



First Lithium Minerals Commences Geophysical Surveys

Toronto, October 20, 2022 – First Lithium Minerals Corp. (“**First Lithium Minerals**” or the “**Company**”) (**CSE: FLM**) (**FRA: X28**) is pleased to announce the commencement of its exploration program on its 100% owned OCA Lithium Project in Chile and that it has contracted SouthernRock Geophysics S.A. to conduct Transient Electromagnetic (TEM) and Magneto-Telluric Surveys (MT).

The OCA Lithium Project is comprised of approximately 8,900 ha of mineral exploration concessions located in the salars of Ollague, Carcote, and Ascotan in the Antofagasta Region of Northern Chile within the cordilleran sector bordering Bolivia.

The principal objective of the geophysical surveys is to define the distribution of the resistivity parameters with respect to depth in the prospect areas of the project in order to characterize the conductivity-thickness of the sedimentary sequence in the corresponding salar environments.

The envisioned geophysical surveys consider the acquisition of contiguous 200m coincident loop dB/dt Transient Electromagnetics (TEM) along 500 to 1,000m spaced lines over selected exploration concessions at the Ollague, Carcote, and Ascotan project areas. TEM data acquisition is expected to be executed with a 200m square coincident loop with a 1 and/or 4Hz 50% duty cycle waveform. A total of approximately 303 TEM contiguously spaced stations planned along 30 profiles for a total of 60.6 line-km. Additionally, optional tensor broadband remote Magneto-Tellurics is contemplated to extend the resistivity information at depth if the defined signature by the TEM falls short of defining the base of the conductive sedimentary sequence. The resistivity data collected by the surveys is expected to provide better understanding of the prospects’ lithology, sediments, and brine signatures, and greatly enhance future geological modeling.

The exploration program will also include completing additional geologic mapping of the project area and surface geochemical sampling.

Rob Saltsman, CEO and Director of First Lithium Minerals commented: *"We are extremely pleased to begin our geophysics exploration work program at the OCA Project in Chile. It's an exciting time for our project as we begin to roll out our exploration strategy which will focus on better understanding the geologic structure and lithology of our salar prospects and identifying potential drill targets".*

The geophysics team is expected to move to the OCA Lithium Project for a maiden survey later this month with the surveying work completed by the end of November. The Company will provide updates as material results become available.

About First Lithium Minerals

First Lithium Minerals is a Canadian, Chile-focused mineral exploration and development company. The company holds a 100% interest in approximately 8,900 ha of mineral exploration concessions located in the salars of Ollague, Carcote, and Ascotan in the Antofagasta Region of Chile.

Additional information about the Company is available on the Company's website: www.firstlithium.ca

Qualified Person

Aldo Moreno Salinas is the VP of Exploration for First Lithium Minerals and the Qualified Person ("QP") as defined by NI 43-101 has reviewed and approved the technical content of this press release. 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.

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Rob Saltsman, CEO and Director

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