

LSC Announces Positive PEA Results of 20,000tpa Lithium Carbonate Operation From Pozuelos-Pastos Grandes Project

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TORONTO, Dec. 04, 2018 - [LSC Lithium Corp.](#) (“LSC” or together with its subsidiaries, the “Company”) (TSXV:LSC) is pleased to announce that it has completed the Preliminary Economic Assessment (“PEA”) for its Pozuelos-Pastos Grandes (“PPG”) Project.

PEA HIGHLIGHTS

US\$2,994/t Li ₂ CO ₃	US\$338m	US\$1,036m	34	%
Avg Operating Costs (incl. 5% contingency)	Initial Capital (incl. \$59m contingency)	NPV8% (Pre-tax)	IRR (Pre-tax)	
US\$125m	20,000tpa	US\$762m	30	%
After Tax Annual Free Cash Flow Production of Battery Grade Li ₂ CO ₃ NPV8% (Post-tax) IRR (Post-tax)				

- US\$762 million after-tax NPV at 8% discount rate and IRR of 30%
- CAPEX estimate of US\$338 million with 34% of estimate at PFS level accuracy
- OPEX of US\$2,994/t of lithium carbonate over life of mine
- Mine life of at least 20 years with initial production in 2021 and steady state in 2024
- Designed for production of 20,000tpa of battery grade lithium carbonate
- Combined PPG Project Resource of 2,617,000 tonnes LCE in Measured and Indicated category and 938,500 tonnes LCE in the Inferred category
- Process development supported by benchscale test work. Pozuelos brine chemistry, in particular is amenable to excellent process performance

LSC’s President and CEO, Ian Stalker, noted, “These results support our view that PPG is one of the most advanced and economically viable lithium projects in Argentina. Operating costs are in the lowest quartile globally, the capital requirements are manageable, and we are excited by the large resource, which leaves room for future upsizing.

“This important development milestone will be further supported by the Environmental Impact Statement which we intend to submit to the Salta mining secretary before the end of the year. We look forward to 2019, when further pilot testing and geotechnical work at the project will support further data for a full Feasibility Study.”

The PEA is based upon brine grades across LSC’s Measured, Indicated and Inferred Mineral Resources only. Mineral Resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that the PPG Project envisioned by the PEA will be realized. The PEA is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves.

Unique Project Advantages

The PPG Project enjoys certain unique advantages, which support a rapid development schedule, and low capital and operating costs:

- LSC controls over 90% of the area of the Pozuelos salar and its surroundings. This advantageous position makes siting of infrastructure, extraction of fresh water and preparation of brine-extraction models extremely simple. In this way, sustainable pumping of brine can be ensured.

- Geotechnical conditions in the mature portion of the Pozuelos salar are such that construction of evaporation ponds can occur on the salar surface at low cost.
- For the two reasons above, it was decided to locate all infrastructure at Pozuelos, with only extraction wells and a pipeline located at Pastos Grandes.
- Pozuelos's proximity to the existing Fenix gas pipeline ensures that only a 26km connection needs to be constructed. LSC has been allocated gas capacity on this pipeline by the gas supply company.
- At least three separate sources of fresh water have been identified and road access is readily available.
- The brine chemistry of the Pozuelos and Pastos Grandes salars complement each other. Test work has shown that an efficient evaporation path can be pursued to produce a high grade and high purity concentrate for feeding into the lithium plant ensuring high recovery rates.
- The Argentine fiscal regime is supportive of mining projects. A reduced corporate tax rate of 25% will be effective for the industry from 2020. A royalty of 3% is applied to all exported products. Salta Province in particular, is actively encouraging mining investment and therefore requires no additional royalties or government participation in the project at this time.
- Pozuelos hosts no communities in the immediate vicinity or environmentally sensitive flora or fauna. This increases the likelihood of a fast and efficient project approval and implementation.
- LSC developed a processing method that is based on conventional and proven operations for lithium brines.

GHD was selected in June 2018 as the preferred engineering company for the execution of the PEA after an extensive selection process, where LSC solicited expressions of interests and proposals from 14 different companies across the globe. GHD offers extensive experience in the design and implementation of lithium projects with brine feedstock. GHD has experience in Argentina's Puna plateau, working with Orocobre as the preferred engineering service provider for the expansion project at Sales de Jujuy operation, as well as providing services for Neo Lithium's Tres Quebradas project. GHD also supports major lithium producers in Chile and Australia along with other lithium developers in the South American region.

1. Capital Costs

Capital costs were estimated by GHD based on initial civil material take-offs, a detailed mechanical equipment list and budget offers for major equipment. The accuracy of the capital cost estimate is +/- 25%. A summary is shown in Table 1. LSC made the decision to develop the primary concentration ponds to a higher level of accuracy. Additional engineering was undertaken to support an estimate for this infrastructure that is at Pre-feasibility Study ("PFS") level.

Table 1 - Capital Cost Summary

Description	US\$ '000's
Production Wells and Primary Ponds*	88,862
Secondary and Tertiary Ponds and Chemical Treatment	48,806
Lithium Carbonate Plant	33,194
Reagents and Services	23,808
Infrastructure	42,888
Direct Capex	237,558
Indirect Costs	41,418
Contingency	58,672
Total Capex	337,648

**Engineering and Cost Estimate at PFS Level*

Brine supply from Pastos Grandes, as well as ponds and equipment for salt harvesting, have been deferred to Years 2 and 3 of operations respectively. This equates to a deferred capital cost of \$33m (or 10% of initial capex), which will be funded from operating cash flows during project ramp up.

2. Operating Costs

Operating costs were estimated by GHD based on information provided and subject to several assumptions, and are shown in Table 2. The accuracy for the operating cost estimate is +/- 25%. The operating costs

benefit from major fundamental advantages, which include:

- High expected process recoveries based on an understanding of the chemical evolution. This has been reviewed and confirmed by process test work undertaken by LSC.
- A high quality brine feedstock from Pozuelos salar, which is complemented by Pastos Grandes chemistry.
- Optimisation within the lithium plant through the use of Continuous Ion Exchange circuits.

Table 2 - Summary of Operating Costs

Description	US\$ / t Li ₂ CO ₃
Reagents	1,431
Salt Removal and Transport	440
Energy	160
Manpower	314
Catering & Camp Services	106
Maintenance	144
Consumables	25
Product Transport to Antofagasta Port	115
Direct Costs Subtotal	2,735
Contingency (5%)	137
General & Administration	122
Indirect Costs	259
Total OPEX	2,994

Sustaining capital was estimated by GHD to average approximately \$373/t and at current prices, royalties are approximately \$360/t lithium carbonate. Total all-in sustaining costs are therefore expected to be \$3727/t. This places the PPG Project at the bottom end of the current production cost curve for lithium carbonate. See the following link for the current production cost.

3. Price Assumptions and Economic Analysis

3.1 Price Assumptions

The PPG Project has been designed to produce 20,000 tons per annum of lithium carbonate that meets “battery grade” specifications.

LSC has reviewed five publicly available price forecast scenarios, which have been concluded between May 2017 and August 2018 as part of technical studies for other lithium projects. The forecasts include analysis undertaken by signumBOX, Roskill, Global Lithium LLC and Benchmark Mineral Intelligence.

It was found that long-term price forecasts used in other projects vary between \$11,800-\$14,500/t lithium carbonate, with an average forecast price of approximately \$13,500/t. This compares with the current free on board (fob) price achieved by an Argentinian lithium producer of \$14,700/t (Orocobre, Nov 2018).

LSC applied a conservative long-term price forecast near the bottom end of the range of price forecasts used by other project developers. A price of \$12,000/t will be used for the project base case. A downside scenario of \$10,000/t and an upside scenario of \$15,000/t were also considered.

Table 3 - Battery Grade Lithium Carbonate Price used for the PPG Project Economic Evaluation

US\$/t Li ₂ CO ₃	2018 (US\$)	2019(US\$)	Long Term (US\$)
Base	12,000	12,000	12,000
High	15,000	15,000	15,000

Low 10,000 10,000 10,000

3.2 Economic Analysis

A Technical Economic Model was prepared by GHD for the PPG Project. The model determined before and after tax project economics in real terms.

A tax rate of 25% and a royalty of 3% was applied to the gross market value of the product.

Using base case price assumptions, and applying a discount rate of 8%, the after-tax project NPV is \$762m, with an IRR of 30%. Annual free cash flows are expected to be approximately \$125m.

The pre-tax NPV is \$1,036m, with an IRR of 34% and annual free cash flows of approximately \$165m.

3.3 Sensitivity Analysis

Sensitivity analyses were undertaken for product price, capex, production rate and discount rate. These sensitivities on after-tax economics can be seen graphically at this link.

The project economics are most sensitive to product price. The after-tax NPV_{8%} for the low product price scenario is \$515m and \$1,135m in the high price scenario.

The net present value is least sensitive to capex, with a 20% increase in capex, reducing the NPV_{8%} by less than \$70m or less than 10%. The after-tax NPV_{10%} is US\$604m; the NPV_{12%} is \$478m and the NPV_{6%} is \$962m. Reducing production to 16,000 tons per annum, reduces the NPV_{8%} to \$540m.

4. Mineral Resource Estimate

A combined PPG Project resource estimate is shown in Table 4. Combined Measured and Indicated Resources are 2.6Mt LCE, 1.7Mt from Pozuelos and 0.9Mt from Pastos Grandes. Total PPG Inferred Resources are 0.9Mt LCE, 0.6Mt from Pozuelos and 0.3Mt from Pastos Grandes.

Table 4 - Combined PPG Project Resource Estimate

Resource Classification	Total Brine Volume million m3	Li mg/l	Ca mg/l	Mg mg/l	K mg/l	SO ₄ mg/l	RBRC %	Available Brine ⁴ Million m3	Li (tons) Metric tonnes	LCE Metric tonnes
PASTOS GRANDES¹										
Measured	7,353	465	682	3,093	4,783	9,847	4.83	355	168,090	894,000
Indicated	508	452	727	2,909	4,479	9,533	3.51	18	8,335	44,300
M&I	7,862	464	685	3,081	4,763	9,827	4.74	373	176,425	939,000
Inferred	2,515	467	681	3,084	4,775	9,879	4.81	121	57,760	307,000
POZUELOS²										
Measured	4,713	470	1,757	2,652	4,143	6,570	8.41	396.4	180,000	958,000
Indicated	4,260	544	1,054	3,216	2,761	11,359	5.84	248.9	135,155	719,000
M&I	8,973	505	1,423	2,920	3,487	8,843	7.19	645.3	315,155	1,677,000
Inferred	4,937	518	1,170	2,948	2,240	8,771	4.64	229.3	118,603	631,000

1. For resource estimate details see "Technical Report on the Pastos Grandes Lithium Project" dated October 25, 2018 with an effective date of October 19, 2018 prepared for LSC as filed on SEDAR.

2. For resource estimate details see LSC press release dated November 27, 2018 “LSC Announces an Updated Mineral Resource Estimate for the Pozuelos Project” as filed on SEDAR. The effective date of the resource estimate for salar de Pozuelos is November 22, 2018. A technical report on the updated resource estimate for salar de Pozuelos will be issued within 45 days of the November 27, 2018 press release.
3. Lithium Carbonate Equivalent (LCE) calculated by applying a factor of 5.323 to lithium metal resource estimate. Totals for M&I and Inferred Resources have been rounded.
4. Available brine volume within each resource category calculated by applying the Relative Brine Release Capacity (RBRC) factor to total brine volume. RBRC value is the weighted average for the resource classification category.
5. Resources have been classified in accordance with CIM mineral resource definitions, May 25, 2014. Assay values have been rounded to nearest whole number.
6. Resources have been estimated by Louis Fourie, P. Geo., Pr.Nat. Sci., under the direction of D. Hains, P. Geo.
7. Resources have been estimated using a cut-off grade of 330 mg/L lithium for Pozuelos and 100 mg/L lithium for Pastos Grandes based on economic considerations related to estimated production costs for brine extraction.
8. Mineral resources which are not Mineral Reserves do not have demonstrated economic value. There is no assurance that additional exploration will result in the conversion of Mineral Resources to Mineral Reserves.
9. Inferred Mineral Resources are considered as too speculative to have economic criteria applied to them. There is no assurance that additional exploration will result in the conversion of Inferred Mineral Resources to Indicated or Measured Mineral Resources.

5. Process Development

The process development was undertaken in-house by LSC and includes applications from mineral processing technologies used in other commodities. This LSC process was reviewed by GHD prior to incorporation into the PEA. The salt chemistry in the evaporation stages of the process has been tested in small basins in the Puna. Batch ion exchange and carbonation have been tested at SGS in Perth, Australia.

This link shows images of the test work undertaken both of the front end concentration process in Argentina Puna conditions and the ion exchange test work undertaken at a laboratory in Perth, Australia.

6. Infrastructure

Other than brine extraction wells and the pipeline connecting the two salars, no infrastructure is planned at Pastos Grandes, with all project infrastructure to be located at Pozuelos. This link shows a general arrangement drawing of the project infrastructure.

Key project infrastructure components include:

- Brine Extraction wells located at Pastos Grandes and Pozuelos. Initially, a total of 15 pumping sites are estimated to feed into the primary evaporation ponds.
- 770ha of primary evaporation ponds supported by 40ha of auxiliary and washate ponds.
- 110ha of secondary and tertiary ponds and associated equipment for chemical reagent addition, entrainment recovery and other mechanical treatment.
- A lithium plant, including boron, magnesium and calcium removal, carbonation circuit, micronisation, bagging and product storage.
- An employee camp, offices and warehouse, partially leveraging off the existing camp at Pozuelos.
- A power generation plant, consisting of 7 x 1.5MW gas engines and cogeneration facilities for steam.
- A 26km long ” (100mm) gas pipeline tying into the Fenix gas pipeline to the west of the salar.
- Salt storage stockpiles both on and off the salar for salt harvested from the primary and later ponds respectively.

7. Implementation Schedule and Next Steps

GHD and LSC jointly developed an implementation schedule which is shown in the attached link. First lithium carbonate production is expected in 2021, with steady state achieved in 2024.

LSC intends to start field work in the new year, with construction of pilot plants and geotechnical testing at Pozuelos. The Feasibility Study is currently scheduled to start in Q2 2019.

Qualified Person

This press release is based upon information prepared and approved by Donald H. Hains, P.Geo. Mr. Hains is a qualified person, as defined in NI 43-101 and is independent of LSC. Mr. Hains has verified all sampling, analytical and test data underlying the information contained in this press release by on-site inspection during drilling, brine sampling; review of drill core photographs to verify lithology; review of certified assay certificates against the assay data base and review of pump test data. There are no drilling, sampling, recovery or other factors that could materially affect the accuracy and reliability of the data.

An NI 43-101 report is required to be filed, in conjunction with the disclosure of this PEA and the Pozuelos Resource Update, within 45 days of this press release.

The information contained in this news release relating to the PEA has been reviewed and is approved by Lawrence D. Henchel, P.Geo., of Stantec C International LLC. Mr. Henchel is a "Qualified Person" as the term is defined in NI 43-101 and is independent of LSC. GHD of Santiago, Chile, has also reviewed and approved the presentation of the PEA information in this news release.

ABOUT GHD:

GHD is one of the world's leading professional services companies operating in the global markets of energy and resources, water, environment, property and buildings, and transportation. Established over ninety years ago and privately owned by its employees, GHD delivers engineering, architecture, environmental and construction services to public and private sector clients across five continents and the Pacific region. Committed to creating lasting community benefit, GHD connects the knowledge, skill and experience of nearly 10,000 diverse people with innovative practices, technical capabilities and robust systems. www.ghd.com

ABOUT LSC [Lithium Corp.](#):

LSC Lithium has amassed a large portfolio of prospective lithium rich salars and is focused on developing its material projects: Pozuelos and Pastos Grandes Project, Rio Grande Project and Salinas Grandes Project. All LSC tenements are located in the "Lithium Triangle," an area at the intersection of Argentina, Bolivia and Chile where the world's most abundant lithium brine deposits are found. LSC Lithium has a land package portfolio totaling approximately 300,000 hectares, which represents extensive lithium prospective salar holdings in Argentina.

For further information please contact:

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Forward-Looking Statements

Certain statements contained in this news release constitute forward-looking information. These statements relate to future events or future performance, including statements as to the realization of the project advantages set out herein, including access to infrastructure; ongoing government support; ability and

feasibility of building a pipeline; ability, timing and likelihood of construction at PPG; accuracy of estimation of capital and operating costs; timing of commencing a feasibility study and field work; ability and likelihood of using combined resource of PPG in the operation outlined in the PEA; likelihood of upsizing the project; timing for submitting the EIS; the ability to convert mineral resources to mineral reserves to be used in operations; timing of production and likelihood of producing in 2021; likelihood of meeting target production rate at PPG; ability and timing of advancing LSC's properties through various stages of exploration and resource development, and any other matters relating to the exploration, production and development of PPG and LSC's other properties. The use of any of the words "could", "anticipate", "intend", "expect", "believe", "will", "projected", "estimated" and similar expressions and statements relating to matters that are not historical facts are intended to identify forward-looking information and are based on LSC's current belief or assumptions as to the outcome and timing of such future events. Whether actual results and developments will conform with LSC's expectations is subject to a number of risks and uncertainties including factors underlying management's assumptions, such as risks related to: drill program results; title, permitting and regulatory risks; exploration and the establishment of any resources or reserves on LSC properties; volatility in lithium prices and the market for lithium; exchange rate fluctuations; volatility in LSC's share price; the requirement for significant additional funds for development that may not be available; changes in national and local government legislation, including permitting and licensing regimes and taxation policies and the enforcement thereof; regulatory, political or economic developments in Argentina or elsewhere; litigation; title, permit or license disputes related to interests on any of the properties in which the Company holds an interest; excessive cost escalation as well as development, permitting, infrastructure, operating or technical difficulties on any of the Company's properties; risks and hazards associated with the business of development and mining on any of the Company's properties. Actual future results may differ materially. The forward-looking information contained in this release is made as of the date hereof and LSC is not obligated to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by applicable securities laws. Because of the risks, uncertainties and assumptions contained herein, investors should not place undue reliance on forward-looking information. The foregoing statements expressly qualify any forward-looking information contained herein. For more information, see the Company's filing statement on SEDAR at www.sedar.com.

The PEA was prepared to broadly quantify the PPG Project's capital and operating cost parameters and to provide guidance on the type and scale of future project engineering and development work that will be needed to ultimately define the project's likelihood of a positive feasibility determination and optimal production rate. It was not prepared to be used as a valuation of the project nor should it be considered to be a final feasibility study on which a commercial production decision could be made as mineral resources that are not mineral reserves do not have demonstrated economic viability. The capital and operating cost estimates which were used have been developed only to an approximate order of magnitude based on generally understood capital cost to production level relationships, and although they are based on engineering studies, these are preliminary so the ultimate costs may vary widely from the amounts set out in the PEA. This could materially adversely impact the projected economics of the project. As is normal at this stage of a project, data in some areas was incomplete and estimates were developed based solely on the expertise of the Company's employees and consultants. At this level of engineering, the criteria, methods and estimates are preliminary and result in a high level of subjective judgment being employed. There can be no assurance that the potential results contained in the PEA will be realized.

Neither the TSX Venture Exchange Inc. 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.

The TSX Venture Exchange Inc. has neither approved nor disapproved the contents of this press release.

ⁱ This Measured and Indicated figure is comprised of 1,678,000 tonnes LCE from Pozuelos with average grade of 505mg/l Li and 939,080 tonnes LCE from Pastos Grandes with average grade of 464mg/l Li. This Inferred figure is comprised of 631,000 tonnes LCE from Pozuelos with average grade of 518 mg/l Li and 307,500 tonnes LCE from Pastos Grandes with average grade of 467mg/l Li. See Technical Report titled "Mineral Resource Estimate and Technical Report on the Salar de Pastos Grandes Project, Salta Province, Argentina" with an effective date of October 28, 2018 filed on the Company's SEDAR profile. See also the press release of LSC dated November 27, 2018 filed on the Company's SEDAR profile for the updated resource estimate of Pozuelos. Numbers have been rounded and may not add.

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