

# Neo Lithium Produces Battery Grade Lithium Carbonate at its Pilot Plant

11.03.2020 | [CNW](#)

- Battery Grade Lithium Carbonate at 99.535% purity was produced consistent with the process described in the PFS
- Battery Grade Lithium Carbonate at 99.599% purity was also produced using an improved process, which may decrease operational and capital costs while minimizing reagent, water and power consumption

TORONTO, March 11, 2020 - [Neo Lithium Corp.](#) ("Neo Lithium" or the "Company") (TSXV:NLC; OTCQX:NTTHF; FSE:NE2) is pleased to announce that battery grade lithium carbonate has been produced at its pilot plant in Fiambalá using concentrated brine from its wholly-owned Tres Quebradas lithium project ("3Q Project") in Catamarca Province, Argentina.

The brine was extracted from the high-grade zone located in the northern zone of the 3Q project and then evaporated at the Company's industrial scale ponds (<http://www.neolithium.ca/project/default.aspx#section=pictures>) at the same location under similar conditions as production scale. No chemical reagents were added to the brine other than minor amounts of hydrochloric acid (HCl) for pH control at the final stage of evaporation. The concentrated brine was then transported by truck to the pilot plant in Fiambalá, which is located 160 km from the 3Q Project.

Two different processes were tested to produce battery grade lithium carbonate at the pilot plant.

The First Process was as described in the Technical Report "Preliminary Feasibility Study (PFS) - 3Q Project NI 43-101 Report Catamarca, Argentina" filed on May 8<sup>th</sup>, 2019 using solvent extraction phase (SX-B) for Boron removal, a sulfation phase for calcium removal using Sodium Sulfate and a liming and carbonation phase to remove magnesium and any remaining calcium. The lithium carbonate process is then completed with 3 stages of soda ash carbonation, washing and drying. See pictures of the operation at <http://www.neolithium.ca/project/default.aspx#section=pictures>

The result of the process above, produced lithium carbonate with a purity of 99.535%. The composition of impurities in the lithium carbonate is as follows\*:

SO4	Cl	Mg	K	B	Si	Ca	Na	Insoluble	Humidity
%	%	%	%	%	%	%	%	%	%
0.251	0.044	0.012	0.001	0.007	0.008	0.003	0.017	0.024	0.100

\*Other elements undetected.

The Company also tested a Second Process to produce battery grade lithium carbonate by changing the sulfation phase for calcium removal by an acidification phase with Sodium Hydroxide. The remainder of lithium carbonate process is then completed similar to the First Process.

The results of the Second Process currently requires less volume of additives for calcium removal (only 8,000 tonnes of Sodium Hydroxide versus 40,000 tonnes of Sodium Sulfate for 20,000 tonnes per annum production of lithium carbonate). The price per tonne of Sodium Hydroxide is higher than the price per tonne of Sodium Sulfate, however Sodium Hydroxide is sourced locally, and Sodium Sulfate is imported.

Transporting less volume carries decreasing transport and logistics costs. In addition, the Second Process consumes a fraction of fresh water than the First Process, making the new proposed process more environmentally conscious. Lastly, the Second Process is completed at room temperature, whereas the First Process requires 60° Celsius, implying a meaningful saving in energy consumption.

The results of the Second Process produced lithium carbonate with a purity of 99.599%, which is higher than the First Process. The composition of impurities in the lithium carbonate is as follows\*:

SO4	Cl	Mg	K	B	Ca	Si	Na	Insoluble	Humidity
%	%	%	%	%	%	%	%	%	%
0.045	0.040	0.003	0.006	ND	0.040	0.003	0.123	0.016	0.100

\*Other elements undetected.

The final economic results of the announced optimization obtained during the Second Process to produce battery grade lithium carbonate can only be confirmed once the Company finalizes its definitive feasibility study (DFS). Management believes that the improved Second Process can have significant advantages when compared to the First Process.

"We continue to improve and optimize our process with a team of outstanding chemists and technicians" stated Waldo Perez, President and CEO of Neo Lithium. "We not only proved that we can produce battery grade lithium carbonate with our known process, but also optimized and improved the purity of the lithium carbonate with a high potential to lower costs. We will continue to optimize and fine tune the process as we work towards a DFS."

#### Grant of Options

Neo Lithium has granted to directors, officers and consultants of the Company stock options (the "Options") to purchase a total of 1,955,000 common shares at a price of \$0.75 per common share. The Options are exercisable for a period of 5 years and have been granted in accordance with the terms of the Company's current stock option plan.

#### Technical Information

The samples collected were delivered by Company personnel to Andesmar Transport Company ("Andesmar") in La Rioja, in the province of Rioja. Andesmar delivered the samples by truck to ASL, an ISO 9001-2008-certified laboratory in Mendoza, Argentina. ASL used the following analytical methodologies: ICP-OES (inductively-coupled plasma-optical (atomic) emission spectrometry) to quantify boron, barium, calcium, lithium, magnesium, manganese, and potassium; an argentometric method to assay for chloride; a gravimetric method to analyze for sulfate; a volumetric analysis (acid/base titration) for the evaluation of alkalinity (as CaCO<sub>3</sub>); a gravimetric method to determine density and total dissolved solids; and, a laboratory pH meter to determine pH. All analytical work is subject to a systematic and rigorous Quality Assurance-Quality Control. A reference ("standard") sample was inserted into the sample stream at a frequency of approximately 1 in 15 samples; a field blank was inserted at a frequency of approximately 1 in 15 samples; and a field duplicate sample was inserted at a frequency of approximately 1 in 15 samples.

Waldo Perez, Ph.D, P.Geo., the CEO and President of [Neo Lithium Corp.](#) is the Qualified Person who approved the scientific and technical disclosure in the news release.

About Neo [Lithium Corp.](#)

[Neo Lithium Corp.](#) has quickly become a prominent new name in lithium brine exploration by virtue of its high quality 3Q Project and experienced team. Already well capitalized, Neo Lithium is rapidly advancing its

recently discovered 3Q Project - a unique high-grade lithium brine lake and salar complex in Latin America's "Lithium Triangle".

The 3Q Project is in Catamarca Province, the largest lithium producing area in Argentina. The project covers approximately 35,000 ha and the salar complex within this area is approximately 16,000 ha.

The technical team that has discovered the 3Q Project characterized this unique salar as one of the most experienced in lithium salars. For example, this team discovered and led the technical work, including resource definition and full feasibility study, that established the Cauchari lithium salar as one of the largest lithium brine resources in the world.

Additional information regarding [Neo Lithium Corp.](http://www.neolithium.ca) is available on SEDAR at [www.sedar.com](http://www.sedar.com) under the Company's profile and at its website at [www.neolithium.ca](http://www.neolithium.ca), including various pictures of ongoing work at the project.

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Cautionary Note Regarding Forward Looking Statements - Certain information set forth in this news release may contain forward-looking statements. Such statements include but are not limited to, statements as to lithium brine grades at depth being consistent with surface results, the potential for resource expansion at depth, the potential of the northern salar sediments, and deeper sediments, for hosting brine, the ability to proceed to scoping studies quickly, proceeding with continued work for additional economic studies the potential for production expansion in the Company's assessment of the economic potential of the 3Q Project, that test results are indicative of future results, and the additional of additional independent directors. Generally, forward-looking statements can be identified by the use of words such as "plans", "expects" or "is expected", "scheduled", "estimates" "intends", "anticipates", "believes", or variations of such words and phrases, or statements that certain actions, events or results "can", "may", "could", "would", "should", "might" or "will", occur or be achieved, or the negative connotations thereof. These forward-looking statements are subject to numerous risks and uncertainties, certain of which are beyond the control of the Company, which could cause the actual results, performance or achievements of the Company to be materially different from the future results, performance or achievements expressed or implied by such statements. These risks include with our limitations, risks related to the failure to obtain adequate financing on a timely basis and on acceptable terms, political and regulatory risks associated with mining and exploration activities, including environmental regulation, risks and uncertainties relating to the interpretation of drill and sample results, risks related to the uncertainty of cost and time estimation and the potential for unexpected delays, costs and expenses, risks related to metal price fluctuations, the market for lithium products, competition for experienced directors in the junior mineral exploration and development sector, and other risks and uncertainties related to the Company's prospects, properties and business detailed elsewhere in the Company's disclosure record. Although the Company believes its expectations are based upon reasonable assumptions and 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 and undue reliance should not be placed on forward-looking statements.

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