



# First Lithium Minerals

A NEW LITHIUM BRINE PROJECT IN NORTHERN CHILE

CSE: FLM | OTC PINK: PGPIX | FSE: X28

July 2023

# Disclaimer

## Cautionary Statements

Information set forth in this presentation contains forward-looking statements that are based on assumptions as of the date of this presentation. These statements reflect management's current estimates, beliefs, intentions and expectations. They are not guarantees of future performance. Words such as “expects”, “anticipates”, “targets”, “goals”, “projects”, “intends”, “plans”, “believes”, “seeks”, “estimates”, “continues”, “may”, variations of such words, and similar expressions and references to future periods, are intended to identify such forward-looking statements. First Lithium Minerals Corp. (“First Lithium” or the “Company”) cautions that all forward-looking statements are inherently uncertain, and that actual performance may be affected by a number of material factors, many of which are beyond First Lithium's control. Such factors include, among other things: risks and uncertainties relating to metal prices, changes in planned work resulting from weather, logistical, technical or other factors, the possibility that results of work will not fulfill expectations and realize the perceived potential of First Lithium's mineral properties, uncertainties involved in the interpretation of drilling results and other tests, the possibility that required permits may not be obtained in a timely manner or at all, risk of accidents, equipment breakdowns or other unanticipated difficulties or interruptions, the possibility of cost overruns or unanticipated expenses in work programs, the risk of environmental contamination or damage resulting from the exploration operations, the need to comply with environmental and governmental regulations and the lack of availability of necessary capital, which may not be available to First Lithium on terms acceptable to it, or at all. First Lithium is subject to the specific risks inherent in the mining business as well as general economic and business conditions. Accordingly, actual and future events, conditions and results may differ materially from the estimates, beliefs, intentions and expectations expressed or implied in the forward-looking information. Except as required under applicable securities legislation, First Lithium undertakes no obligation to publicly update or revise forward-looking information. First Lithium does not intend, and does not assume any obligation, to update these forward-looking statements, except as required under applicable securities legislation.

The Corporate Presentation contains information which was accurate at the time of posting but may be superseded by subsequent disclosures.

For more information on First Lithium, readers should refer to First Lithium's website at [www.firstlithium.ca](http://www.firstlithium.ca).

**Historical Results** – This presentation contains historical exploration results. The Company has not verified historical results, unless stated otherwise, and there is a risk that any future confirmation work and exploration may produce results that substantially differ from the historical results. The Company considers these historical results relevant to assess the mineralization and economic potential of the properties.

## Qualified Person

The content of this presentation has been reviewed and approved by Aldo Moreno Salinas, the Qualified Person, as defined by National Instrument 43-101. Mr. Moreno is a Public Registered Person for Reserves and Resources N° 328 in Chile and is also registered in the Colegio de Geólogos de Chile under N° 437.



First Lithium Minerals Corp. (CSE: FLM | OTC Pink: PGPXF | FSE: X28) is a Canadian exploration and development company with the OCA lithium brine project in the Antofagasta Region of northern Chile

Salars Ollague, Carcote, Ascotan. Hydrogeologic setting of the Andean plateau ("lithium triangle"). 9,000ha of lithium exploration concessions. 100% ownership

Excellent infrastructure:

- Powerlines, geothermal powerplant - 70km
- Major continental railroad (The Ferrocarril de Antofagasta a Bolivia) and highway - 10km
- Proximity to major commodities export seaport Tocopilla - 350km
- Experienced labor, City of Calama and Chuquicamata open-pit copper mine - 200km

43-101 Technical Report OCA Prospect (2019). Up to 607 mg/l Li grade brine and 300 ppm Li sediment samples (2018)

Successful completion of property-wide TEM geophysical surveys of over 47 line-km (November 2022)

Pronounced geophysical anomalies and highly conductive zones up to 400m from Magneto Telluric (MT) geophysical survey (March 2023)

Advancing to inaugural exploration and resource drilling H2/23

## Corporate profile

CSE: FLM

Shares outstanding 86.9 million

Share price \$0.07

Market capitalization (*July 26, 2023*) \$6.1MM

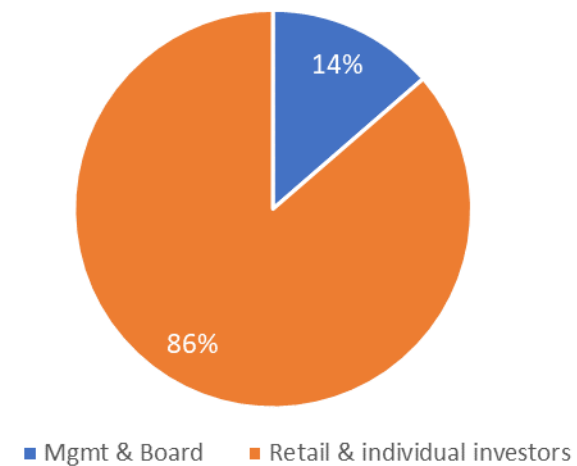
Cash \$3.5MM (Q1/23)

No Debt

Warrants 904,260 (*@ \$0.25, expiry July 28, 2024*)



Shareholder Ownership



### **Rob Saltsman | President & CEO | Director**

Mr. Saltsman has 25 years of experience in venture capital and public investments and is the Founder of First Lithium Minerals Inc., a company he founded in 2017. He served as the CEO of Compel Capital Inc. and RMM Ventures Inc., and as Vice President of Georgian Capital Corp. where he focused on investing and consulting services in private equity. He is currently a President and Managing Partner of Paige Capital Inc., a venture capital investment company, and is a founding partner of South America Finance Corp SAS, a private merchant banking group in Colombia.

### **Claude Ayache | CFO**

Mr. Ayache is a bilingual CPA, CMA with over 35 years of experience, more than half of which was served at the CFO/CEO level of publicly reporting companies in Canada and the US. He has also served on the board of several private companies and non-profit organizations.

### **Aldo Moreno | VP Exploration**

Mr. Moreno is a seasoned geologist with 40 years of experience in exploration and evaluation of metallic and non-metallic mineral deposits and worked with several mining projects in Chile, Argentina, Bolivia, Peru, Ecuador, Brazil, Colombia, Venezuela, Cuba, Honduras, Mexico, and the United States. Mr. Moreno has a degree in geology from Universidad de Chile, is a member of the Chilean Professional Association of Geologists No. 437 and registered in the Public Records of Competent Persons No. 328.

### **Peter Espig | Director**

Mr. Espig has been the President and CEO of Nicola Mining Inc. since 2013. The former Goldman Sachs banker and Olympus Capital Partners executive founded TriAsia Capital, a private equity and consulting firm focused on raising capital for mid-sized companies and pre-initial public offering investment in 2006. Mr. Espig is a founding director of Promontory Therapeutics, a private biopharmaceutical company, and has been a board member since November 2010. He is an independent director of Element 29 (TSX.V: ECU) and is an independent director of NAVCO Pharmaceuticals Inc. (formerly, BMGB Capital Corp.) (TSXV). Mr. Espig is a pioneer of SPACs, having completed two mega transactions with a combined value of greater than US\$1.0 BN and served as a board member of Star Bulk Carriers (NASDAQ: SBLK) from 2006 to 2013. Mr. Espig received his MBA from Colombia Business School, where he was a Chazen International Scholar.

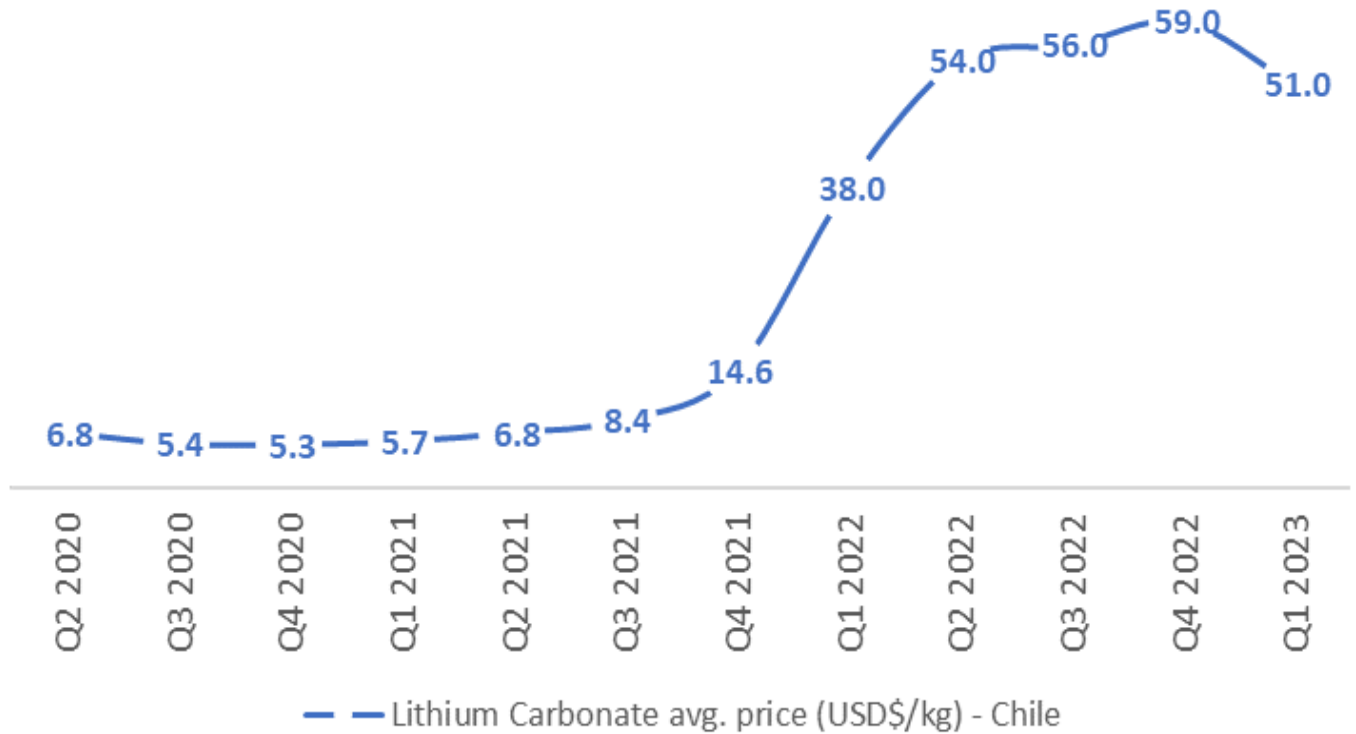
### **Ernest Mast | Director**

Mr. Mast is the former President & CEO of Primero Mining Corp. and Minera Panama S.A., a subsidiary of Inmet Mining Corp., which was subsequently acquired by First Quantum Minerals for \$5.1 B. He received an MBA from Universidad Catolica de Chile and holds a Master's degree in Mining & Metallurgical Engineering. He is fluent in Spanish and worked as a Technical Director of Noranda Chile's operation and Lomas Bayas Copper Mine.

# Management and Board

# Lithium Price

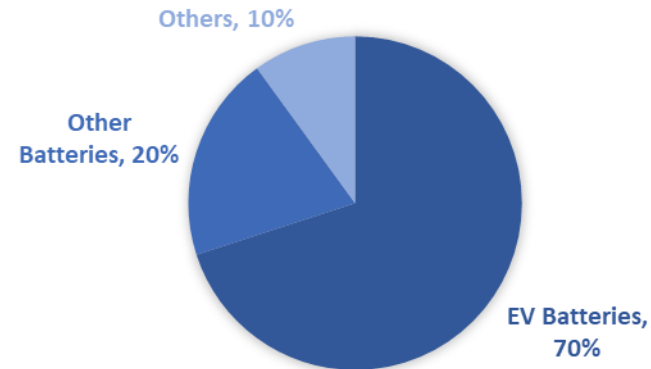
Regional destocking suppressed prices in Q1/2023. Strong lithium demand is expected to sustain prices as supply is not catching up



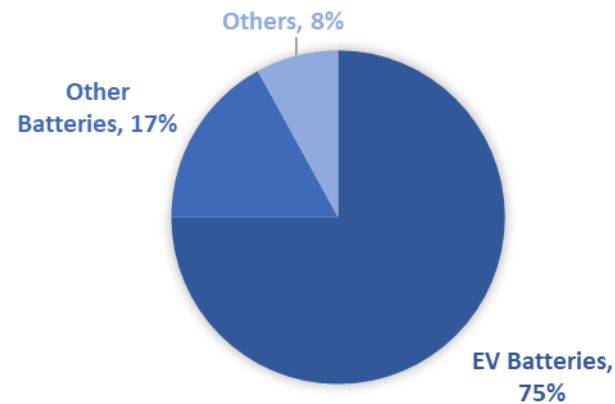
# Lithium Demand

Lithium demand is expected to continue be driven by EV, consumer electronics, grid, and mobility

**LITHIUM CHEMICAL DEMAND (2022)**  
~760 KMT



**LITHIUM CHEMICAL DEMAND (E2025)**  
~1,500 KMT



~23% CAGR

# Lithium Supply

Supply shortage in the future

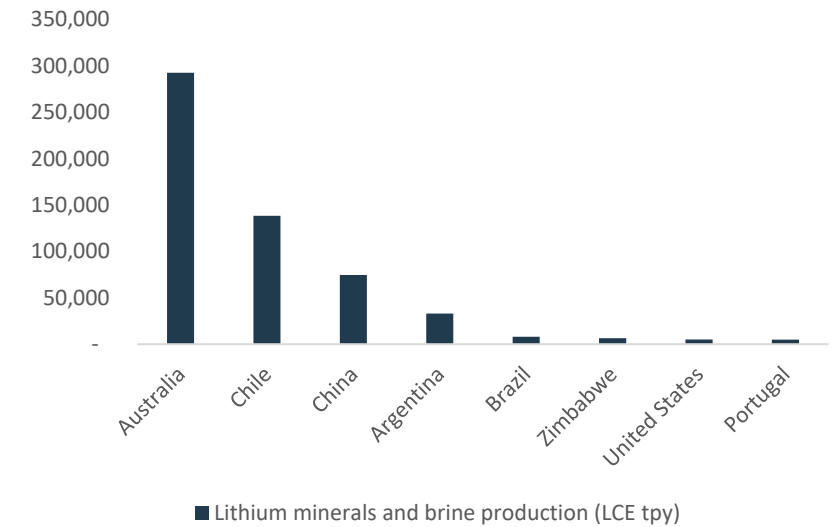
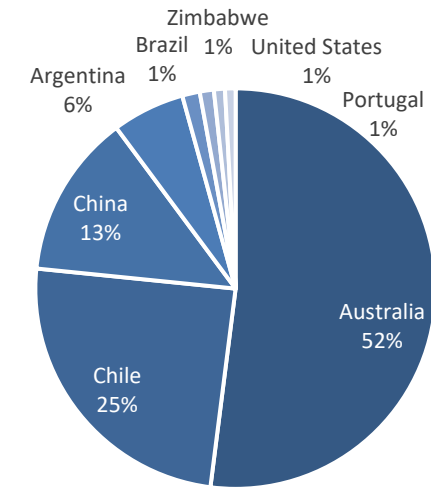
Current global lithium production ~ 635,000 tpy LCE

Inelastic nature of supply

Time to bring new capacity / mines online

Widening supply-demand gap by 2025

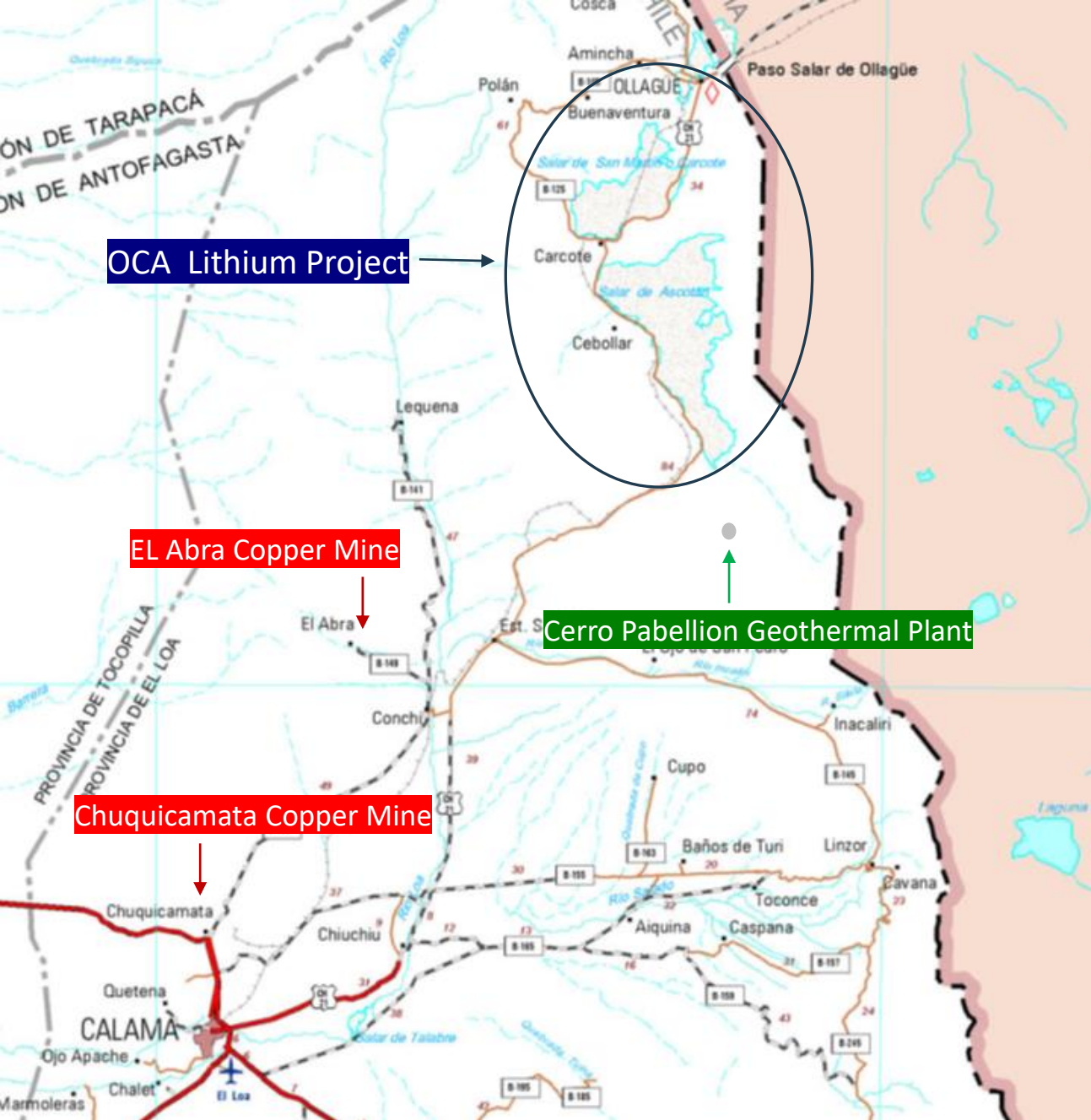
Share of lithium minerals and brine production LCE tpy (%)





Salars  
Ollague | Carcote | Ascotan

OCA Project

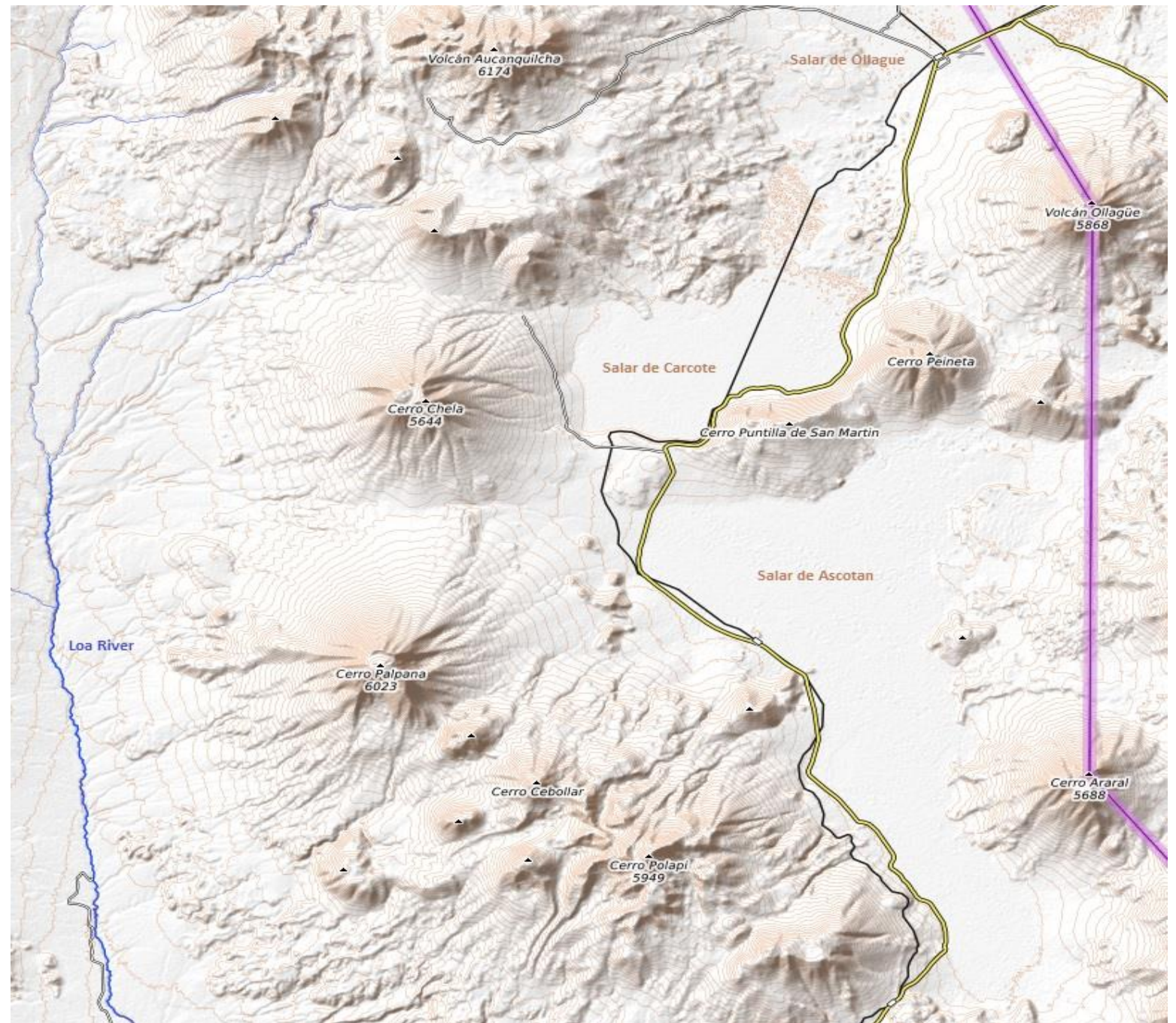


# Project Location and Infrastructure

- The mineral exploration concessions that form the OCA Prospect located in the salars of Ollague, Carcote, and Ascotan, within the hydrogeologic settings of the Andean plateau bordering Bolivia
- The OCA Prospect is accessed from the town of Ollague, Chile via Highway 21 that connects Ollague with the city of Calama (200km)
- The town of Ollague is at an elevation of 3,700 meters above sea level and is the closest to the OCA Prospect
- The railway (The Ferrocarril de Antofagasta a Bolivia, "FCAB") that passes through Ollague forms the major transportation corridor between the port city of Antofagasta, Chile and the capital city of Bolivia, La Paz
- Historically, primary traffic on the railway has been minerals such as lead-zinc concentrates, nitrates, and copper.
- Cerro Pabellon Geothermal Power Plant located approximately 70km south of the OCA prospect
- Operating copper mines in the area

# Topography of Salars

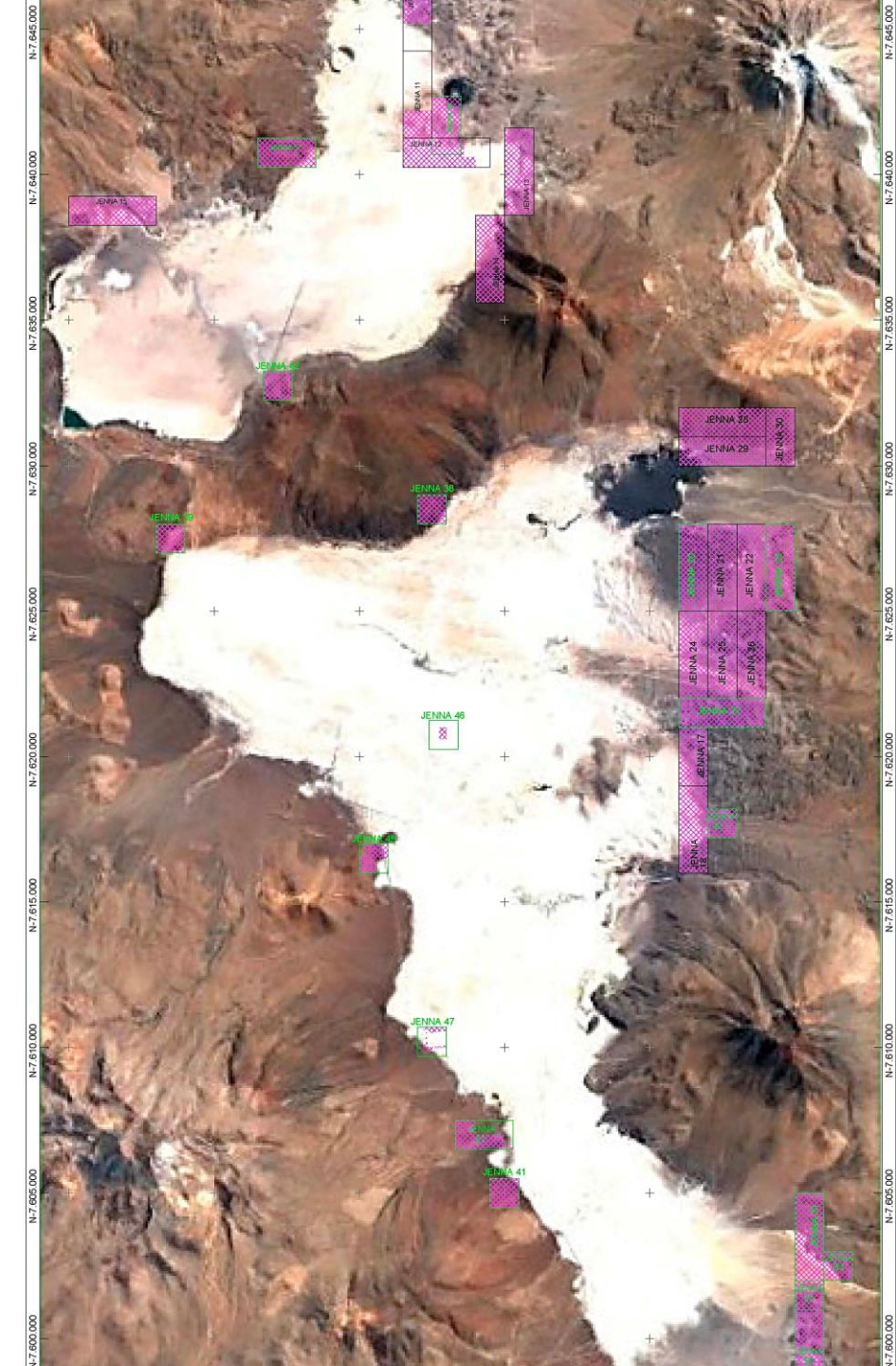
Topography is mainly formed by Loa River, volcanic chain, and endorheic basins of salars de Ascotan, Carcote, and Ollague



# Ollague, Carcote, Ascotan Salars Project (OCA)

- The OCA Prospect is located in Ollague, Carcote and Ascotan Salars, Antofagasta Region; the eastern part of the Atacama Desert
- Topography is mainly formed by Loa River, volcanic chain, and endorheic basins of salars de Ascotán, Carcote and Ollague
- The upper basin of Loa River is flanked on both sides by two longitudinal mountain ranges; the western flank is constituted by the Sierra del Medio with an approximate altitude of 4,500 meters
- The eastern flank the continental divide formed by the Andes including: the Paruma de Portezuelo mountain (5,582 meters above sea level), the Ollagüe volcano (5,868 meters asl), the Ascotán mountain (5,187 meters asl) and the Toconce mountain (5,411 meters asl)
- Prospect is composed of 40 mining exploration concessions covering a total area of approx. 9,000 hectares
- Climate is arid, with average annual precipitation 0.60 – 0.85 mm
- Historical mining exploration concessions for Borates, Sodium Chloride and Potassium
- Existing commercial production of borates

Source: 43-101 Technical Reports on The OCA Prospect, Comuna De Ollague, Province of El Loa, Region of Antofagasta Chile (Nov 2019), Company Reports



# Mineralization

Mineralization in the OCA Prospect is primarily represented by three different fractions:

- ❑ Liquid, represented mainly by chloride and sulfate brines
- ❑ Dendritic material, consisting of sand, silt and clay intercalated in the salar sediments
- ❑ Various precipitated salt compounds resulting from salts reaching respective solubility and concentration limits





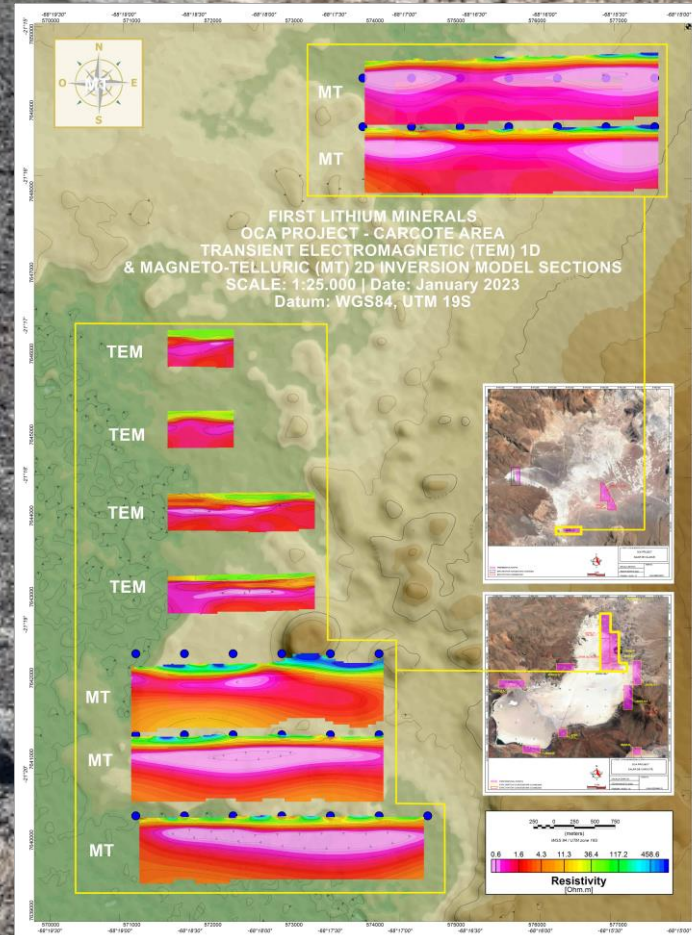
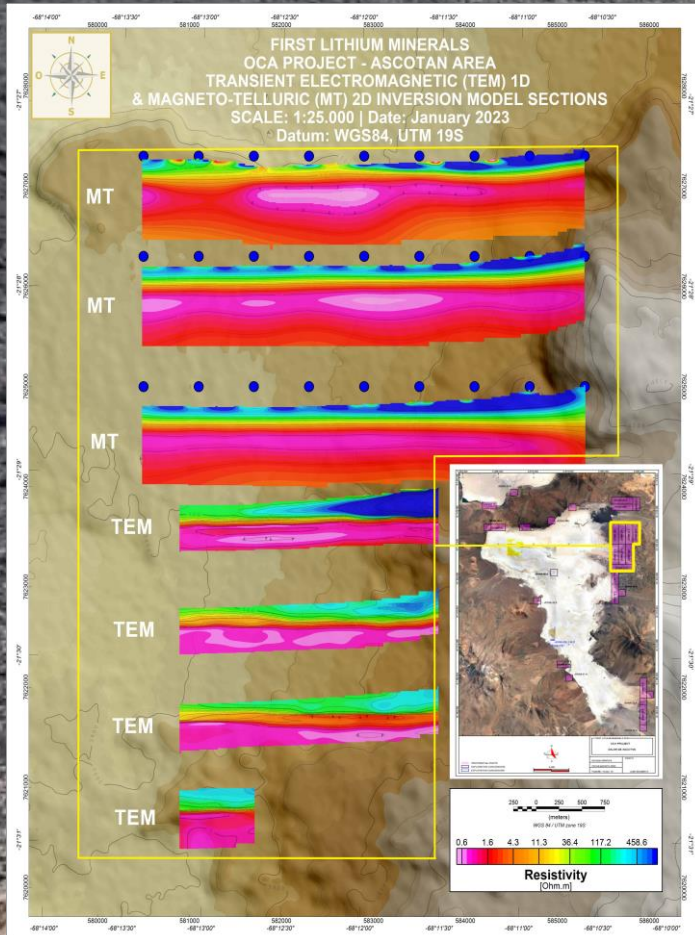
# Hydrogeology

- The salars of Ollague, Carcote and Ascotán correspond to continental saline deposits or salars with brines
- The basin collects water from temporary streams in a catchment area of approximately 6,000 km<sup>2</sup>
- Lithium (Li), potash (K), boron (B), sodium (Na) and magnesium (Mg), among others, are leached and transported from rocks in the catchment, and then accumulated and concentrated by evaporation in the Salars
- Geology and hydrogeology extensively studied and investigated by SQM, Codelco and Chilean Geological Surveying
  - Salar de Ollague: 187 km<sup>2</sup> (basin area), 31 km<sup>2</sup> (surface area in Chile)
  - Salar de Carcote : 561 km<sup>2</sup> (basin area), 108 km<sup>2</sup> (surface area)
  - Salar de Ascotan: 1,757 km<sup>2</sup> (basin area), 243 km<sup>2</sup> (surface area)
- All three salars are terminal lakes with sediments intermixed with salt compounds, undersurface brine, and a surface crust composed primarily of gypsum and halite
- Groundwater of the salars show characteristics of a typical brine observable a few meters below the surface



# Exploration Program

# Geophysics and Priority Drill Targets



Completed extensive property-wide Transient Electromagnetic (TEM) geophysical surveys (November 2022)

TEM contiguously spaced stations along 28 profiles for a total of 47.8 line-km

Highly conductive zones across concessions up to 400m at less than 1.0 Ohm-m beneath the surface at 100-200m

Defined two target areas with resistivity less than 0.2 Ohm-m at Carcote (approx. 1,275 ha) and Ascotan (approx. 1,775 ha)

Magneto-Telluric (MT) surveying identified pronounced geophysical anomalies and high conductivity up to 400m zones typically indicative of brine mineralization (March 2023)

# Sampling Program Highlights (sediments)

Initial geochemical surface samples showed anomaly of high lithium (Li) grades at **217ppm** in Salar Ollague, **207ppm** in Salar Ascotan, and **300ppm** in Salar Carcote (2019 sampling program)

*Cautionary statement: Note that grades from grab surface samples are not necessarily indicative of mineralized zones and can be highly erratic.*

WGS Number 84	CA (%)	K (%)	Li (ppm)	Mg (%)	Na (%)	Salar
JENNA 1	7.49	1.75	31.00	0.66	2.24	Salar Ollague
JENNA 2	11.57	0.77	134.00	0.85	3.31	Salar Ollague
JENNA 3	2.25	1.71	37.00	0.92	2.07	Salar Ollague
JENNA 4	10.12	1.21	76.00	2.23	1.63	Salar Ollague
JENNA 5	7.20	1.45	84.00	2.33	1.92	Salar Ollague
JENNA 6	14.37	0.91	47.00	0.81	2.31	Salar Ollague
JENNA 7	14.04	1.21	36.00	0.96	1.18	Salar Ollague
JENNA 8	20.14	0.62	53.00	1.37	0.90	Salar Ollague
JENNA 9	19.17	0.31	217.00	3.70	1.28	Salar Ollague
JENNA 10	7.18	0.90	169.00	3.61	2.04	Salar de Carcote
JENNA 11	11.56	0.56	300.00	4.56	2.79	Salar de Carcote
JENNA 12	18.42	0.69	59.00	0.88	1.79	Salar de Carcote
JENNA 13	8.38	1.21	101.00	1.30	2.76	Salar de Carcote
JENNA 14	14.27	0.77	20.00	0.63	1.09	Salar de Carcote
JENNA 15	11.70	0.94	17.00	0.62	1.27	Salar de Carcote
JENNA 17	8.28	1.35	207.00	3.68	2.54	Salar Ascotan
JENNA 18	7.77	1.37	188.00	3.31	2.76	Salar Ascotan
JENNA 20	6.14	1.40	39.00	1.65	1.83	Salar Ascotan
JENNA 21	3.67	1.64	65.00	1.61	1.95	Salar Ascotan
JENNA 22	3.57	1.57	61.00	1.49	1.86	Salar Ascotan
JENNA 23	3.56	1.57	65.00	1.46	2.18	Salar Ascotan
JENNA 24	6.18	1.42	30.00	1.16	1.53	Salar Ascotan
JENNA 25	7.25	1.25	28.00	0.96	1.28	Salar Ascotan
JENNA 26	6.33	1.29	29.00	1.06	1.35	Salar Ascotan
JENNA 27	16.64	0.65	18.00	0.64	0.69	Salar Ascotan
JENNA 30	3.72	1.31	53.00	1.24	2.12	Salar Ascotan
<b>Average:</b>	9.65	1.15	83.23	1.68	1.90	

Source: 43-101 Technical Reports on The OCA Prospect, Comuna De Ollague, Province of El Loa, Region of Antofagasta Chile (Nov 2019), Company Reports

# Sampling Program Highlights (brine)

Initial chemical brine samples showed attractive lithium grades at **607mg/l** high in Salar Carcote and **451mg/l** in Salar Ascotan (2019 sampling program)

*Cautionary statement: Note that grades from grab surface samples are not necessarily indicative of mineralized zones and can be highly erratic.*

WGS Number 84	Brine	CA (MG/L)	K (MG/L)	Li (MG/L)	Mg (MG/L)	Na (MG/L)	Salar
JENNA 11	S 10	60.44	18.46	0.96	21.44	312.77	Salar de Carcote
JENNA 14	S 11	125.69	4,888.28	186.75	2,472.50	128.07	Salar de Carcote
JENNA 15	S 12	174.07	19,205.62	607.28	7,222.70	39,921.28	Salar de Carcote
JENNA 21	S 15	334.10	844.88	451.32	5,000.41	41,104.74	Salar de Ascotan
JENNA 24	S 16	254.70	927.81	422.29	5,053.45	38,744.64	Salar de Ascotan
JENNA 25	S 17	928.88	715.04	355.23	4,416.84	417.40	Salar de Ascotan
JENNA 27	S 20	292.03	686.12	331.12	4,121.01	398.55	Salar de Ascotan
<b>Average:</b>		309.99	3,883.74	336.42	4,044.05	17,289.64	

*Source: 43-101 Technical Reports on The OCA Prospect, Comuna De Ollague, Province of El Loa, Region of Antofagasta Chile (Nov 2019), Company Reports*



# Exploration Program

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## **Phase I 2022**

- Geologic mapping - Completed 2022
- Electromagnetic survey (TEM) - Completed November 2022

## **Phase II 2023**

- Magneto-Telluric (MT) geophysics - Completed March 2023
- Drill target definition – Completed May 2023
- Surface brine geochemical sampling program - Ongoing
- Community engagement and social licensing - Ongoing
- Shallow drilling to test brine depth and continuity of chemical composition
- Porosity and permeability analysis of salars sediment structure

# Contact us

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