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30 June 2016

ASX ANNOUNCEMENT

Lithium Australia and ANSTO Minerals update progress of Sileach™ technology

HIGHLIGHTS

- **Lithium Australia (ASX: LIT) and ANSTO Minerals continue to investigate the suitability of LIT's Sileach™ process to produce high-value lithium carbonate**
- **Pilot testing of Pilgangoora and other concentrates to commence in the near future**
- **LIT's goal is to be a lowest quartile lithium carbonate producer**

Testing on the Sileach™ process is continuing at ANSTO Minerals (a division of the Australian Nuclear Science and Technology Organisation). This testing has confirmed lithium extractions of greater than 90% lithium for the lithium bearing silicates lepidolite and spodumene. The test program at ANSTO Minerals has also identified a preferred, simple processing route to reject impurities prior to precipitation of a lithium carbonate product. The quality of the lithium carbonate product appears suitable for further refining to produce high purity battery-grade lithium carbonate, or high value added lithium hydroxide.

Optimisation of the Sileach™ process for the processing of both lepidolite and spodumene is in the final stages of completion. One of the key objectives of these programs is to finalise the design criteria prior to pilot testing the process, from ore through to lithium carbonate production.

A piloting design program has been conducted in parallel to the optimisation programs to accelerate the transition from bench-scale testing to continuous piloting. The process design criteria, mass balance and equipment list are currently being developed to assist in the pilot plant design. Each of these items is well advanced or has already been completed for the lepidolite flowsheet.

In the coming weeks, LIT and ANSTO Minerals will be working together to complete the associated process flow diagrams and operating philosophy, with a view to critically reviewing the overall design against the on-going optimisation program results.
In order to shorten the timeline to piloting, preliminary inquiries for speciality equipment required for the pilot plant has already commenced.

The pilot plant design includes a throughput of 3-5 kg/hr of lithium feed (ore or mineral concentrate) in order to demonstrate the ability of the Sileach™ process to extract lithium on a continuous basis with high recoveries. The downstream purification circuits and lithium carbonate precipitation circuits will also be operated continuously.

One of the key objectives is for the continuous operation of the process from leaching to lithium carbonate precipitation to provide the necessary engineering design data for Lithium Australia's planned demonstration plant.

The pilot plant will also produce significant quantities of battery-grade lithium carbonate, which will be available for market evaluation purposes.

Managing director, Mr Adrian Griffin:
"*The development of the Sileach™ process is a credit to all involved and the ability to progress to piloting in such a short timeframe is a considerable milestone for Lithium Australia. These achievements have a very positive impact on our recently announced arrangements to work with Pilbara Minerals to commercialize Sileach™ for the recovery of lithium from spodumene without roasting."*

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About Lithium Australia NL
LIT is a dedicated developer of disruptive lithium extraction technologies including the versatile Sileach™ process which is capable of recovering lithium from any silicate minerals. LIT has strategic alliances with a number of companies, potentially providing access to a diversified lithium mineral inventory globally.

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