

## ASX/Media Announcement

Perth: 16 January 2017



## L-Max® Produces Battery Grade Lithium Carbonate

- High specification battery grade lithium carbonate grading 99.75% produced using Lepidico's L-Max<sup>®</sup> technology
- Caesium formate and sodium silicate by-products also produced
- Test work on samples from two other lepidolite deposits will be undertaken over the next four weeks

Lepidico Ltd (ASX:LPD) ("Lepidico" or "the Company") is pleased to announce that it has produced battery grade lithium carbonate grading 99.75% using its L-Max® technology, as part of the ongoing Pre-Feasibility Study (PFS) test work programme. Samples from three separate lepidolite deposits will be tested for the Phase 1 commercial L-Max® plant PFS.

Hydrometallurgical batch tests have been completed for the first of these samples, sourced from the tailings of an existing mining operation. Approximately 30 kg of material containing lepidolite (36%) and lithium muscovite (43%) was received in  $50 \, \text{mm} - 100 \, \text{mm}$  pieces, grading approximately  $3.8\% \, \text{Li}_2\text{O}$  and  $0.7\% \, \text{Cs}$ .

The sample was subjected to leaching under standard L-Max® conditions, with extractions for lithium and caesium of 91% and 88% respectively. Optimisation of leach conditions is expected to result in improved recoveries.

The leach liquor from the leach tests was subjected to the standard L-Max® process flowsheet in a series of batch tests. Lithium losses in the L-Max® process were estimated at 3%, with total recovery of 88% to battery grade lithium carbonate grading 99.75%.

Caesium formate represents a potential high value by-product of the L-Max® process. A mixed formate brine was produced from the batch test that contained 55% rubidium formate and 16% caesium formate (along with potassium and sodium formates), with a specific gravity of 1.96 g/cm³. Total recovery of caesium to formate was 88%.

A 36% sodium silicate solution was produced with a  $SiO_2/Na_2O$  ratio of 1.94. This is consistent with the grade of saleable sodium silicate and thereby represents a further valuable potential by-product of L-Max<sup>®</sup>.

Lepidico's Managing Director, Joe Walsh said, "These excellent results have provided the confidence for Lepidico to accelerate its L-Max® test work programme with the commencement, in February 2017, of Definitive Feasibility Study continuous mini-plant trials.

"Commercial negotiations to secure offtake sourced from the three deposits that are the subject of the PFS test work have commenced.

"The Phase 1 commercial plant PFS remains on schedule for completion this quarter and DFS work is now on a fast track, to be concluded around 2017-year end."

## **Further Information**

For further information, please contact

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## **About Lepidico Ltd**

Lepidico Ltd is an ASX-listed Company focused on exploration, development and production of lithium. Its current exploration assets include options over the Lemare and the Royal projects, both in Quebec, Canada; ownership of the Euriowie project near Broken Hill in New South Wales; joint venture agreements with ASX-listed Crusader Resources (ASX:CAS) in Brazil and Latin Resources (ASX:LRS) in Peru and Argentina to jointly evaluate lithium opportunities. Lepidico also owns the technology to a metallurgical process that has successfully produced lithium carbonate from non-conventional sources, specifically lithium-rich mica minerals including lepidolite and zinnwaldite. The L-Max® Process has the potential to disrupt the lithium market by providing additional lithium supply from alternative sources. On 27 September 2016 the Company announced the commencement of a prefeasibility study for a Phase 1 L-Max® plant targeting production for 2019.