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Standard Lithium Provides Update on Exploration and Process Testing Program at Bristol Dry Lake, Mojave, California

VANCOUVER, British Columbia, Oct. 10, 2017 (GLOBE NEWSWIRE) -- **Standard Lithium Ltd.** ("Standard Lithium" or the "Company") (TSX-V:SLL) (FRA:S5L) (OTCQX:STLHF) is pleased to provide an update on the exploration and process testing program at the Company's Bristol Dry Lake lithium brine project located in the Mojave Desert, California.

Building on the promising results of its recently completed large-scale geophysical surveys, the Company has commenced a resource definition drill program on its approximately 25,000 acre Bristol Dry Lake lithium brine project. The objectives of the intrusive exploration program are to establish the lithium grade of the subsurface brine across Standard's extensive landholdings within the large salar; to determine depth and lateral extent of the brine; and also to define key geological and hydrogeological data that will be required in order to develop a maiden resource estimate. The Company has received all required permits and approvals from Federal and County regulators to conduct the exploration drilling program. Two drill rigs have commenced work on site and the Company's team of senior geologists and hydrogeologists are supervising all work.

In addition to the geophysical and intrusive exploration programs, the Company has collected and shipped bulk raw brine samples from Bristol Dry Lake to several leading lithium brine assessment and process technology firms across North America. These firms have begun a series of lab-scale process testing studies of the Bristol Dry Lake brine and will begin determining the most efficient and effective process technologies to optimize lithium recovery from this important U.S. mineral brine bearing resource. The Company has also completed preliminary evaporation pond process testing work at the Bristol Dry Lake project site. The initial test work consisted of taking raw brines gathered from near-surface test pits (depth to lithium brine at the project is typically 5-20 ft (1.5-6 m)) and pumping the brine into three shallow plastic-lined ponds that were partially buried to avoid heating effects on the walls of the ponds. Brine samples and field parameters were taken on a weekly schedule, and samples were sent for chemical analysis to a qualified laboratory in Sparks, NV. The data from this first round of evaporation pond testing showed that the raw brine pumped from the near-surface test-pit contained an average concentration of 146 mg/L lithium, and that within a period of 4 weeks, the brine was concentrated by passive solar evaporation to an average lithium concentration of 556 mg/L (max. 717 mg/L). These short-duration evaporation tests will be repeated several times throughout the year, so that seasonal effects can be quantified. Data developed from this short-duration evaporation pond work will be incorporated into the ongoing process-testing work being conducted by leading North American process technology firms.

Standard Lithium's President and COO, Dr. Andy Robinson commented, *"Standard's exploration and process-testing programs are now fully underway and being completed in*

parallel by our highly experienced resource assessment and chemical engineering teams. The amount of work that we've been able to complete in such a short period of time is evidence of our fast-track development philosophy, and speaks volumes to the constructive relationships that we have in place with the existing fully-permitted brine producers in operation at Bristol Dry Lake. All of the work being completed right now will be used to support the maiden 43-101 resource estimate for the Bristol Dry Lake lithium brine project, estimated for the first half of 2018".

Quality Assurance

Raymond Spanjers, Certified Professional Geologist (SME No. 3041730), is a qualified person as defined by NI 43-101, and has supervised the preparation of the scientific and technical information that forms the basis for this news release. Mr. Spanjers is not independent of the Company as he is an officer in his role as Vice President, Exploration and Development.

About Standard Lithium

Standard's value creation strategy encompasses acquiring a diverse and highly prospective portfolio of large-scale domestic brine resources, led by an innovative and results-oriented management team with a strong focus on technical skills. The Company is currently focused on the immediate exploration and development of the Bristol Dry Lake Lithium Project located in the Mojave region of San Bernardino County, California; the location has significant infrastructure in-place, with easy road and rail access, abundant electricity and water sources, and is already permitted for extensive brine extraction and processing activities. The Company is also commencing due diligence and resource evaluation on 33,000 acres of lithium brine leases located in the Smackover Formation.

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.

For further information, contact Anthony Alvaro at 604.240.4793.

On behalf of the Board,

Standard Lithium Ltd.

Robert Mintak, CEO & Director

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Neither the Company, nor National Chloride makes any representations as to the value of lease rights associated with National Chloride's Bristol Lake mineral claims (the "Property"), the availability of any particular resource or minerals on the Property, or the merits of any proposed exploration work to be completed on the Property. National Chloride expressly disclaims any responsibility for the adequacy or accuracy of disclosure made by the Company in respect of the Property. Readers are cautioned that a "Qualified Person"(as that term is defined by National Instrument 43-101 – Standards of Disclosure for Mineral Projects) has not done sufficient work to specify any mineral resource or reserve on the Property.

Source: Standard Lithium Ltd.