

Neo Lithium Corp. Produces 99.9% Battery Grade Lithium Carbonate

17.06.2021 | [CNW](#)

- Highest battery grade lithium carbonate produced to date with 99.9% purity
- The Company will now convert the Plant from batch mode into continuous mode to produce large samples for specification certification
- Lithium carbonate has now been considered acceptable for the development of batteries by CATL

TORONTO, June 17, 2021 - [Neo Lithium Corp.](#) ("Neo Lithium" or the "Company") (TSXV: NLC) (OTCQX: NTHHF) (FSE: NE2) is pleased to announce that the Company has reached an important milestone in lithium carbonate production at its pilot plant for its wholly owned Tres Quebradas lithium project ("3Q Project") in Catamarca Province, Argentina

Using the upgraded alkali methodology, the Company further advanced the crystallization parameters as well as other necessary minor adjustments, which resulted in achieving battery-grade lithium carbonate with a purity of 99.891%, which is acceptable by Contemporary Amperex Technology Co. Limited (CATL) for its LFP batteries standard. This methodology will be applied to the design of the 3Q Project lithium carbonate pilot plant ("the Plant") in the feasibility study being carried out by Worley and expected to be completed by the end of Q3 2021.

The composition of impurities in the lithium carbonate is as follows*:

SO4	Cl	Mg	B	Al	Fe	K	Ca	Si	Na	Insoluble	Humidity
%	%	%	%	%	%	%	%	%	%	%	%
0.039	0.022	0.003	0.004	0.002	0.001	0.014	0.001	0.002	0.001	0.006	0.01

*Other elements <0.001%

The Company will now convert the Plant from batch mode into continuous mode to produce large samples for specification certification. Neo Lithium has already sent samples to CATL in China for their own chemical analysis.

"We have reached our objective to produce high-quality lithium carbonate while minimizing the reagent consumption and freshwater footprint," stated Waldo Perez, President and CEO of Neo Lithium. "We are now ready to complete the feasibility study with the final parameters achieved in the piloting stage."

The Pilot Plant Process

Neo Lithium received the Plant built by the Instituto de Investigaciones Tecnológicas from Universidad de Concepcion, Chile in February 2019. The Company's engineers assembled the Plant in the warehouse of the town of Fiambalá, Catamarca, located 160km from the 3Q salar. The Plant operated in batches and has a designed annual capacity of 50 tonnes of lithium carbonate per year using concentrated brine from the 3Q Project with 3.2% to 3.6% lithium brine.

The in-situ brine comes from the high-grade northern sector of the 3Q Project salar, with an initial chemical composition as follows:

Li	Cl	Na	Ca	Mg	K	B	Density
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	g/ml
1,175	212,662	68,861	51,529	1,875	11,319	1,567	1.24

After approximately one year the brine is evaporated, and sodium chloride, potassium chloride and calcium chloride are removed to produce concentrated brine with a composition as follows:

Li	Cl	Na	Ca	Mg	K	B	Density
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	g/ml
42,842	504,331	5,162	135,692	1,829	25,859	6,140	1.45

The Plant produced the first batch of lithium carbonate with 99.1% purity in September 2019 and in March 2020 the engineers achieved a 99.535% purity following the process described in Technical Report "Preliminary Feasibility Study (PFS) - 3Q Project NI 43-101 Report Catamarca, Argentina" filed on May 8th, 2019. This process uses 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.

At that point, the Company's technical team designed a more efficient process to produce higher purity lithium carbonate with lower consumption of fresh water, reagents, and energy. This process was called the alkali route and in this process the sulfation phase for calcium removal is changed by an alkalization phase with sodium hydroxide. The first production of lithium carbonate with this process reached 99.599% purity in March 2020 and 99.797% purity in January 2021. The Company has now achieved the final objective of 99.891% which is considered acceptable as a final product of high-quality battery grade material for the production of LFP batteries by CATL. This process will be used as final design for the feasibility study scheduled to be completed by Worley by the end Q3 2021.

The Company today has about 50 tonnes of concentrated brine ready to be converted to lithium carbonate by the Plant and has also upgraded the pilot ponds to mimic the pond design of the feasibility study parameters (please refer to the April 26, 2021, press release for more information).

Since the arrival of the Plant over 30 batches of lithium carbonate have been produced, and the final quality goals have been achieved. The next phase is to set up the Plant in continuous mode to produce larger volume samples for final specification tests and final certification.

The Company is also pleased to announce that it has engaged Kemetco of Canada to evaluate the physical parameters of the final product.

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 CaCO₃); 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 development by virtue of its

high quality 3Q Project and experienced team. Neo Lithium is rapidly advancing its 100% owned 3Q Project - a unique high-grade lithium brine lake and salar complex in Latin America's "Lithium Triangle".

The 3Q Project is located in the Catamarca Province, the largest lithium producing area in Argentina covering approximately 35,000 ha including a salar complex of approximately 16,000 ha.

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

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<https://www.rohstoff-welt.de/news/386735--Neo-Lithium-Corp.-Produces-99.9Prozent-Battery-Grade-Lithium-Carbonate.html>

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