



TSX-V: LI

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NEWS RELEASE

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Lithium One Enters into Option to ACQUIRE LITHIUM BRINE PROJECT at Salar del Hombre Muerto, Argentina

Lithium One Inc (the "Company") (TSX-V: LI), is pleased to announce that it has acquired an option to earn a 100% interest in the Sal de Vida lithium brine project at Salar del Hombre Muerto in northwest Argentina. **This property encompasses more than 150 square kilometres adjacent to FMC's lithium brine operation, the third largest lithium brine producer in the world.** The Company has optioned the mining claims from Maktub Compañía Minera SRL ("Maktub").

The Sal de Vida land package covers a significant portion of the eastern half of the Hombre Muerto salt pan. It is accessible from the city of Salta via an all-season road. The western half of the salar is the site of Argentina's only commercial scale lithium mining operation, Fénix, owned by Minera del Altiplano, a subsidiary of FMC Corporation. The 2008 production from the Fénix operation is estimated at 3,115 tonnes of lithium metal, or 10,000 tonnes of lithium carbonate and 7,600 tonnes of lithium chloride. This production represents nearly 14% of the total world production of lithium metal (Roskill, 2009).

Highlights of FMC's production at the Hombre Muerto salar include [Sources: Economics of Lithium 11th Edition, Roskill Information Services (2009); FMC Website]

- Long life production. According to FMC's website, their life of mine at Salar de Hombre Muerto is over 75 years.
- High concentrations of lithium, reportedly between 680 and 1210 ppm Li
- Low in magnesium, with a Mg:Li ratio of approximately 1.5:1
- High in potassium, with concentrations from 0.24 to 0.97 wt% K

As part of its due diligence, the Company conducted a reconnaissance sampling program in the salar, collecting 17 brine samples over a large area. The lithium content in those brine samples ranges from 23 ppm Li to 1,386 ppm Li with an average of 637 ppm Li. The potassium content of the samples is also high, averaging 5,443 ppm (or 0.544% K) and ranging from 200 ppm to 12,183 ppm K. The average magnesium content is 964 ppm, yielding an average ratio of magnesium to lithium of 1.63.

The Company's President and CEO, Patrick Highsmith, commented on the acquisition, "*Our new Sal de Vida Project gives us a tremendous opportunity to begin developing a lithium resource in one of only two salars in South America already in commercial production.*" He continued, "*The Salar del Hombre Muerto is known for having uniform high lithium concentrations and low penalty elements, and our reconnaissance sampling confirmed that on the ground we are acquiring. The access to the project is also excellent, so we can commence immediately with our exploration program.*"

Lithium One has initiated an exploration program, which will include: surveying, systematic pit sampling, hydrological studies, geophysical surveys, and drilling of core holes and large diameter wells. The intent of the Company is to advance the project to a feasibility decision in 2010.

Sal de Vida Project Option and Purchase Agreements

Lithium One's Sal de Vida project is comprised of mining claims under option from Maktub Compañía Minera SRL ("Maktub").

Maktub is a private mining company focused on the exploration for, exploitation and marketing of ulexite, a sodium-calcium borate mineral mainly used for the production of boric acid. Ulexite is produced from shallow surface mining, not by extraction of brines. The mineral rights to the brine on the Maktub claims are transferred 100% to Lithium One under this agreement; there is no retained royalty. Payment terms are summarized below:

- US\$100,000 on or before August 28, 2009 [PAID];
- US\$200,000 on or before August 14, 2010;
- US\$300,000 on or before August 14, 2011;[
- US\$1,000,000 on or before August 14, 2012;
- US\$1,500,000 on or before August 14, 2013; and
- US\$2,500,000 on or before August 14, 2014.

Maktub retains a twenty year right to mine ulexite on the property. Lithium One has the option to purchase the ulexite rights for US\$7,000,000, again subject to no royalty.

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. 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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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.