

19 August 2019

Pilot Plant results confirm L-Max[®] process viability

- **Assay results confirm L-Max[®] viability from Pilot Plant Campaign 1, with average lithium extraction of 94% to lithium sulphate**
- **Insoluble lithium losses associated with impurity removal stages averaged just 3% for the entire campaign and were consistently below 2% for extended periods**
- **High purity potassium sulphate (SOP) of more than 96% K₂SO₄ produced, equivalent to 52.2% K₂O**
- **Pilot Plant data confirms the Phase 1 design parameters**
- **Lithium carbonate precipitation complete, assays due in late August**

Lepidico Ltd (ASX:LPD) (“Lepidico” or “Company”) is pleased to advise that the ten-day continuous L-Max[®] Pilot Plant trail, Campaign 1, produced excellent results based on assay data. These data support the Phase 1 Plant design parameters including an average lithium recovery of more than 90% to the intermediate product liquor. Process optimisation, including improved process control capabilities are expected to lead to higher future recoveries.

The overall lithium recovery is calculated by determining the lithium losses to the residue streams, being the leach residue and impurity removal residues. These were sampled every four hours throughout the campaign duration. Assay data from these samples were used to calculate the associated lithium extraction and lithium losses throughout the campaign.

The lithium extraction in the L-Max[®] leach for the campaign duration averaged 94% (Figure 1). There was a period in which relatively low lithium extraction was evident (90-130 hours), which correlated with insufficient acid addition. Once the acid addition rate was corrected the lithium extraction returned to anticipated values, above 92%.

LEPIDICO LTD
ABN 99 008 894 442

ASX: LPD

23 Belmont Avenue
Belmont WA 6104

PO Box 330
Belmont WA 6984

Phone: + 61 8 9363 7800
Email: info@lepidico.com

Suite 200, 55 University
Avenue
Toronto ON M5J 2H7,
CANADA

The lithium loss to the impurity removal residues was low for the campaign. The L-Max[®] process produces two main residues, a low pH and high pH precipitation residue. Lithium loss to the low pH residue averaged 1.5% for the campaign (Figure 2) and periods of very low lithium losses were achieved for lengthy periods of the campaign. From 120-224 hours of operation the lithium losses averaged just 0.71%. Lithium loss to the high pH residue averaged 1.5% for the campaign (Figure 3) and periods of low lithium losses were also achieved for extended periods. From 56-148 hours of operation the lithium losses averaged 0.67%. Elevated lithium losses at several brief periods of the campaign for both low and high pH circuits were associated with deviation from the standard L-Max[®] operating conditions, due to poor instrumentation control. A review of instrumentation and control equipment has commenced and several solutions already identified that are expected to enhance and optimise sustainable operating performance.

A proportion of the stockpiled lithium sulphate liquor has been further purified and concentrated prior to lithium carbonate precipitation. Precipitation of high purity lithium carbonate was completed on 16 August 2019, with assay results due in late August.

SOP has been recovered from the L-Max[®] intermediate product in the pilot plant crystalliser. Potassium sulphate of more than 96% purity was produced, equivalent to 52.2% K₂O, a high purity product. Importantly these results also confirm the design parameters for the SOP recovery circuit in the Phase 1 Plant. The by-product from the potassium sulphate crystalliser is a rubidium and caesium rich sulphate. Research and development testwork will start in August to produce a range of caesium and rubidium products, for market evaluation during the December 2019 quarter.

Commenting on the results Managing Director Joe Walsh said: "This first Pilot Plant campaign has successfully confirmed the chemistry underlying the L-Max[®] process through to production of lithium carbonate. The campaign has also highlighted a number of areas for optimising the process, particularly in the area of improved process control. Importantly, none of the issues identified represent material flaws in the process, rather they provided a focus for design optimisation that will be extremely beneficial for the operation of the Phase 1 Plant Project."

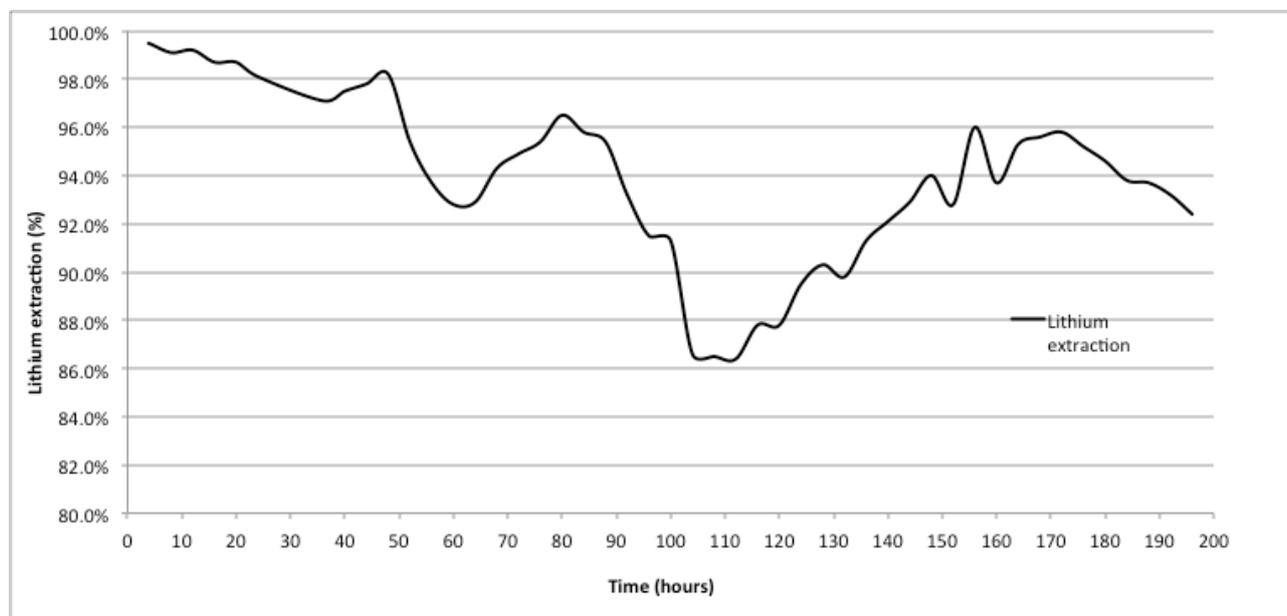


Figure 1. Lithium extraction in the L-Max[®] Pilot Plant leach circuit for the campaign duration.

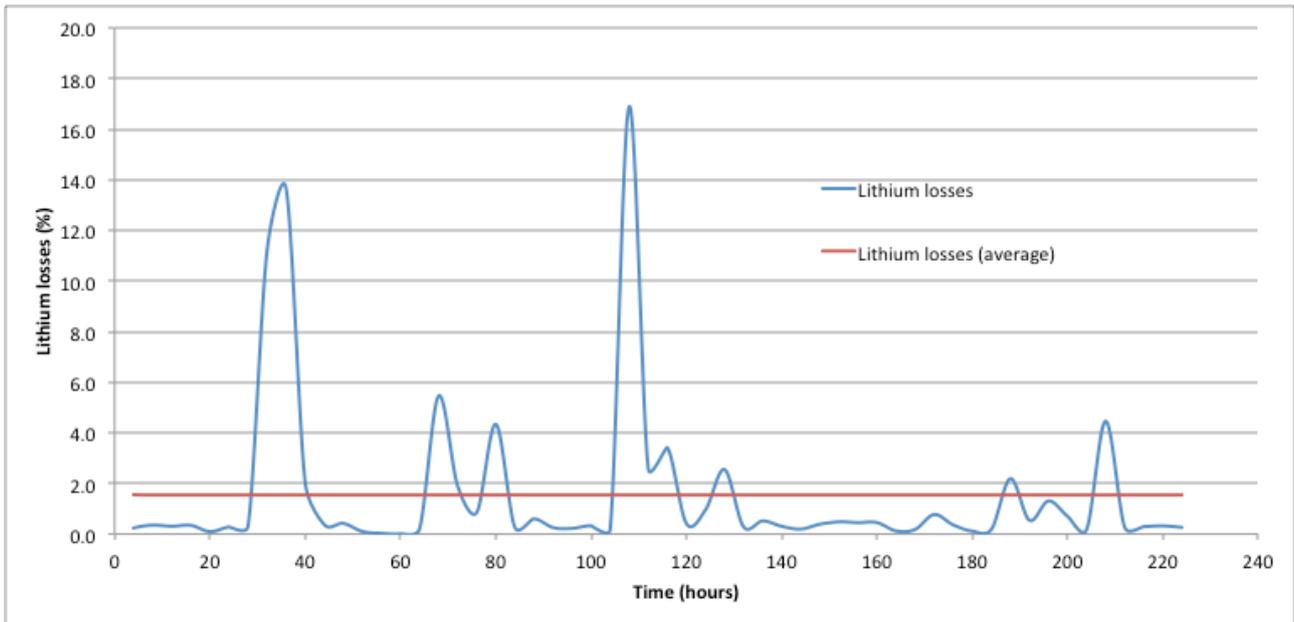


Figure 2. Lithium losses in the L-Max[®] Pilot Plant low pH impurity removal residue.

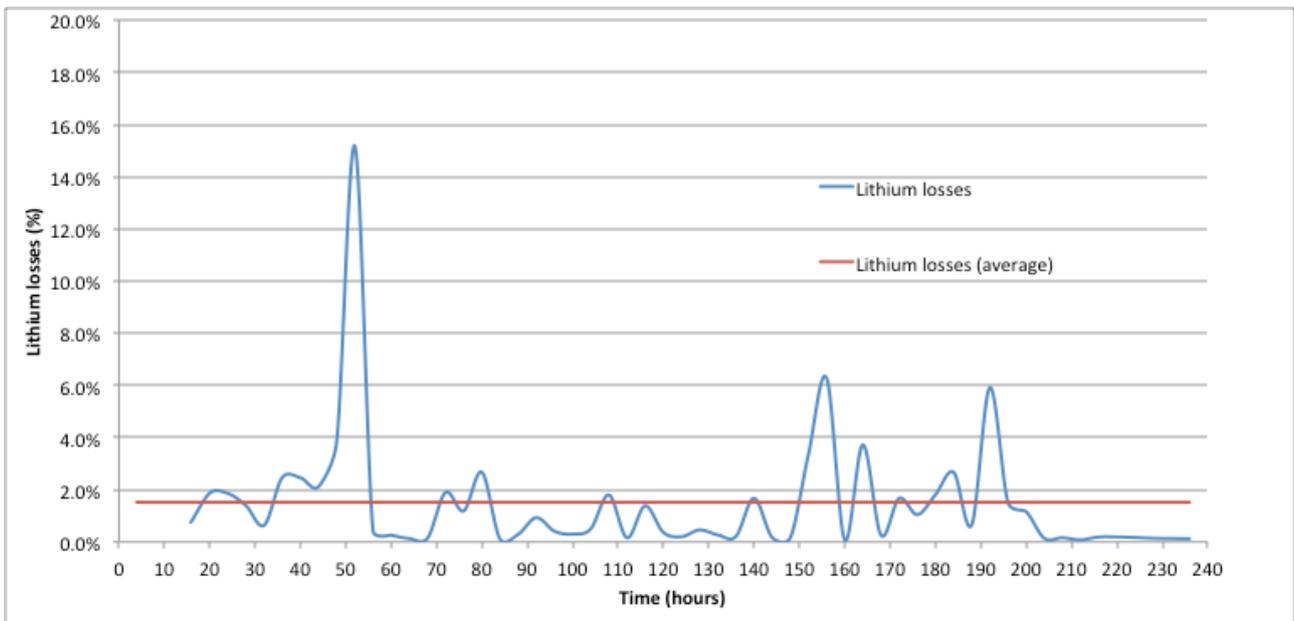


Figure 3. Lithium losses in the L-Max[®] Pilot Plant high pH impurity removal residue.

Further Information

For further information, please contact

Joe Walsh
Managing Director
Lepidico Ltd
 Tel: +1 647 272 5347

Tom Dukovcic
Director Geology
Lepidico Ltd
 Tel: +61(08) 9363 7800

Email: info@lepidico.com
 Website: www.lepidico.com

About Lepidico Ltd

Lepidico Ltd is an ASX-listed Company focused on exploration, development and production of lithium chemicals. Lepidico 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 complement the lithium market by adding low-cost lithium carbonate supply from alternative sources. More recently Lepidico has added LOH-Max[™] to its technology base, which produces lithium hydroxide from lithium sulphate without by-product sodium sulphate. The Company is currently conducting a Feasibility Study for a 5,000 tonne per annum (LCE) capacity Phase 1 lithium chemical plant, targeting commercial production for 2021. Work is currently being undertaken to evaluate the incorporation of LOH-Max[™] into the Phase 1 Plant Project flow sheet. Feed to the Phase 1 Plant is planned to be sourced from the Karibib Lithium Project in Namibia, 80% owned by Lepidico where a Mineral Resource of 8.8 Mt grading 0.56% Li₂O and 59ppm Ta₂O₅ is estimated (ASX announcement of 16 July 2019) and/or the Alvarrões Lepidolite Mine in Portugal under an ore access agreement with owner-operator Grupo Mota (ASX announcement of 7 December 2017).

Forward-looking Statements

All statements other than statements of historical fact included in this release including, without limitation, statements regarding future plans and objectives of Lepidico, are forward-looking statements. Forward-looking statements can be identified by words such as "anticipate", "believe", "could", "estimate", "expect", "future", "intend", "may", "opportunity", "plan", "potential", "project", "seek", "will" and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its directors and management of Lepidico that could cause Lepidico's actual results to differ materially from the results expressed or anticipated in these statements.

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