

**ASX RELEASE** 

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# MARICUNGA LITHIUM BRINE PROJECT ACHIEVES 99.9% LITHIUM CARBONATE PURITY

## **Highlights**

- ✓ Globally regarded processing group Veolia Water Technologies produced lithium carbonate samples with 99.9% purity, from the Salar de Maricunga brine
- ✓ Optimised evaporation process developed by the Minera Salar Blanco (MSB) Maricunga project team has resulted in impurity removal
- ✓ Pilot plant testing to continue to further quantify the process for commercial application.

Lithium Power International Limited (LPI or the Company) is pleased to advise that in addition to the previous announcement of 19 February 2018, where initial lithium carbonate sample with purity of 99.4% had been achieved, the globally recognised chemical company Veolia Water Technologies has produced lithium carbonate samples of 99.9% purity from concentrated brine produced from the Salar de Maricunga.

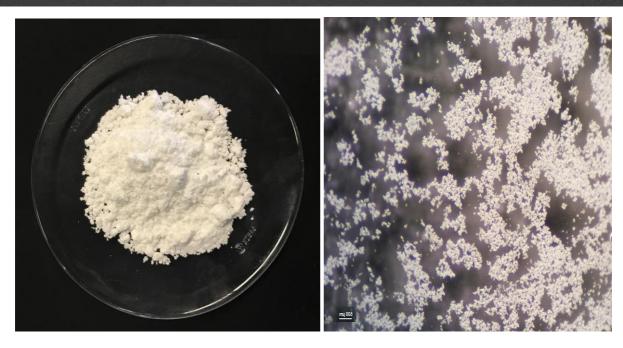
The optimised evaporation process has been developed by Peter Ehren; Principal Process Consultant to the Maricunga Project (MSc. Raw Materials Technology, MAusIMM CP under JORC and QP under NI43-101) and executed by Veolia. This work has been achieved by using several crystallization techniques to remove primary contaminates such as tachyhydrite and calcium chloride from the concentrated Maricunga lithium bearing brine (Brine).

A second part of the process provides for simplified and optimized polishing stages in order to remove the remaining boron, calcium and magnesium from the concentrated lithium brine. This successful application ensured the purity of the final washed lithium carbonate product was 99.9% which greatly exceeds the battery grade lithium carbonate specification as can observed in the table below.

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|     |                      | Not De la | Fig. 18 Sept. |               |
|-----|----------------------|---|---------------|---------------|
|     | Analytical Parameter | Units   | Target        | Final Product |
|     | Veolia Sample No.    | •   | •             | 244-27-01     |
|     | Li2CO3               | %   | 99.2          | 99.9          |
| 2)  | Sodium               | ppm   | 600           | 385           |
| 15) | Iron                 | ppm   | 10            | <1            |
|     | Calcium              | ppm   | 100           | 78            |
|     | Sulfate (SO4)        | ppm   | 300           | <100          |
|     | Potassium            | ppm   | 50            | <15           |
| ,D  | Chloride             | ppm   | 100           | <100          |
|     | Magnesium            | ppm   | 100           | 51            |
|     | Chromium             | ppm   | 10            | <1            |
|     | Nickel               | ppm   | .10           | <1            |
| 75  | Copper               | ppm   | 10            | <1            |
|     | Lead                 | ppm   | 10            | <1            |
|     | Aluminum             | ppm   | .10           | <10           |
|     | Zinc                 | ppm   | .10           | <1            |
|     | Boron                | ppm   | 10            | <5            |



Figures 1 and 2: Lithium Carbonate Samples

### Lithium Power's Chief Executive Officer, Martin Holland said:

"We are exceptionally pleased that our test work has produced such a proven process that can extract and deliver such high purity lithium carbonate product. These exceptional results will be further enhanced and developed to ensure the operational application of these results in the planned mining and processing operation. The LCE purity clearly exceeds battery grade requirements and will continue to generate interest from possible off-take partners."

## MSB's Chief Executive Officer, Cristobal Garcia-Huidobro, said:

"The MSB developed optimised evaporation process along with the pilot plant testing conducted by Veolia has produced results which ensures that the Maricunga lithium brine project will be continued to be seen as Chile's most advanced and highest quality pre-production lithium project."

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