

## Standard Lithium, in Partnership with Telescope Innovations, to Produce Next Generation Solid-State Battery Materials

NEW AND NOVEL LOW TEMPERATURE IP-PROTECTED METHOD FOR PRODUCING LITHIUM SULFIDE DEVELOPED IN PARTNERSHIP BETWEEN STANDARD LITHIUM AND TELESCOPE INNOVATIONS

## LITHIUM PRODUCTS FROM STANDARD LITIHIUM'S ARKANSAS DEMONSTRATION PLANT USED TO MAKE NEXT GENERATION LITHIUM SULFIDE PRODUCT FOR USE IN SOLID STATE BATTERIES

VANCOUVER, British Columbia, June 03, 2025 (GLOBE NEWSWIRE) -- **Standard Lithium Ltd.** ("Standard Lithium" or the "Company") (TSXV:SLI) (NYSE American:SLI), a leading near-commercial lithium company, is pleased to announce the successful production of battery quality lithium sulfide as part of a collaboration with Telescope Innovations.

As previously mentioned (see <u>Aug 28<sup>th</sup> 2024 news release</u>), Standard Lithium has been working with its research and development partner, Telescope Innovations, to develop new and novel conversion technologies to make next generation battery materials. This new conversion process has now been successfully used to convert lithium hydroxide produced by Standard Lithium at its southern Arkansas Demonstration Plant, into battery quality lithium sulfide (Li<sub>2</sub>S – see <u>news release dated May 7<sup>th</sup> 2025</u>). Samples of the lithium sulfide have been shipped to solid-state battery companies in Asia and North America for ongoing testing and validation purposes.

Standard Lithium's President and COO, Dr. Andy Robinson commented "this development of new IP and technology with our research partner, Telescope Innovations, exemplifies our approach to becoming the leading new lithium company in North America. Whilst our principle area of focus, and capital allocation, is building the first DLE project in North America at our South West Arkansas Project Phase 1 with our joint venture partner Equinor, we understand that constant technological evolution is integral to staying at the forefront of this rapidly evolving industry. This recent work led by Telescope demonstrates that we are able to take lithium chemicals produced from the Smackover Formation in southern Arkansas, and then transform them into the feedstocks required by the next generation of batteries. Our partnership with Telescope Innovations continues to be a "win-win" for our shareholders and their's."

Lithium sulfide is a key raw material required for many next-generation solid-state battery chemistries (see news release: <u>Toyota works with partners to develop Li<sub>2</sub>S based batteries</u>), but despite the importance of lithium sulfide in the next generation of battery technology, it is only produced commercially in very small quantities and at very high cost. The technical collaboration between the two teams has resulted in a novel low-temperature patented

process that has the following advantages:

- Feedstock flexibility both lithium hydroxide and lithium carbonate are viable inputs;
- Impurity tolerance allows the use of technical-grade feedstocks;
- Lower processing temperatures (<100 °C) reduces equipment complexity and operating costs; and,
- **Enhanced safety in manufacturing** avoids high-temperature conditions and associated thermal risks.

## About Standard Lithium Ltd.

Standard Lithium is a leading near-commercial lithium development company focused on the sustainable development of a portfolio of large, high-grade lithium-brine properties in the United States. The Company prioritizes projects characterized by high-grade resources, robust infrastructure, skilled labor, and streamlined permitting. Standard Lithium aims to achieve sustainable, commercial-scale lithium production via the application of a scalable and fully integrated Direct Lithium Extraction ("DLE") and purification process. The Company's flagship projects are located in the Smackover Formation, a world-class lithium brine asset, focused in Arkansas and Texas. In partnership with global energy leader Equinor, Standard Lithium is advancing the South West Arkansas project, a greenfield project located in southern Arkansas, and actively exploring promising lithium brine prospects in East Texas.

Standard Lithium trades on both the TSX Venture Exchange and the NYSE American under the symbol "SLI". Please visit the Company's website at <u>www.standardlithium.com</u>.

## Investor and Media Inquiries

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Source: Standard Lithium