

May 9, 2023



Standard Lithium Signs Joint Development Agreement With Koch Technology Solutions

Shared Technology Agreement to Accelerate Commercial Deployment of Standard Lithium's Projects on an Exclusive Basis

Performance Guarantees for High Levels of Commercial Lithium Extraction from Smackover Brines

EL DORADO, Ark., May 09, 2023 (GLOBE NEWSWIRE) -- **Standard Lithium Ltd.** ("**Standard Lithium**" or the "**Company**") (TSXV: SLI) (NYSE American: SLI) (FRA: S5L), a leading near-commercial lithium company, is pleased to announce that it has signed a Joint Development Agreement (JDA) with Koch Technology Solutions (KTS), an affiliate of Koch Engineered Solutions, to share data and jointly develop and commercialize integrated lithium brine processing flowsheets for Standard Lithium's exclusive use in the Smackover Formation. The agreement will further enhance Standard Lithium's position to build the first U.S. commercial lithium project in several decades and to begin to meet the surging demand for lithium.

Under the JDA, Standard Lithium and KTS will work together to integrate the proprietary KTS Li-Pro™ Lithium Selective Sorption (LSS) technology into a complete flowsheet solution, and Standard Lithium will have exclusive rights to deploy this technology at any of its projects in the Smackover Formation under a license agreement. KTS will also provide firm performance guarantees for the deployment and operation of the technology at high levels of commercial lithium extraction, allowing Standard Lithium to accelerate the development process cost-efficiently.

Dr. Andy Robinson, President and COO of Standard Lithium, commented, "*Today's announcement is about greater certainty, speed, and choice. The performance guarantees for the KTS Li-Pro™ technology license will provide significant risk reduction for Standard Lithium and its shareholders; the partnership will help accelerate the Company's first project to commercial reality; and the exclusivity will allow us to benefit from a second Direct Lithium Extraction (DLE) technology that works with Smackover Formation brines in addition to our own proprietary LiSTR technology.*"

The joint development relationship will also allow our project execution team to take what we learn from the Demonstration Plant at the LANXESS property in El Dorado, Arkansas, and leverage these insights as we scale to our first commercial facility and continue to develop multiple lithium projects across the Smackover Formation. In addition to the LANXESS Property Project, these include the high-grade brines of our South West Arkansas Project and our expansion into East Texas (see news release dated 28th March 2023). We are delighted to have KTS as a partner and look forward to a productive relationship."

Adam Sackett, President of KTS, said, *“Standard Lithium has been an incredible development partner, and this Joint Development Agreement signals the acceleration of the collaboration to drive commercial success. Standard Lithium has done an excellent job positioning itself as a first mover supporting broader domestic energy through the application of Direct Lithium Extraction (DLE) technology, and KTS is excited to be a part of this significant opportunity.”*

Standard Lithium has been testing the KTS Li-Pro™ LSS technology since October 2022, alongside its own proprietary LiSTR technology at the Company’s pre-commercial DLE Demonstration Plant in El Dorado, Arkansas. Highlights of this integrated testing include:

- Over 1.4 million gallons of Smackover brine processed through the LSS equipment;
- Over 4,600 cycles of lithium loading and elution; and
- Production of high-purity lithium eluates that have been further concentrated and purified using the integrated operations at the Demonstration Plant.

Quality Assurance

Steve Ross, P.Geol., a Qualified Person as defined by NI 43-101, has reviewed and approved the relevant scientific and technical information that forms the basis for this news release. Mr. Ross is a consultant to the Company.

About Standard Lithium Ltd.

Standard Lithium is a leading near-commercial lithium development company with a portfolio of projects in progress. The Company’s flagship projects, the LANXESS Property Project and the South West Arkansas Project, are located in southern Arkansas near the Louisiana state line. The Company is focused on the evaluation and testing of commercial lithium extraction and purification from brine sourced from approximately 180,000 acres of leases across these two projects. The Company operates a first-of-a-kind industrial-scale DLE Demonstration Plant at the LANXESS Property Project. 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. A Definitive Feasibility Study (DFS) and Front-End Engineering Study (FEED) for Phase 1A of the LANXESS Property Project commenced in September 2022. A Preliminary Feasibility Study (PFS) of the South West Arkansas Project commenced in May 2022. The Company is also pursuing the resource development of other projects in the Smackover Formation in East Texas, as well as 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 Exchange and the NYSE American under the trading symbol “SLI”; and on the Frankfurt Stock Exchange under the symbol “S5L”. Please visit the Company’s website at <https://www.standardlithium.com>.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

This news release may contain certain “Forward-Looking Statements” within the meaning of

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