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ASX ANNOUNCEMENT

SILEACH™ GENERATES 99.8% LITHIUM CARBONATE FROM SPODUMENE WITHOUT ROASTING

Lithium Australia's (ASX: LIT) Sileach™ process has produced battery grade lithium carbonate from Pilbara Minerals (ASX: PLS) Pilgangoora deposit.

HIGHLIGHTS

- Sileach™ demonstrates its versatility processing low-grade spodumene concentrates
- High purity product produced – 99.8% lithium carbonate
- By-product credits add revenue not available through conventional processing

Operations undertaken at ANSTO Minerals (a division of the Australian Nuclear Science and Technology Organisation) have demonstrated proof-of-concept production of high-purity lithium carbonate from spodumene process solutions.

The lithium carbonate feed solutions were produced by Lithium Australia's Sileach™ pilot plant, processing of Pilgangoora spodumene concentrates. The concentrate grades processed were intentionally selected to have a grade lower than commercial concentrate grades, in this case 3.4% Li₂O to demonstrate the flexibility of Sileach™ in processing a wide range of materials, including off-specification spodumene concentrates. Specifications of the material treated are shown in Appendix I.

The solutions generated by digesting spodumene contain approximately 2.4% Si, 1.2% Al and 0.2% Li. These concentrations provide an opportunity to recover components, other than lithium, as by-products. This opportunity is not available with conventional processing.

MANAGING DIRECTOR, ADRIAN GRIFFIN SAID:

"The ability of Sileach™ to cope with the high levels of contamination in the spodumene concentrate, and still produce a high-purity lithium carbonate is a great achievement. The ability to produce by-products that are not available with conventional processing of spodumene shows great potential."

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About Lithium Australia

Lithium Australia is a dedicated developer of disruptive lithium extraction technologies and sole owner of the Sileach™ halogen based lithium recovery process. LIT has strategic alliances with a number of companies, potentially providing access to a diversified lithium mineral inventory. LIT aspires to create the union between resources and the best available technology and to establish a global lithium processing business.

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APPENDIX I

SPODUMENE CONCENTRATE SPECIFICATIONS

Mineral	Pilot Plant Feed (%)	Assay	wt %
Spodumene	70.7	Al	10.59
Petalite	1.03	Ca	1.75
Albite	5.27	Cs	0.009
Quartz	5.21	Fe	2.14
Lepidolite/Muscovite	3.27	K	1.35
Aegirine -augite	2.63	Li	1.63
K-Feldspar	2.16	Mg	0.93
Hornblende	1.94	Mn	0.29
Apatite	1.28	Na	0.99
Anorthite	1.24	Rb	0.14
Phlogopite	1.20	Si	28.12

The concentrates selected for processing were selected on the basis of containing significant impurities. Commercial spodumene concentrates usually exceed 90% spodumene.

The ability of Sileach™ to process contaminated spodumene concentrates is considered to be one of the advantages of the process.