

STANDARD LITHIUM FILES POSITIVE PRELIMINARY ECONOMIC ASSESSMENT FOR THE HIGH-GRADE 70,000 TONNES PER YEAR FRANKLIN PROJECT IN EAST TEXAS

October 20, 2026 Lewisville, Ark. – Standard Lithium (“Standard Lithium” or the “Company”) (NYSE.A: SLI) (TSXV: SLI), in partnership with Equinor, announced today that the Preliminary Economic Assessment Technical Report (the “PEA” or the “Report”) for the Franklin project (“Franklin”, the “Project”, or the “Franklin Project”) in the northeast region of Texas, USA, [has been filed on SEDAR+](#).

The Report for the Franklin Project, the partnership’s first defined project area in the East Texas region of the Smackover Formation, highlights the globally significant size and high quality of its brine position. The Report marks a key step towards the partnership’s goal of reaching over 100,000 tonnes (“t”) of lithium chemical production per year in Texas through multiple phases and projects.

The PEA contemplates annual production capacity of up to 70,000 tonnes of battery-quality lithium carbonate and 1.29 million tonnes of total lithium carbonate production over a 20-year modelled operating life, with a starting lithium concentration of 562 mg/L and an average lithium concentration of 515 mg/L. Initial production could begin in the early 2030’s with additional potential for a longer operating life and further expansion, though this is not modelled in the Report.

The PEA for the lithium Project is highlighted by attractive economics, including an unlevered pre-tax net present value (“NPV₈”) of \$5.9 billion, an internal rate of return (“IRR”) of 25.7% and a 3-year payback period, along with average annual lithium cash operating cost of \$4,226/t and a capital intensity of \$49,945/t. Additionally, it includes an upgraded and upsized Mineral Resource with some of the highest lithium-in-brine concentrations reported in North America. This is supported by an increase in the Project area by 37% since the prior [Maiden Inferred Resource Report](#) to 44,541 hectares (110,064 acres).

The Report also considers a scenario based on a co-located bromine facility of 50,000 tonnes per year alongside the lithium operation. Standard Lithium and Equinor anticipate further evaluating potential commercial opportunities for both bromine and potash given the significant scale and quality of the resources, as well as the [designation of potash as a U.S. critical mineral in 2025](#).

The principal recommendation of the PEA is to advance the Franklin Project to a Preliminary Feasibility Study (“PFS”). The partnership will continue to conduct direct lithium extraction (“DLE”) testing of the Project brine, leveraging insights gained at Standard Lithium’s Demonstration Plant, as well as at the South West Arkansas Project (“SWA Project”).

All figures are in US dollars and all units are metric unless otherwise stated. All model outputs are expressed on a 100% ownership basis with no adjustments for financing assumptions. Standard Lithium's economic interest in the Project is 55%. Mineral Resources have been reported in accordance with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards for Mineral Resources & Mineral Reserves.

The Report is available for review under the Company's profile on SEDAR+ at www.sedarplus.ca and on the Company's website at <https://www.standardlithium.com/projects/smackover>. For highlights of this Report, please refer to the Company's news release dated [8 September 2026](#).

Qualified Persons

All scientific and technical disclosure in this news release was reviewed and approved by Mr. Stephen Ross, P.Geo., British Columbia, Vice President of Resource Development for Standard Lithium and a Qualified Person for purposes of, and as that term is defined in, National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101"). Mr. Ross is not independent of the Company.

About Standard Lithium

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 DLE and purification process. The Company's flagship projects are in the Smackover Formation, an attractive lithium brine asset, focused in Arkansas and Texas. In partnership with global energy leader Equinor, Standard Lithium is advancing the SWA Project, a greenfield project located in southern Arkansas, and actively advancing a promising lithium brine resource position in East Texas, including the highest known lithium brine grade project in North America, the Franklin Project.

Standard Lithium trades on both the TSX Venture Exchange ("TSXV") and the NYSE American under the symbol "SLI". Visit the Company's website at www.standardlithium.com for more information.

About Smackover Lithium

Smackover Lithium is a partnership between Standard Lithium and Equinor, through subsidiaries of Equinor ASA. Formed in May 2024, Smackover Lithium is developing multiple DLE projects in Southwest Arkansas and East Texas. Standard Lithium owns a 55% interest and Equinor holds the remaining 45% interest in the projects, with Standard Lithium maintaining operatorship.

About Equinor

Equinor is an international energy company committed to long-term value creation in a low-carbon future. Equinor's portfolio of projects encompasses oil and gas, renewables, and low-carbon solutions, with an ambition of becoming a net-zero energy company by 2050. Headquartered in Norway, Equinor is the leading operator on the Norwegian continental shelf and has offices in more than 20 countries worldwide. Equinor's partnership with Standard Lithium to mature DLE projects builds on its broad US energy portfolio of oil and gas, offshore wind, low carbon solutions, and battery storage projects.

For more information on Equinor in the U.S., please visit: [Equinor in the US - Equinor](#).

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Use of Non-GAAP Measures

Certain financial measures referred to in this news release are not measures recognized under International Financial Reporting Standards ("IFRS") and are referred to as non-GAAP financial measures or ratios. These measures have no standardized meaning under IFRS and may not be comparable to similar measures presented by other companies. The definitions established and calculations performed by the Company are based on management's reasonable judgement and are consistently applied. These measures are intended to provide additional information and should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS.

The non-GAAP financial measure used in this news release and common to the lithium industry is average annual cash operating cost per tonne.

Average annual cash operating cost per tonne is a non-GAAP financial measure and has no standardized meaning under IFRS Accounting Standards and may not be comparable to similar measures used by other issuers. As the Franklin Project is not in production, the Company does not have historical non-GAAP financial measures nor historical comparable measures under IFRS, and therefore the foregoing prospective non-GAAP financial measures or ratios may not be reconciled to the nearest comparable measures under IFRS.

Cautionary Note Regarding Forward-Looking Statements

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

This news release may contain certain "Forward-Looking Statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and applicable Canadian securities laws. Forward-looking statements in this news release include, but are not limited to, the Company's

expectations and estimates with respect to: the economic and scoping-level parameters of the Franklin Project, including the unlevered pre-tax NPV, IRR, payback period, average annual lithium cash operating cost and capital intensity; anticipated annual production capacity of battery quality lithium carbonate; total lithium carbonate production and the 20-year modelled operating life; the potential for a longer operating life and further expansion of the Franklin Project; the anticipated timing of initial production; the partnership's goal of reaching over 100,000 tonnes of lithium chemical production per year in Texas; the anticipated timeline for completion of any future PFS, including targeting completion of the Franklin PFS in 2027; Mineral Resource estimates, including the average lithium concentration and size and quantity of the brine position; the cost and timing of any development of the Franklin Project; the proposed mine plan and mining methods; mining recoveries; processing method and rates; the potential co-located bromine facility and its anticipated production capacity; potential commercial opportunities for, and potential value of, bromine and potash production at the Franklin Project; production rates; continued DLE testing of Project brine; the partnership's ability to leverage insights gained at the Demonstration Plant and SWA Project; energy sources; and general business and economic conditions.

Statements relating to "Mineral Resources" are deemed to be forward-looking statements, as they involve the implied assessment, based on certain estimates and assumptions that the Mineral Resources described can be profitably produced in the future. Generally, forward-looking statements can be identified using forward-looking terminology. Wherever possible, words such as "may", "will", "should", "could", "expect", "plan", "target", "forecast", "schedule", "prospective", "envision", "continue", "intend", "assume", "anticipate", "believe", "estimate", "budget", "predict", "project" or "potential" or the negative or other variations of these words, or similar words or phrases, have been used to identify these forward-looking statements. These statements reflect management's current beliefs and are based on information currently available to management as at the date hereof.

All statements other than statements of historical fact may be forward-looking statements. Forward-looking statements involve significant risk, uncertainties and assumptions. Many factors could cause actual results, performance or achievements to differ materially from the results discussed or implied in the forward-looking statements. Such factors include, among other things: risks related to the inherent uncertainties regarding cost estimates; the preliminary nature of the PEA and the risks that the results of the PEA, and any future PFS, may not be realized; the risk that Inferred Mineral Resources may never be upgraded or converted to Mineral Reserves; the use of non-GAAP measures in financial performance accounting; changes in commodity and lithium prices; currency fluctuation; financing; unanticipated resource grades and process recoveries; infrastructure; results of future exploration activities; cost overruns; availability of materials and equipment; timeliness of government approvals; political risk and related economic risk; unanticipated environmental impact on operations; and risks associated with executing the Company's plans and intentions. These factors should be considered carefully, and readers should not place undue reliance on the forward-looking statements. Although the forward-looking statements contained in this news release are based upon what management believes to be reasonable assumptions, the Company cannot assure readers that actual results will be consistent with these forward-looking statements. Additionally, while the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. These forward-looking statements are made as of the date of this news release, and the Company assumes no obligation to update or revise them to reflect new events or circumstances, except as required by law.