

Neo Lithium Announces Positive PFS Results on its 3Q Project

21.03.2019 | [GlobeNewswire](#)

- A \$1.14 billion after-tax NPV with 8% discount rate and a 50% IRR at an average price \$11,882/t LCE
- Significant cash flows generation over a 35-year life of mine drive a rapid payback of 1 year and 8 months provide a variety of financing alternatives
- Maiden Proven and Probable Reserves of 1.3Mt of LCE with 790 mg/l Lithium
- Low pre-production capital cost of \$319 million (excluding deferred and sustaining capital costs) and low operating costs of \$2,914/t LCE
- Life of mine average annual production of 20,000t LCE (battery grade) with significant potential to expand with reserves being only 32% of entire resource
- Well known processing, with conventional evaporation pond operations followed by purification and precipitation of lithium carbonate
- Significant opportunities to further improve the project economics, such as increasing higher-grade zone reserve, include by-products and phased expansions

TORONTO, March 21, 2019 - [Neo Lithium Corp.](#) ("Neo Lithium" or the "Company") (TSXV: NLC; OTCQX: NTTHF; FSE: NE2) is pleased to announce positive results of a prefeasibility study ("PFS") prepared in accordance with National Instrument 43-101 ("NI 43-101") for its wholly-owned Tres Quebradas lithium brine project ("3Q Project") in Catamarca Province, Argentina.

The technical report summarizing the PFS is being prepared by GHD Chile SA ("GHD") and Groundwater Insight Inc., in accordance with NI 43-101 (the "Technical Report"). GHD is a leading independent engineering services firm with extensive experience in projects developments with some of the largest and lowest cost lithium brine processing facilities in Chile and Argentina. Groundwater Insight Inc. is a technical consultancy with lithium brine experience on more than 18 salars in exploration or production stages. The reserve estimation in the Technical Report was done by groundwater numerical model experts IHLA Research Group under the supervision of Groundwater Insight Inc. ("Groundwater Insight"). Golder SA and G&T Ingenieria SA also collaborated in the study.

Waldo Perez, President and CEO of Neo Lithium, commented, "With the discovery of a high-grade core, we optimised the 3Q Project development plan with respect to our Preliminary Economic Assessment. The new capex and opex, together with a long life of mine and high-grade brine, allow us to present a superior IRR of 50%. Furthermore, we currently continue drilling the high grade core and we are now able to validate that the 3Q Project still has further significant high-grade resource upside potential."

The PFS represents a comprehensive study of the technical and economic viability of the 3Q Project and has advanced to a stage where a preferred processing method has been established and an effective method of mineral processing has been determined.

PFS Highlights

Unless otherwise indicated, all dollar amounts in this press release are stated in U.S. dollars ("USD"). Currency exchange is based on current rates.

Description	PEA
After-Tax Net Present Value ("NPV") @ 8% Discount Rate	\$1,141 million
After-Tax Internal Rate of Return ("IRR")	29.9%
Initial Capital Expenditures	\$319 million
Cash Operating Costs (per tonne of lithium carbonate)	\$2,914

Average Annual Production (lithium carbonate)	26,000
Mine Life	26 years
Payback Period (from commencement of production)	2 year3 months

Note: By-products (such as potash, calcium chloride and boric acid) are not included in the Company's “Preliminary Economic Assessment (PEA) 3Q Project NI 43-101 Technical Report, Catamarca, Argentina ” prepared by GHD with an effective date of December 12, 2017 (“PEA”); or PFS and could potentially add incremental value to the 3Q Project.

“We are delighted with the results of the PFS. We have improved the PEA results on all fronts, requiring a smaller capital investment for a similar NPV. The 3Q Project is now easier to build, easier to finance, and its larger size allows us to think in terms of potential phased expansions. The final value of this project will be realized over time,” said Carlos Vicens CFO of Neo Lithium.

Mineral Resources, Mineral Reserves and Mine Plan

The Mineral Resources were defined in the Company's “Updated Mineral Resource Estimate Technical Report on the 3Q Lithium Project, Catamarca Province, Argentina” prepared by Groundwater Insight Inc. with an effective date of August 14, 2018 and summarized in the following table:

High Grade Lithium Core (Cut-off 800 mg/L) Deposit at Large (Cut-off 400 mg/L)							
Measured	Indicated	M&I	Inferred	Measured	Indicated	M&I	Inferred
Volume [Mm3]							
45.4	93.8	139	28.3	152	1,070	1,222	939
Average Lithium concentration (mg/L)							
1,010	1,006	1,007	1,239	701	602	614	584
Lithium Carbonate Tonnage (rounded)							
244,000	502,000	746,000	186,000	569,000	3,436,000	4,005,000	2,917,000

The strategy to maximize value at the 3Q Project was by first extracting the high-grade core brine with 5 wells strategically located in the middle of the high-grade component of the measured and indicated resource, with screens between 70 and 100 m. Early extraction of high-grade brine allows minimal sizing of early stage ponds. Grade is predicted to decrease with time, as progressively lower grade brine is extracted. Consequently, total pond area increases over the years.

A numerical groundwater model was developed to support the reserve estimate and development of the 35-year mine plan. The model predicts a brine grade decrease over time and simulates additional brine recovery to maintain production at around 20,000 tonnes of lithium carbonate equivalent over the life of mine. The model simulates long term brine recovery, based on rigorous assembly of groundwater flow and solute transport parameters.

The tonnage, grade, and classification of the Mineral Reserves captured within the PFS mine plan are summarized below.

Year	Brine Volume [Mm ³] ***	Average Li concentration [mg/l] ***	Li metal [tonnes]		LCE [tonnes]		*Resources [%]	
			Proven	Probable	Proven	Probable		
1	3.3	1,177	1,113	2,542	5,923	13,526	0.5	%
2-10	73	1,000	21,549	44,038	114,642	234,282	9	%
11-20	101	841	20,211	53,472	107,524	284,472	10	%
21-35	183	670	18,694	81,513	99,453	433,651	13	%
Total 35 years production**	360	790	61,600	182,000	328,000	966,000	32	%

*Total M&I resources 4,005,000 tonnes LCE @ 400 mg/l cut-off / ** Rounded / *** These two include some incidental capture from the inferred resource, which is excluded from the reserve estimate.

In the initial 10 years of the PFS mine plan, 5 wells would each produce 51 l/s of high-grade brine. During the

subsequent 10 years, the same wells would produce 64 l/s. From 20 years onward, a total of 11 wells would be in operation, with individual production rates between 23 l/s to 49 l/s. These variable brine recovery rates are designed to maintain a relatively constant production rate of approximately 20,000 tonnes of Lithium Carbonate Equivalent (“LCE”). The required yields are reasonable within the known parameters of the brine aquifer. However, ample space exists within the resource for additional production wells, if required. The Company has already installed one production well capable of sustained production of 84 l/s from the high-grade zone.

Proposed Mining Operation and Processing

The PFS identifies the preferred development option as being a conventional evaporation pond operation followed by purification and precipitation of lithium carbonate.

“We have been working towards a mining plan and a process facility that maximizes the competitive advantages of the 3Q Project, which is high grade, with low impurities and a large size of resource,” said Gabriel Pindar, Director and COO of Neo Lithium. “The PFS has been tailor-made to the 3Q Project, while using proven technologies that have been utilized by major companies in the region to minimize operational and construction risks.”

The process begins with the extraction of brine from pumping wells into solar evaporation pre-concentration ponds. After a retention period of approximately 120 days, approximately 90% of the sodium chloride and other salts crystallizes out from the brine. The potash is harvested in a subsequent pond, with no requirement for reagents. Subsequently, the brine is transferred to calcium chloride precipitation ponds and thickeners are used to extract most of the calcium that precipitates as antarctite. Minor amounts of hydrochloric acid are required for pH control and to crystallize boric acid out of the brine. Residence time in the calcium chloride ponds is approximately 105 days. When the brine achieves a lithium concentration of 3.5%, it is transported to the brine processing plant. The total time to get to this stage is approximately 225 days and lithium recovery in the ponds is approximately 60%.

Influent brine lithium grade is predicted to change over the mine life, from 1,177 mg/l in year 1 to 670 mg/l in year 35. Consequently, pre-concentration ponds must be expanded over time to keep production constant. In the initial phase, 406 hectares of pre-concentration ponds will be utilized. This will be followed by two expansions of 102 hectares, each in year 10 and year 20. The calcium chloride ponds and thickeners remain constant over the life of mine. Average production is 20,000 tonnes LCE per year, and the need for capital at the beginning of the project is minimized by mining the high grade first.

Processing of the concentrated brine is achieved in four stages at two locations Fiambalá y Recreo:

Fiambalá (100 Km. from Salar 3 Quebradas)

- Solvent Extraction to remove remaining boron;
- Sulfatation to remove remaining calcium adding a saturated solution of sodium sulfate;

Recreo (465 Km. from Fiambalá)

- Mix with mother liquor and minor soda ash to remove traces of calcium and magnesium; and
- Addition of soda ash and heat to precipitate lithium carbonate, followed by drying and packaging.

Recovery in the sulfatation plant is 92% and recovery in the carbonation plant is 85%. The Company is now operating a 1:500 scale pilot plant in Fiambalá, to fine-tune this standard method. The general approach has been proven in industry by major producers, to achieve battery grade lithium carbonate.

Key parameters that provide the basis for the PFS and other qualifications and assumptions are provided below.

Capital Costs

Initial capital costs are estimated at approximately \$319 million. Life-of-mine deferred and sustaining capital costs are estimated at approximately \$207 million, and closure costs are estimated at approximately \$26 million. Details for capital costs could be found in the table below:

Description	(\$ Million)
Direct Costs	
Evaporation Ponds and Wells	\$128.1
Plant Facilities and Equipment	\$55.8
Infrastructure and Others	\$63.7
Direct Costs Subtotal	\$247.7
Indirect Costs	\$24.1
Contingency	\$47.1
Total Initial Capital Costs	\$318.9
Deferred and Sustaining Capital Costs	\$206.7
Closure Costs	\$26.3

Note: numbers may not match exactly due to rounding.

Operating Costs

Average operating costs per tonne processed are as follows:

Description	\$000/yr	\$/tonne Li ₂ CO ₃ (lithium carbonate)
Direct Costs		
Chemical Reactives and Reagents	\$27,989	\$1,469
Salt Harvesting Equipment	\$1,867	\$98
Energy	\$6,055	\$318
Brine Transport	\$5,075	\$266
Manpower	\$8,019	\$420
Li ₂ CO ₃ Transport	\$1,694	\$89
Maintenance	\$1,527	\$78
Direct Costs Subtotal	\$52,225	\$2,740
Indirect Costs		
General Expenses	\$3,310	\$174
Production Total Costs	\$55,535	\$2,914

Note: numbers may not match exactly due to rounding.

Lithium Markets and Price

Neo Lithium commissioned a market study by Benchmark Minerals Ltd. in December 2018, which shows the following results:

	\$/tonne				
Year	2021	2022	2023	2024	Average onwards
Lithium Carbonate	14,100	16,000	14,800	11,500	11,606

The average lithium carbonate pricing estimate over the life of mine is approximately \$11,882 per tonne.

Base Case Sensitivity Analysis

Discount Rate	NPV After Tax US\$ Million	IRR After Tax	NPV Pre Tax US\$ Million	IRR Pre Tax
6%	\$1,331		\$2,004	

8%	\$1,144	49.9%	\$1,547	60.3%
10%	\$956		\$1,224	

Future Work

Neolithium intend to now complete a full feasibility study to further validate and detail the elements outlined in the Pre-Feasibility Study.

At reserve level, it is recommended to extend drilling at depth of the high-grade zone below the already drilled 100 metres. Definition of additional high-grade resources could have a significant impact on pond requirements, with the possibility to increase production with fewer ponds. This program is already in process, and the first drilling results are expected soon.

Additional long-term pumping tests in the high-grade zone are also recommended to test the aquifer in production scale pumping scenarios. Currently, the Company is carrying out a 20 days long term pumping test that is almost completed.

The pilot plant operation, currently in the commissioning and testing phase, is critical to complete the feasibility study and to prove the concept of the plant facility to yield battery grade lithium carbonate.

The final feasibility study must consider the economics of by-products including potash, calcium chloride and boric acid, all readily available with minor additional investment.

The recommended feasibility study is expected to be completed in the first half of 2020.

Environmental and Permitting Considerations

Neo Lithium is fully permitted for the current work program, through feasibility and up to construction. The Company has completed the baseline studies and is now completing the final environmental impact assessment report for mine construction. The report is expected to be delivered to the mining authorities in Argentina imminently.

Technical Information

The Technical Report will be filed on SEDAR within 45 days of the date of this news release.

The PFS is being prepared in accordance with NI 43-101 by GHD and Groundwater Insight, in conjunction with a team of globally recognized consultants. The two independent qualified experts that lead the team of consultants are:

- Gino Zandonai, P.Eng., a Chilean Professional Mining Engineer and competent person under CRISCO#0155, is the independent qualified person signing the report for GHD Chile SA; and
- Mark King, Ph.D., P.Geo., a Canadian Professional Geoscientist registered with the Association of Professional Geoscientists of Nova Scotia, is the independent qualified person signing the report for Groundwater Insight.

These two qualified persons under NI 43-101 have reviewed that the technical information in respect to the PFS in this press release is accurate and approve the written disclosure of such information.

Other than as set forth above, all scientific and technical information contained in this press release has been reviewed, verified, and approved by Mr. Perez, Ph.D. and P.Geo., CEO and Director of Neo Lithium, and a qualified person for the purposes of NI 43-101, and also supervised the preparation of and approved the contents of this news release.

Project Financing

The PFS defines the major economic parameters of the 3Q Project. The Company now has a strong foundation to discuss various financial options to move the project forward, following strategic discussions with multiple partners during 2018.

"The robust project economics generated from the PFS further validates our view that the 3Q Project is an exceptional project, particularly when our industry faces unprecedented growth and it needs predictable, long term, low cost producers," noted Constantine Karayannopoulos, Chairman of [Neo Lithium Corp.](#) "We are not short of options, and the next step is a careful analysis of how to maximize value for our shareholders."

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 located in the Province of Catamarca, 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 complex 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.](#) 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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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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