



First Lithium Minerals

A NEW LITHIUM BRINE PROJECT IN NORTHERN CHILE

CSE: FLM

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.

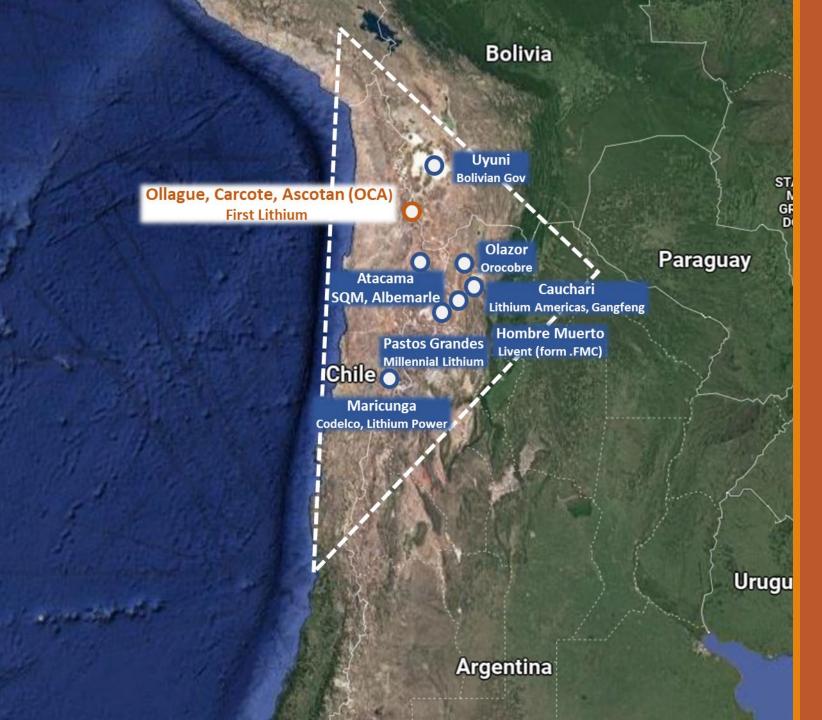
The Corporate Presentation contains information which was accurate at the time of posting, but may be superseded by subsequent disclosures.

For more information on First Lithium, readers should refer to First Lithium's website at www.firstlithium.ca.

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) is a Canadian exploration and development company with a lithium brine project in the Antofagasta Region of northern Chile - Lithium Triangle

First Lithium began assembling salar exploration properties in late 2016

Single geologic area and setting within the cordilleran sector

Salars Ollague, Carcote, Ascotan

The Ollague, Carcote, Ascotan brine exploration prospect (OCA project) - 8,900ha of exploration concessions

100% ownership

Excellent infrastructure:

- Powerlines, geothermal powerplant 70km
- Major South American railroad (The Ferrocarril de Antofagasta a Bolivia) and highway 10km
- Commodities export seaport, Tocopilla 350km
- Experienced labor, City of Calama and Chuquicamata open-pit copper mine 200km
- Water two major tributaries San Pedro de Inacaliri River and Salado River

Completed sampling program (2019)

43-101 Technical Report on OCA Prospect (2019)

Up to 607 mg/l Li grade brine and 300 ppm Li sediment samples (2018)

Corporate profile

CSE: FLM

Shares outstanding 86.9 million

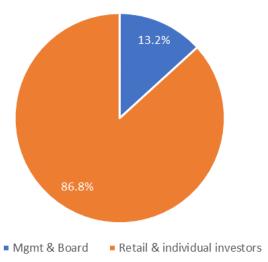
Share price \$0.19

Current market capitalization (Sep. 16, 2022) \$16.5MM

Warrants 904,260 (@ \$0.25, expiry Aug. 2022)







Source: Company Reports, TradingView

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.

Ignacio Lopez, Chilean Legal Counsel

Mr. Lopez is a professional attorney with over 15 years of international experience, specialized in providing legal advice to foreign companies on starting and developing operations in Chile. His mining practice includes deal negotiations, options, leases, purchase and joint venture agreements, title reviews, mineral access rights, legal proceedings from early phases of mineral exploration and permitting and development and production. Mr. Lopez holds a Law Degree from the Universidad Adolfo Ibáñez, and a Diploma in Energy and Natural Resources, majoring in Mining Law, from the Pontificia Universidad Católicade Chile.

Peter Espig, Director

Mr. Espig has been the President & CEO of Nicola Mining since 2013. The former Goldman Sachs banker and Olympus Capital Partners executive. Founder of TriAsia Capital, a private equity and consulting firm focused on raising capital for mid-sized companies and pre-IPOs. Mr. Espig is a founding director of Phosplatin Therapeutics, a private biopharmaceutical company, and has been a board member since November 2010. He is also the CEO of Sweet Earth Holdings (CSE: SE) and is an independent director of Element 29 (TSX.V: ECU). 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 Columbia 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 Catolicade 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.

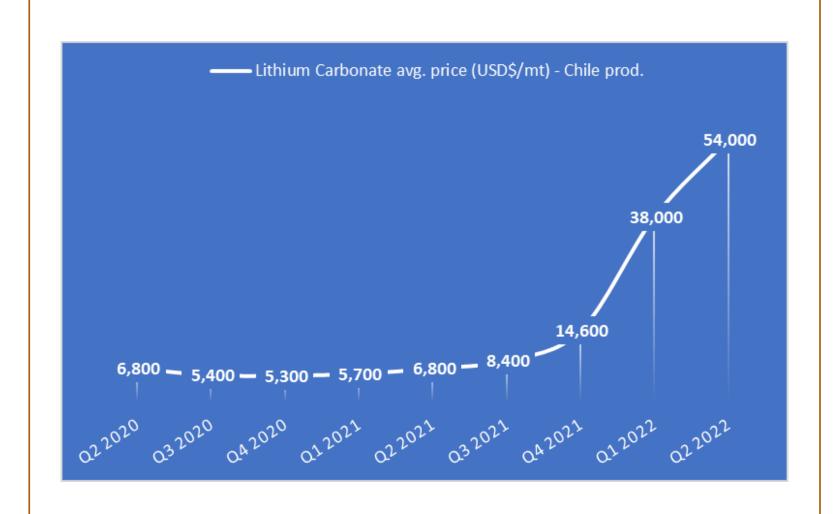
Rick Moscone, Corporate Secretary and Legal Counsel

Mr. Moscone is a corporate lawyer and Partner at Fogler Rubinoff LLP with 15 years of experience in corporate finance, mergers and acquisitions, and securities regulatory matters. His experience includes structuring and negotiating securities and commercial transactions. Mr. Moscone also provides general corporate commercial advice to a range of private company clients on day-to-day matters impacting their businesses, including acting for startups from the formation stage all the way through the development cycle of an emerging growth company.

Management and Board

Lithium Price

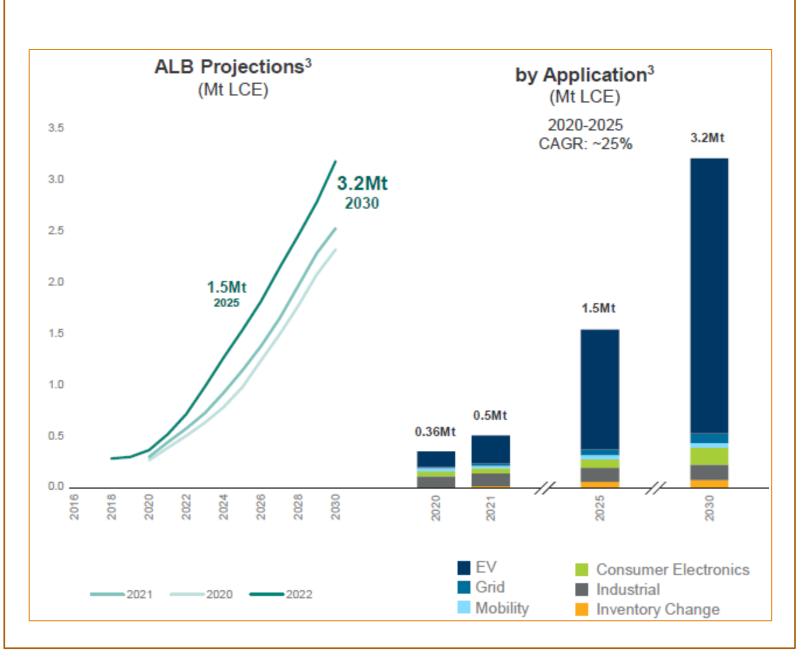
Strong lithium demand is expected to move the supply - demand balance deeper into a deficit by 2030



Source: SQM, Industry Reports, Company Reports

Lithium Demand

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





Salars
Ollague | Carcote | Ascotan

OCA Project

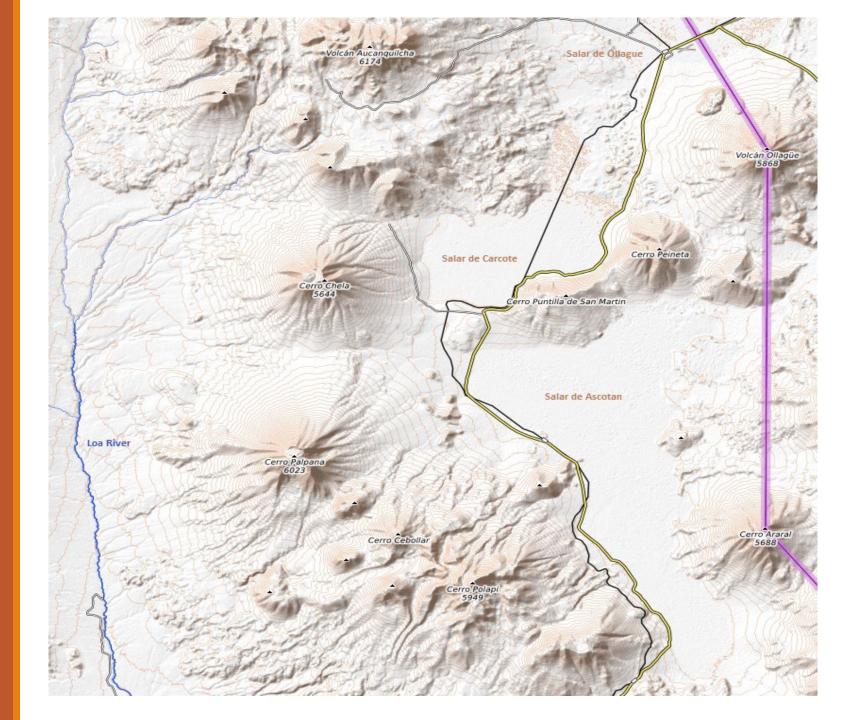
Paso Salar de Ollagüe ON DE TARAPACA IN DE ANTOFAGASTA **OCA Project** Carcote Cebollar Est. San Pedro El Ojo de San Pedro Conchi Chuquicamata Quetena CALAMA

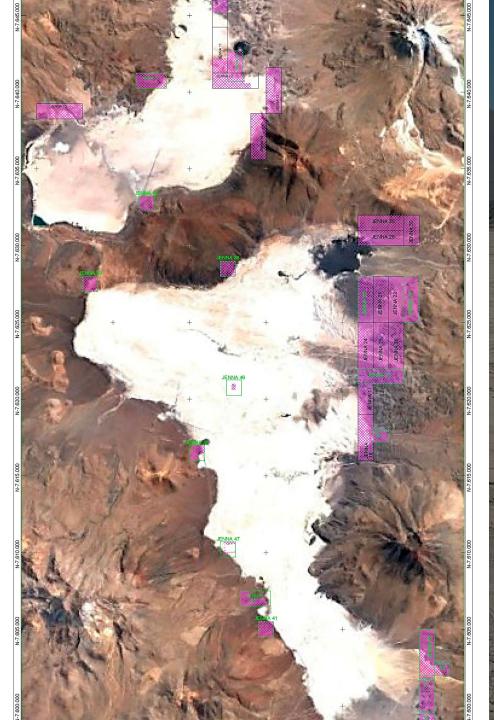
Project Location and Infrastructure

- The mineral exploration concessions that form the OCA Prospect located in the salars of Ollague, Carcote and Ascotan, are within the cordilleran sector 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 3,960 meters above sea level and is the closest to the OCA Prospect
- The railway (The Ferrocarril de Antofagasta a Bolivia, "FCAB") forms a 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. The railway passes close to the border of salars and has a depot and station in the town of Ollague
- Cerro Pabellon Geothermal Power Plant located approximately 70km south of the OCA prospect

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 8,900 hectares
- -Climate is arid, with rainfall of 60 85 mm per year across the area of the three salars
- Historical mining exploration concessions for Borates, Sodium Chloride and Potassium
- Existing commercial production of borates

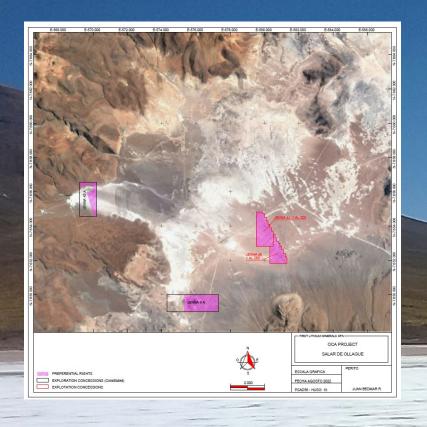
Source: 43-101 Technical Reports on The OCA Prospect, Comuna De Ollague, Province of El Loa, Region of Antofagasta Chile (Nov 2019), Company Reports

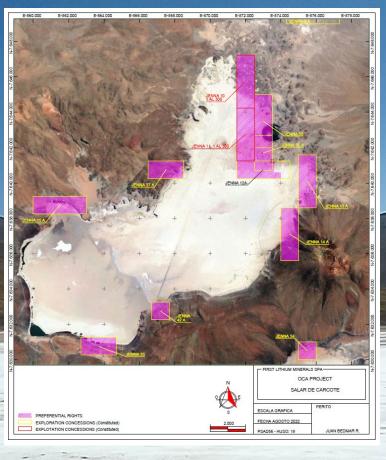
Mineralization

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

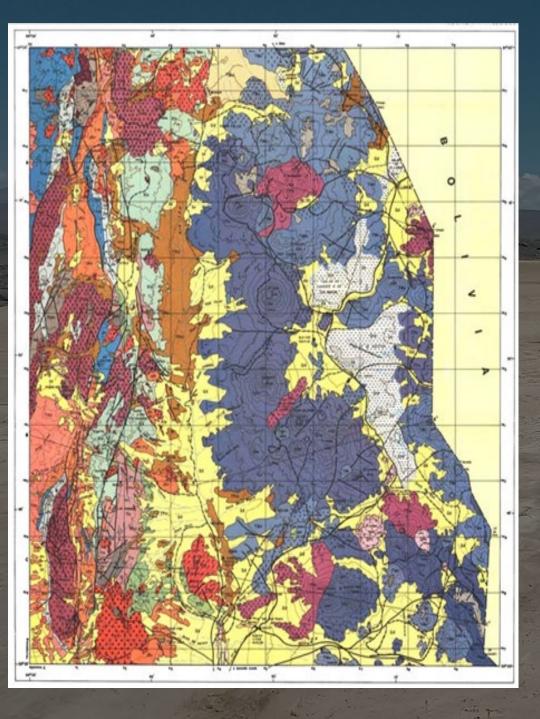












Geology and Hydrogeology

- 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 km2
- 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 km2 (basin area), 31 km2 (surface area in Chile)

Salar de Carcote : 561 km2 (basin area), 108 km2 (surface area)

Salar de Ascotan: 1,757 km2 (basin area), 243 km2 (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

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 and Exploration Program

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)

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
Average:	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 607 mg/l high in Salar Carcote and 451 mg/l in Salar Ascotan (2019 sampling program)

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
Average:		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



Proposed Exploration Program

Phase I (Q4/2022)

- -Electromagnetic survey (TEM)
- -Extensive shallow brine geochemical sampling program

Phase II (H1/2022)

- Shallow drilling to test brine depth and continuity of chemical composition
- -Porosity and permeability analysis of salars sediment structure
- -Deeper drilling (>300m)
- -Test well completion
- -Pumping tests

Exploration Target Areas 1 and 2

Phase I Exploration Program Objectives

- Further hydrogeology research of the prospect area
- Additional surface mapping and brine sampling
- Determine potential areas of brine concentration within the prospect for conducting a detailed geophysical survey
- Geophysical survey of the prospect area evaluated by TEM
- Positive anomalies of the TEM surveys generate and model the drilling program

Phase II Exploration Program Objectives

- Augur drilling, diamond, or optionally vibratory drilling technology for brine sample recovery
- The drilling samples would be used to determine the presence of brine fluids in the formation followed by modeling of effective porosity
- Selective sample drilling of the entire high conductive horizon identified in the geophysical program
- At each lithological change, or in favorable zones, additional brine sampling
- Casing and screening to develop a permanent pumping well where longer terms tests can be performed

Contact us

Rob Saltsman, CEO and President First Lithium Minerals Corp.

77 King Street West
Suite 3000, P.O. Box 95
Toronto Ontario M5K 1G8
Canada
www.firstlithium.ca

Tel: +1 416 402 2428

Email: rob@firstlithium.ca

