

July 15, 2021



Standard Lithium Announces Delivery of Its SiFT Lithium Carbonate Plant to El Dorado Arkansas Project Site

EL DORADO, Ark., July 15, 2021 (GLOBE NEWSWIRE) -- **Standard Lithium Ltd.** ("Standard Lithium" or the "Company") (TSXV: SLI) (NYSE: SLI) (FRA: S5L), an innovative technology and lithium project development company today announced the delivery of its 'SiFT' lithium carbonate plant to the El Dorado Arkansas project site, located at the LANXESS South Plant facility. The SiFT Plant will be installed adjacent to and connected to the Company's LiSTR Direct Lithium Extraction ("DLE") pre-commercial scale demo plant. The SiFT plant is designed to take the intermediate product made by the company's DLE process (a high purity, concentrated lithium chloride solution) and convert that into a battery-quality (or better) lithium carbonate.

The modular plant was sent as several truck-loads and has been reassembled on its purpose-built foundations. Standard Lithium and its team of engineers and operators in Arkansas, assisted by the experienced on-site team of Milam and HGA, is now reconnecting the modules, and making all utility, instrumentation, control, reagent and process-flow connections between the SiFT plant and the existing operating SLI Demo Plant. Following the connections being completed, a weatherproof structure will be installed at the site, scheduled for later this month. Once the SiFT Plant is made weatherproof, then it can be hydraulically integrated and site-specific commissioning can be completed; note that the SiFT Plant has been fully commissioned previously, and has been running successfully for several months in Vancouver. Photos of the installation process are shown below.

Figure 1: One of the SiFT lithium carbonate crystallization plant modules being lowered into position at Standard Lithium's Demonstration Plant in El Dorado, Arkansas, USA.

<https://www.globenewswire.com/NewsRoom/AttachmentNg/33b7c500-c828-4d2b-b42c-bd62a2017137>

Figure 2: The final module being loaded into position, with the Company's LiSTR DLE Plant behind. Note the climate-controlled container adjacent to the SiFT Plant, which will be used to store battery-quality lithium carbonate samples produced by the plant.

<https://www.globenewswire.com/NewsRoom/AttachmentNg/7e838c9c-5dc5-4feb-b975-57e9033ceecc>

The fully automated lithium carbonate crystallization plant has been designed around the Company's proprietary 'SiFT' continuous fractional crystallisation technology, which has demonstrated to produce >99.9% purity (also known as 'three-nines') battery-quality lithium carbonate. The crystallization plant was constructed by Saltworks Technologies Inc ([see the Company's June 6, 2020 news release](#)). The SiFT plant has been operating for the past year at a facility in the Greater Vancouver area; processing lithium chloride produced at the Company's Arkansas site, as well as reprocessing technical grade lithium carbonate sourced

from South American brine operations into battery quality Li_2CO_3 .

Dr. Andy Robinson, President and COO of Standard Lithium, commented, *“Due to constraints imposed on our operations by the COVID-19 pandemic, we have, up until now, been running the SiFT Plant separately at a location in the Vancouver area. This work has been extremely successful, and we have produced large volumes of better-than battery quality lithium carbonate from lithium chloride concentrates made by the El Dorado Plant. We’ve also been reprocessing very large quantities of low-quality material sourced from existing South American brine producers, and have demonstrated that the SiFT technology can easily upgrade off-spec material in a single, simple step. We’re now thrilled to move the SiFT Plant to El Dorado, which was always our plan, get the plant connected and running, and then operate the only continuous, 24/7 start-to-finish brine-to-carbonate plant in North America.”*

About Standard Lithium Ltd.

Standard Lithium is an innovative technology and lithium development company. 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. The company has commissioned its first-of-a-kind industrial-scale direct lithium extraction demonstration plant at Lanxess's south plant facility in southern Arkansas. The demonstration plant utilizes the company's proprietary LiSTR technology to selectively extract lithium from Lanxess's tail brine. The demonstration plant is being used for proof-of-concept and commercial feasibility studies. The scalable, environmentally friendly process eliminates the use of evaporation ponds, reduces processing time from months to hours and greatly increases the effective recovery of lithium. 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 jointly listed on the TSX Venture and the NYSE American Exchanges under the trading symbol “SLI”; and on the Frankfurt Stock Exchange under the symbol “S5L”. Please visit the Company’s website at www.standardlithium.com.

On behalf of the Board of Standard Lithium Ltd.

Robert Mintak, CEO & Director

For further information, contact Anthony Alvaro at (604) 240 4793

Twitter [@standardlithium](https://twitter.com/standardlithium)

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Figure 1



One of the SiFT lithium carbonate crystallization plant modules being lowered into position at Standard Lithium's Demonstration Plant in El Dorado, Arkansas, USA.

Figure 2



The final module being loaded into position, with the Company's LiSTR DLE Plant behind. Note the climate-controlled container adjacent to the SIFT Plant, which will be used to store battery-quality lithium carbonate samples produced by the plant.

Source: Standard Lithium