



TSX-V: LI

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NEWS RELEASE

NR: 09-08

Lithium One INCREASES SAL DE VIDA LITHIUM BRINE PROJECT TO OVER 250 SQUARE KILOMETRES

Lithium One Inc (the "Company") (TSX-V: LI), is pleased to announce that it has signed a Purchase Agreement to acquire a 100% interest in an additional 6,500 hectares in the southeast quadrant of the Salar del Hombre Muerto, Argentina. The new property adjoins the two previously acquired land packages, **and increases the area of the Company's Sal de Vida lithium brine project by more than 30% to over 250 square kilometres.**

The Sal de Vida project now encompasses more than 40% of the Salar del Hombre Muerto. The Salar del Hombre Muerto is one of a limited number of known salars in the world which have brines suitable in composition and extent for commercial lithium production. The western portion of the salar is the site of Argentina's only commercial scale lithium mining operation, Fénix, which is operated by FMC subsidiary Minera del Altiplano. Fénix was permitted and put into production in the late 1990's, and in 2008 produced nearly 14% of the total world production of lithium metal. Attributes of the brines in the Hombre Muerto salar include high lithium content, high potash content, low magnesium to lithium ratio, and brine production to greater depths than many other salars [Sources: Economics of Lithium 11th Edition, Roskill Information Services (2009); FMC Website].

The Company's President and CEO, Patrick Highsmith, commented on the acquisition, *"We have assembled a strong land package at the Sal de Vida Project, now spanning more than 25,000 hectares. Having established in our due diligence sampling the presence of high lithium and potash in the surface brine over much of that area, we are proceeding with a systematic evaluation of the extent, concentration, and value of the brine. We are also hosting a number of experts on the project in late September to assist with various aspects of the program."*

Lithium One has initiated an exploration program on the Sal de Vida project, with the intent to advance the project to a feasibility decision by the end of 2010.

Property Agreement

The Company is acquiring the properties from a private individual (the "Vendor") through a Purchase Agreement. Lithium One will acquire 100% ownership of the property with no retained royalty by issuing the Vendor 100,000 common shares of the Company, which may be subject to a hold period in accordance with rules of the TSX Venture Exchange.

Closure of this agreement is subject to approval by the TSX Venture Exchange.

Review by Qualified Person

The technical portions of this news release have been reviewed and approved by Mr. A. James McCann, the Company's consulting exploration manager. Mr. McCann is a licensed Professional Geologist in Quebec and a qualified person as defined by National Instrument 43-101.

About Lithium

Lithium is a light, highly reactive metal with use in a variety of industrial applications including ceramics, lubricants and pharmaceuticals. The fastest growing market for lithium is as lithium carbonate for use in batteries, including those in cell phones, computers and new generations of electric and hybrid vehicles. Salar brines can precipitate salts such as lithium chloride which are first concentrated and then can be processed into lithium carbonate. For additional information on lithium please see the Company's website, www.lithium1.com.

About Lithium One:

Lithium One Inc is a well-financed explorer and developer of mineral properties with a specific focus on lithium. The Company now has two major lithium projects: the Sal de Vida lithium brine project in Argentina and the James Bay bulk tonnage spodumene project in Quebec. Lithium One believes that lithium demand will grow as its value and efficacy in "green energy" applications is fully realized. The Company's strategy is to build a portfolio of high quality lithium assets.

ON BEHALF OF THE BOARD OF DIRECTORS,

Patrick Highsmith, M.Sc.
President and Chief Executive Officer

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Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

Disclaimer

The Company has conducted certain research on technical and production data from other operations. The Company has made every effort to be accurate and believes the data cited herein about FMC and their Fénix operation to be reliable. However, the Company cautions that this information with respect to the FMC property and operations could not be verified by the Company and is not necessarily indicative of the mineral endowment on the Sal de Vida Project or the potential production from any future mining on the Sal de Vida Property.

Forward-Looking Statements

This document may contain “forward-looking information” within the meaning of Canadian securities legislation (hereinafter referred to as “forward-looking statements”). These forward-looking statements are made as of the date of this document and the Company does not intend, and does not assume any obligation, to update these forward-looking statements. Forward-looking statements relate to future events or future performance and reflect management’s expectations or beliefs regarding future events. By their very nature forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include unsuccessful exploration results, changes in metals prices, changes in the availability of funding for mineral exploration, unanticipated changes in key management personnel and general economic conditions, title disputes as well as those factors detailed from time to time in the Company’s interim and annual financial statements and management’s discussion and analysis of those statements, all of which are filed and available for review on SEDAR at www.sedar.com. In certain cases, forward-looking statements can be identified by the use of words such as “plans”, “expects” or “does not expect”, “is expected”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates” or “does not anticipate”, or “believes”, or variations of such words and phrases or statements that certain actions, events or results “may”, “could”, “would”, “might” or “will be taken”, “occur” or “be achieved” or the negative of these terms or comparable terminology. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward looking statements.