

# Standard Lithium Crystallisation Prototype

## Completes Carbonate Pilot

written by Raj Shah | October 25, 2018

✘ October 25, 2018 ([Source](#)) – **Standard Lithium Ltd.** (“Standard Lithium” or the “Company”) (TSXV: SLL) (OTCQX: STLHF) (FRA: S5L), is pleased to announce that the Company has completed the construction of the prototype pilot plant for its proprietary selective crystallisation process, and is currently commissioning the plant for operation. The pilot prototype has been designed and fabricated in partnership with Saltworks Technologies Inc. and will be initially operated at their facility in Richmond, British Columbia, Canada.

The prototype pilot has been designed based on Standard Lithium’s proprietary process that selectively crystallises “battery-quality” lithium carbonate from concentrated lithium chloride solutions (see Standard Lithium’s previous news release dated 12<sup>th</sup> Sept regarding progress on the lithium extraction pilot plant that will produce the concentrated lithium chloride solutions). To date, the Company’s testwork has been completed at laboratory scale, and has yielded high purity lithium carbonate material (>99.5% purity). The newly constructed pilot prototype will operate on a semi-continuous basis, whereby the feed solution is periodically replenished, and the final high purity lithium carbonate is periodically removed. The prototype is designed to process up to 100 L/day of inlet brine, and produce up to 1 kg/day of lithium carbonate. Artificial Intelligence (AI) enabled high-speed, multi-image photo-

microscopy and computer image recognition for crystal size and shape will be tested during the prototype, and will be fully integrated into the process control system for the subsequent full-scale pilot.

The prototype is considered to be a proof-of-concept for the proprietary process, and commissioning is currently underway at Saltworks. It is expected that members of Standard Lithium's Technical Advisory Committee and their staff will operate the prototype for 2-3 months. If results are positive, Standard Lithium will commission and build the full-scale crystallisation pilot plant for future deployment at the Project site in southern Arkansas.

Dr. Andy Robinson, President and COO of Standard Lithium commented, *"we're very excited to have this prototype pilot plant built and commissioned, and we are very grateful to Saltworks Technologies Inc. for their knowledge, expertise and diligence in designing, fabricating and commissioning this prototype so quickly. It's our hope that we can demonstrate how sophisticated modern crystallisation technologies developed and transferred from the pharmaceuticals industry can be adapted for use in the modern world of high purity lithium chemicals."*

Ben Sparrow, CEO & Chief Engineer of Saltworks commented, *"Standard Lithium's proprietary process showed compelling potential when we ran it through our in-house mass & energy balance computer models and detailed engineering. This is why we put our best people on it and accelerated the build. The next step is to dial-in their innovation and start making high grade lithium carbonate. If Standard Lithium likes the work and results, we are ready to rapidly deliver a mobile fully continuous plant and support Standard Lithium to commercialise this high-potential technology."*

The Company also announces that it has reached an agreement with Native Ads, Inc. (“Native Ads”) pursuant to which the Company will increase the budget under the master services agreement entered into with Native Ads. Native Ads provides the Company with comprehensive digital media marketing services. The new budget will allocate a further \$250,000 to these services, of which \$187,500 will be allocated to digital advertising, paid distribution and media buying, and the balance will be allocated to content creation and consulting and management services.

For further information concerning the Company’s engagement with Native Ads, readers are encouraged to review the Company’s news release of 19<sup>th</sup> July 2018. Neither Native Ads, nor any of its directors or officers, own any securities of the Company.

The Company also wishes to clarify that it did not proceed with the intended grant of 2,100,000 restricted share units (RSUs) as announced in its news release of 21<sup>st</sup> February, 2018. The board of directors have ultimately elected not to implement a restricted share unit plan at this time, and will not be proceeding with the grant of RSUs.

### **Quality Assurance**

Ross Lewis, Professional Engineer (APEGBC#116613), is a qualified person as defined by NI 43-101, and has reviewed and approved the relevant technical information that forms the basis for this news release. Mr. Lewis is a consultant to the Company.

### **About Standard Lithium Ltd.**

The Company’s flagship project is located in southern Arkansas, where it is engaged in the testing and proving of the commercial viability of lithium extraction from over 150,000 acres of permitted brine operations utilising the Company’s proprietary selective extraction technology. The Company is also pursuing

the resource development of over 30,000 acres of separate brine leases located in southwestern Arkansas and approximately 45,000 acres of mineral leases located in the Mojave Desert in San Bernardino County, California.

Standard Lithium is listed on the TSX Venture under the trading symbol "SLL"; quoted on the OTCQX under the symbol "STLHF"; and on the Frankfurt Stock Exchange under the symbol "S5L". Please visit the Company's website at [www.standardlithium.com](http://www.standardlithium.com).

### **About Saltworks Technologies**

Saltworks Technologies treats the toughest water. Saltworks delivers intelligent industrial desalination and zero liquid discharge (ZLD) water treatment plants. We reliably separate out the salt, so customers can focus on their core business ([www.saltworkstech.com](http://www.saltworkstech.com)).

On behalf of the Board,

Standard Lithium Ltd.

Robert Mintak, CEO & Director

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party information, continued access to mineral properties or infrastructure, fluctuations in the market for lithium and its derivatives, changes in exploration costs and government regulation in Canada and the United States, and other factors or information. Such statements represent the Company's current views with respect to future events and are necessarily based upon a number of assumptions and estimates that, while considered reasonable by the Company, are inherently subject to significant business, economic, competitive, political and social risks, contingencies and uncertainties. Many factors, both known and unknown, could cause results, performance or achievements to be materially different from the results, performance or achievements that are or may be expressed or implied by such forward-looking statements. The Company does not intend, and does not assume any obligation, to update these forward-looking statements or information to reflect changes in assumptions or changes in circumstances or any other events affecting such statements and information other than as required by applicable laws, rules and regulations.