

**Project Status** PRELIMINARY ECONOMIC ASSESSMENT (PEA)  
 Company's Last Announcement

## Resources and Reserves

RESOURCES	Brine Vol (Mm <sup>3</sup> )	Grade		Metal Content	
		Avg Li (mg/l)	Avg K (mg/l)	LCE (t)	KCl (t)
Indicated	450	946	9,725	2,267,000	7,496,000

## Technical and Economic Information

**Estimated average annual production:** 20,000 Tn LCE.  
**Product to obtain:** Lithium Carbonate (Li<sub>2</sub>CO<sub>3</sub>)  
**CAPEX:** 439 M USD  
**Estimated annual employment in operation:** N/A  
**Estimated employment in construction stage:** N/A  
**Estimated LOM:** 40 years  
**Mining Method:** Pumping-Evaporation

Sources Consulted  
<https://galanlithium.com.au/>



# POZUELO (PPG)

15





# POZUELO (PPG)



## 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.



## MINERALIZATION TYPE

Brine



## PROPERTY DATA

### OWNER / CONTROLLER

Litica Resources, PLUSPETROL  
(currently under acquisition process by  
Ganfeng Lithium )



## AREA

21,324 ha





## POZUELO (PPG)

### PROJECT GEOLOGY

Type of deposit - Brine

#### Regional Geology

The salt flats are the result of a long paleoenvironmental evolution, which began with the formation of freshwater lakes during the Pleistocene, which were 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 was 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 clastics (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.





# POZUELO (PPG)

## Contact

<http://www.pluspetrol.net/litica.php>  
info@litica.com

## Project Status PRELIMINARY ECONOMIC ASSESSMENT (PEA)

### Resources and Reserves

RESOURCES	Tonnage (Mm <sup>3</sup> )	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

### Technical and Economic Information

**Estimated average annual production:** 25,000 t LCE

**Product to obtain:** Lithium Carbonate (Li<sub>2</sub>CO<sub>3</sub>)

**CAPEX:** 338 M USD

**Estimated annual employment in operation:** N/A

**Estimated employment in construction stage:** N/A

**Estimated LOM:** 20 years

**Mining Method:** Pumping-Evaporation

#### Sources Consulted

<http://www.pluspetrol.net/litica.php>

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





# RINCON

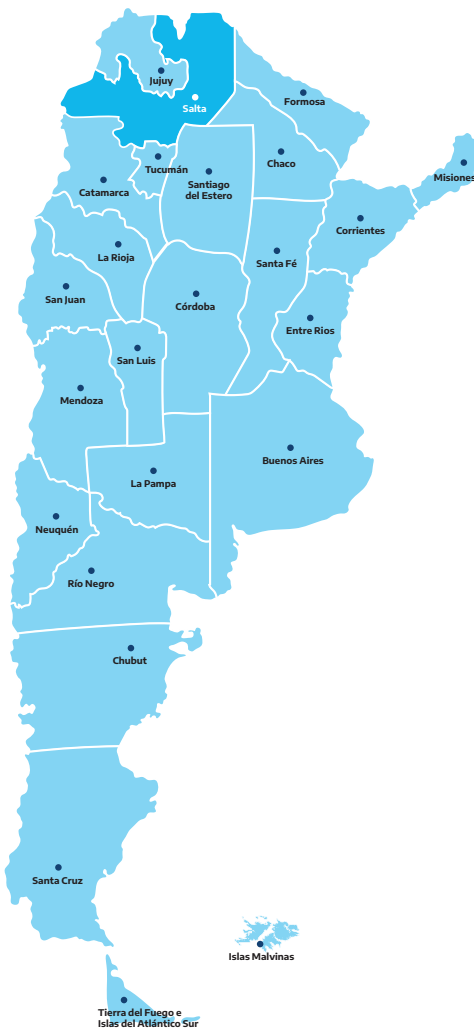
16







# RINCON



## 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.



## MINERALIZATION TYPE

Brine



## PROPERTY DATA

### OWNER / CONTROLLER

Argosy Minerals



## OPERATOR

Puna Mining Lithium



## AREA

2,794 ha





## RINCON

### PROJECT GEOLOGY

Type of deposit - Brine

#### Regional Geology

The salt flats are the result of a long paleoenvironmental evolution, which began with the formation of freshwater lakes during the Pleistocene, which were 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 was 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 (Ordovícico) 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.





# RINCON

## Contact

Argosy Minerals  
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## Project Status PRELIMINARY ECONOMIC ASSESSMENT (PEA)

### Resources and Reserves

RESOURCES	Brine (Mm <sup>3</sup> )	Grade	Metal Content
		Li (mg/l)	LCE (t)
Indicated	144	233	245,120

### Technical and Economic Information

**Estimated average annual production:** 10,000 t LCE  
**Product to obtain:** Lithium Carbonate (Li<sub>2</sub>CO<sub>3</sub>)  
**CAPEX:** 141 M USD  
**Estimated annual employment in operation:** N/A  
**Estimated employment in construction stage:** N/A  
**Estimated LOM:** 17 years  
**Mining Method:** Pumping-Evaporation

#### Sources Consulted

<https://exportargentina.org.ar/companies/4719>  
<https://www.argosyminerals.com.au/rincon-lithium-project-argentina>  
[https://www.argosyminerals.com.au/sites/default/files/presentation\\_file/agy-asx-20181130-pea-nov2018.pdf](https://www.argosyminerals.com.au/sites/default/files/presentation_file/agy-asx-20181130-pea-nov2018.pdf)



# Thank you

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