

ASX RELEASE

LPI.ASX

4 October 2017

**PRODUCTION OF LITHIUM CARBONATE SAMPLES IMMINENT
MARICUNGA LITHIUM BRINE PROJECT**

- 5% lithium concentration successfully achieved in Maricunga process test work.
- Milestone first production of lithium carbonate and potash (KCl) samples from pilot pond brine expected by the end of 4Q17.
- Advanced production testing of the lithium and potash extraction processes continues at the pilot plant stage, using tier-1 equipment suppliers Veolia, GEA, Andritz and FLSmidth and certified laboratories using brine and salts from the pilot ponds.
- The production process utilizes evaporation ponds and proven process technology, so there is minimal future uncertainty over operations, Opex and Capex of the project.

Lithium Power International Limited (ASX: LPI) ("LPI" or "the Company") is pleased to provide an update on the pilot plant process test work being carried out on lithium brine from the Maricunga project located in northern Chile.

Laboratory pilot plant test work

The Maricunga Joint Venture (MJV) is working with tier 1 equipment suppliers Veolia, GEA, Andritz and FLSmidth and other experienced laboratories, who are undertaking pilot plant test work using Maricunga brine. Stage 1 is now successfully completed reaching a 5% lithium concentration. Stage 2 is now underway with first lithium carbonate and potash (KCl) production samples expected by the end of 4Q17. Test work aims to optimise lithium extraction and potassium production and develop the lowest cost process, with highest possible lithium recovery. Test work is well advanced and in the coming months final adjustments will be made to optimise the brine polishing sequence, which will be completed by the end of 4Q17. The process flow sheet diagram (Figure 1) is subject to ongoing optimisation.

Evaporation Pond Design

Geotechnical sampling and site evaluation has been undertaken in the area where the evaporation ponds will be located to finalise pond design as part of the feasibility study. The project will use the well-established method of evaporation to concentrate the brine, before final processing to produce lithium carbonate and potash (KCl) for sale.

Global Tier-1 engineering consultancy WorleyParsons has designed the evaporation ponds, which will be located slightly off to the north of the salar, where they can be constructed taking advantage of gravel and sand that can be easily shaped into pond embankments prior to lining with impermeable liner material for operation long term as non-harvestable and harvestable evaporation ponds.

Project Engineering Design and Pre-feasibility Study

WorleyParsons is well advanced on the design for the process plant and other site infrastructure, with the Capex and Opex of the project as outcomes of the project PFS expected by the end of 2017. Preliminary results regarding these outcomes have been very promising.

Lithium brine has been extracted from salars in Chile and Argentina for over 34 years for production of lithium chemicals and is well understood, although some differences in process are required for each project reflecting the unique brine chemistry of each salar. The Maricunga process will use proven technology and processing methods to minimise uncertainties over future production results, operational costs, and capex.

Maricunga JV Background

The Maricunga JV is 50%-owned by LPI. The project is regarded as one of the highest quality pre-production lithium brine project globally, with a very high grade and strong flow rates. The drilling & pump testing program completed in 2017 resulted in a 3.7 fold increase in the project resource, to a JORC resource estimate of 2.15 mt LCE at 1,160 mg/l announced to the ASX on 12 July 2017.

For further information, please contact:

Martin C Holland – CEO

Lithium Power International

E: info@lithiumpowerinternational.com

Ph: +612 9276 1245

www.lithiumpowerinternational.com

@LithiumPowerLPI

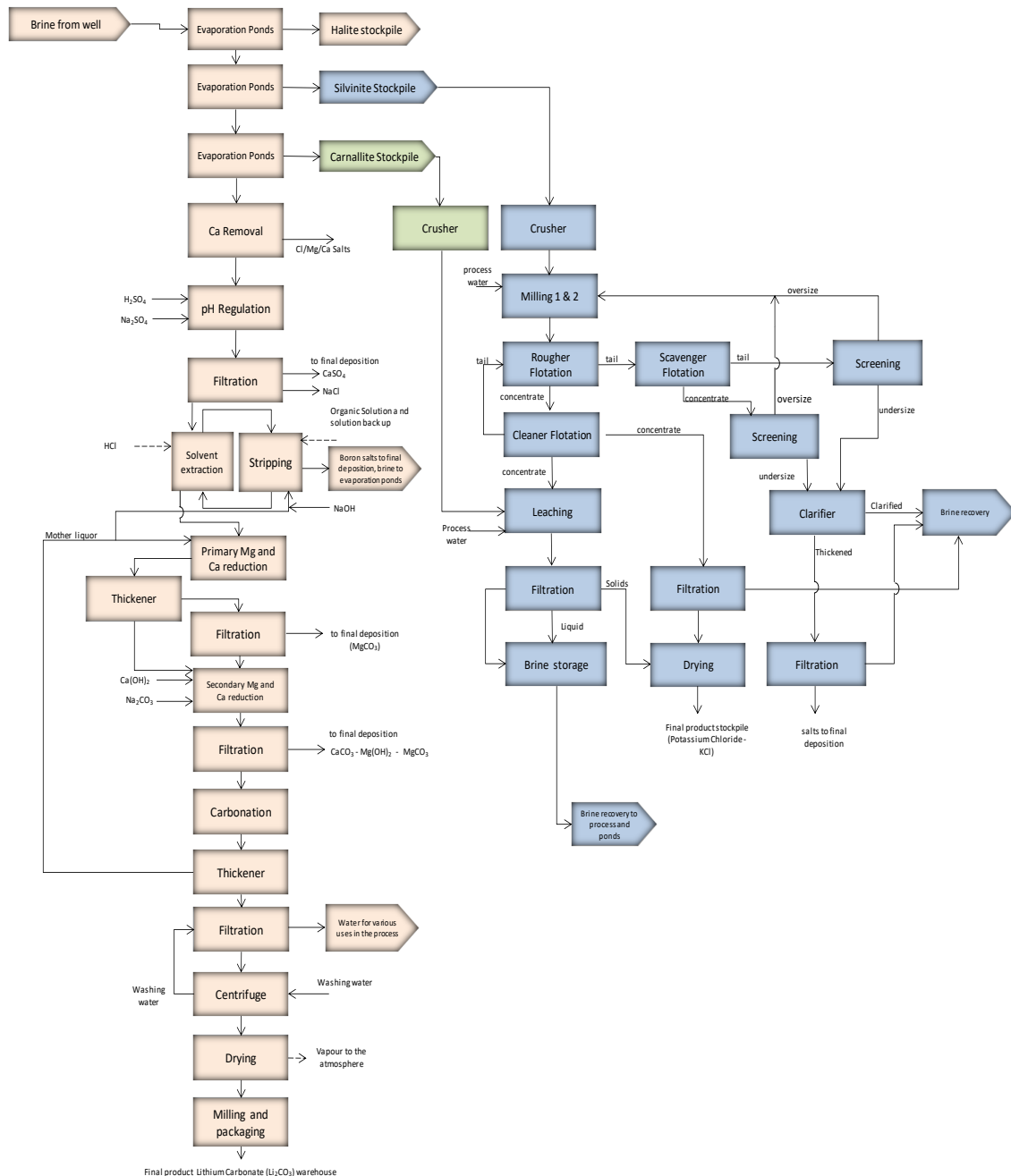


Figure 1: Maricunga process diagram, subject to optimisation from ongoing test work. Lithium process shown on the left, potash on the right