

ASX RELEASE

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MARICUNGA LITHIUM BRINE PROJECT UPDATE POSITIVE PUMPING TEST RESULTS RECEIVED

- **Positive pumping results from two test production wells at the Maricunga lithium brine project indicate strong brine flow rate and high lithium grades**
- **Pump test production wells were previously completed as part of an exploration program undertaken by Joint Venture partners in order to establish current lithium resource**
- **Strategic drilling program aimed at expanding current resource scheduled to commence at Maricunga project this month, with initial results expected soon thereafter**

Lithium Power International Limited (ASX: LPI) (“LPI” or “the Company”) is pleased to advise that it has received positive pumping test results from the Maricunga lithium brine project in northern Chile. The results were uncovered during due diligence following the completion of two test production wells by the Company’s joint venture partners in 2015.

As previously reported, LPI has executed a JV agreement with Minera Salar Blanco (“MSB”) and Minería Li (“MLi”) to explore and develop the Maricunga lithium brine project, following extensive technical and legal due diligence over recent months (refer to ASX announcements on 20 July, 28 July, 1 September, and 13 September).

Maricunga is regarded as the highest quality pre-production lithium project in Chile, with a very high grade of both lithium (1250 mg/l) and potassium (8970 mg/l). The salar has been subject to significant past exploration under the previous partners, MSB and Li3 Energy (“Li3”), with more than US\$30 million invested in property purchases and exploration over the past four years to generate the existing lithium resource (refer to LPI announcement of 28 July). A drilling program aimed at expanding the current resource will commence at Maricunga later this month, with results to be released shortly after.

Maricunga Pumping Well Test Results

Extended pumping of two test production wells within the Maricunga project was undertaken by MSB in 2015. These two wells, referred to as P1 and P2, were installed to a depth of 150m, in line with the depth of the measured lithium resource (see map in Figure 1 below).

P1 and P2 pumped brine at constant rates of 38 and 37 litres per second over 14 days and 28 days respectively, with corresponding lithium concentrations of 1260 mg/l and 1170mg/l each. During the test period, a consistent brine flow rate was observed, with minimal variation in lithium or potassium grades (see Figure 2 below).

Monitoring of the test wells was undertaken via four dedicated holes installed to different depths surrounding each pump well, in addition to the C-series bores drilled in 2012. This monitoring network provided extensive information on the pumping performance of P1 and P2, which were constructed to assess brine inflows from the halite-dominated upper zone (down to 26m), and also the deeper zone mixed with clay, sand and gravel (60-150m).

By way of background, pump testing is significant as it provides an indicative rate at which brine can be extracted from the host sediments (based on the porosity and permeability of the deposit). This information is then used to design the bore field and associated infrastructure, and thereby allows optimised brine extraction for lithium production.

Lithium Power International’s Chief Executive Officer, Martin Holland, commented:

“The Company is pleased to advise that the initial pumping tests undertaken by our JV partners produced a strong flow rate with a high lithium grade. Importantly, the high grade nature of the Maricunga project distinguishes it from a number of other lithium brine projects in South America.

Furthermore, these robust pump test results indicate that Maricunga could produce at a similar brine flow rate to other lithium carbonate producers in the region.

Following the execution of the JV agreement with MSB and MLI, the Company is now focused on the commencement of drilling at the end of this month with 16 diamond drill holes and 2 additional pumping wells scheduled. This exploration work is aimed at expanding the existing resource base, and providing additional information to support the planned feasibility study and ongoing project development.”



Figure 1 (left hand side): Maricunga project tenements - with the location of the pumping well tests P1 and P2
Figure 2 (right hand side): Maricunga production pump test, 2015

Summary of the Maricunga pump testing as stated in JORC Table 1:

Geology and Geological interpretation

The Altiplano-Puna is a large high altitude plateau in Chile, Argentina and Bolivia hosting numerous salt lakes, some of which contain concentrations of lithium in brine that is of economic interest. The evaporite salt pans or salt lakes, known locally as salars, form in topographic depressions with no drainage outlets. They generally represent the end product of a basin infill process that results in the deposition of gravel, sand, silt and clay units. Lithium brine is present in sediments deposited in the Maricunga mountain basin in Chile. The lithium brine is present in the pore spaces in the semi-consolidated sediments.

Sampling and sub-sampling techniques

Representative samples were taken from the outflow pipe from the bores. Samples were collected in clean plastic bottles and delivered to the laboratory with chain of custody documentation.

Sample analysis method

The primary laboratory used for the analysis of brine was the University of Antofagasta, which used the Atomic Absorption Spectrometry analytical technique for the determination of lithium and other elements. Chloride was analysed with the Argentometric technique and sulphate by a gravimetric method.

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Competent Person's Statement – MARICUNGA LITHIUM BRINE PROJECT

The information contained in this ASX release relating to Exploration Results has been compiled by Mr Murray Brooker. Mr Brooker is a Geologist and Hydrogeologist and is a Member of the Australian Institute of Geoscientists and the International Association of Hydrogeologists. Murray has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a competent person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. He is also a "Qualified Person" as defined by Canadian Securities Administrators' National Instrument 43-101.

Murray Brooker is an employee of Hydrominex Geoscience Pty Ltd and an independent consultant to Lithium Power International. Murray Brooker consents to the inclusion in this announcement of this information in the form and context in which it appears. The information in this announcement is an accurate representation of the available data from pump tests conducted at the Maricunga project.

APPENDIX 1 - JORC Code, 2012 Edition

Table 1 Report: Maricunga Salar

Criteria	Section 1 - Sampling Techniques and Data
<i>Sampling techniques</i>	<ul style="list-style-type: none"> • Drill cuttings were taken during reverse circulation drilling, used to install the test production bores P1 and P2 and the associated piezometers. These are low quality drill samples, compared to holes drilled around the pump bores (C series holes) using the sonic drilling technique. • Brine samples were collected at different times during the pump testing undertaken. Water levels were also monitored extensively during and following the test period using data loggers. • The brine sample was collected in a clean plastic bottle and filled to the top to minimize air space within the bottle. Each bottle was taped and marked with the sample number and details of the bore and the time of the sample were noted.
<i>Drilling technique</i>	<ul style="list-style-type: none"> • Reverse circulation drilling – This method was used to install the pump and monitoring bores, with the use of brine for lubrication during drilling, to minimize the development of wall cake in the holes that could reduce the bore flow rate. • RC drilling – which allowed for recovery of drill cuttings and basic geological description. During RC drilling, rock chip were collected directly from the cyclone. Drill cuttings were collected over two metre intervals in plastic bags that were marked with the borehole number and depth interval. Sub-samples were collected from the plastic bag by the site geologist to fill chip trays (also at a two metre interval).
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> • RC cuttings were recovered from the cyclone when this technique was used.
<i>Logging</i>	<ul style="list-style-type: none"> • RC drilling was carried out for the collection of chip samples for geologic logging, brine samples for chemistry analyses and airlift data. Drill cuttings were logged by a geologist.
<i>Sub-sampling techniques and</i>	<ul style="list-style-type: none"> • Brine samples collected during the pumping are homogenized as brine flows from the bore and no sub-sampling is undertaken in the field.

<i>sample preparation</i>	<ul style="list-style-type: none"> The brine sample was collected in one-litre sample bottles, rinsed and filled with brine. Each bottle was taped and marked with the borehole number and details of the pump test.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> The University of Antofagasta in northern Chile was used as the primary laboratory to conduct the assaying of the brine samples collected as part of the drilling program. They also analyzed blanks and standards, with blind control samples in the analysis chain. The laboratory of the University of Antofagasta is not ISO certified, but it is specialized in the chemical analysis of brines and inorganic salts, with extensive experience in this field since the 1980s, when the main development studies of the Salar de Atacama were begun. The quality control and analytical procedures used at the University of Antofagasta laboratory are considered to be of high quality and comparable to those employed by ISO certified laboratories specializing in analysis of brines and inorganic salts.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> A full QA/QC program for monitoring accuracy, precision and to monitor potential contamination of samples and the analytical process was implemented. Accuracy, the closeness of measurements to the "true" or accepted value, was monitored by the insertion of standards, or reference samples, and by check analysis at an independent (or umpire) laboratory. Duplicate samples in the analysis chain were submitted to the University of Antofagasta as unique samples (blind duplicates) during the drilling process Stable blank samples (distilled water) were inserted to measure cross contamination during the drilling process The anion-cation balance was used as a measure of analytical accuracy.
<i>Location of data points</i>	<ul style="list-style-type: none"> The bores are believed to have been located with a hand held GPS. The location is in UTM Zone 19, with the Provisional South American 1956 datum
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> Lithological data was collected throughout the drilling. There were two pump test holes and 8 piezometers used to monitor the results of pumping.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> The salar deposits that host lithium-bearing brines consist of subhorizontal beds and lenses of halite, sand, silt and clay. The vertical bores are essentially perpendicular to these units, intersecting their true thickness
<i>Sample security</i>	<ul style="list-style-type: none"> Samples were transported to the University of Antofagasta (primary and duplicate samples) for chemical analysis in sealed 1-litre rigid plastic bottles with sample numbers clearly identified. The samples were moved from the drill site to secure storage at the camp on a daily basis. All brine sample bottles are marked with a unique label.
<i>Review (and Audit)</i>	<ul style="list-style-type: none"> No audit of data has been conducted to date.

Section 2 - Mineral Tenement and Land Tenure Status

<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> The Maricunga property is located approximately 170 km northeast of Copiapo in the III Region of northern Chile at an elevation of approximately 3,800 masl. The property comprises 1,438 ha in six mineral claims known as Litorio 1 through Litorio 6. P1 and P2 were located within these Litorio claims. In addition, the Cocina 19-27 properties, San Francisco, Salamina and Despreciada properties have been added since the drilling of these pump bores on the Litorio properties. The properties are located in the northern section of the Salar de Maricunga. The tenements are believed to be in good standing, with payments made to relevant government departments
<i>Exploration by other parties</i>	<ul style="list-style-type: none"> SLM Litorio drilled 58 vertical holes in the Litorio properties on a 500 m x 500 m grid in February, 2007. Each hole was 20 m deep. The drilling covered all of the Litorio 1 – 6 property holdings. Those holes were 3.5" diameter and cased with either 40 mm PVC or 70 mm HDPE pipe inserted by hand to resistance. Samples were recovered at 2 m to 10 m depth and 10 m to 20 m depth by blowing the drill hole with compressed air and allowing recharge of the hole. Subsequently, samples were taken from each drill hole from the top 2 m of brine. In total, 232 samples were collected and sent to Cesmec in Antofagasta for analysis. Prior to this the salar was evaluated by Chilean state organization Corfu, using hand dug pit

	<p>samples.</p> <ul style="list-style-type: none"> • The sediments within the salar consist of halite, sands, gravels, silts and clays deposits that have accumulated in the salar from terrestrial sedimentation and evaporation of brines within the salar. • Brines within the salar are formed by solar concentration, with brines hosted within the different sedimentary units • Geology was recorded during drilling to 150m of the two pump test bores, P1, P2 and associated piezometers (as well as previous sonic drill holes that recovered core samples)
<i>Drill hole data</i>	<ul style="list-style-type: none"> • The two test production bores were installed with sets of 4 monitoring bores installed to different depths for each of the test bores
<i>Data aggregation</i>	<ul style="list-style-type: none"> • Data consists of individual bores installed for pump testing.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> • The lithium-bearing brine deposits extend across the tenements and over a thickness of > 150 m, limited by the depth of the drilling • The drill holes are vertical and perpendicular to the horizontal sediment layers in the salar
<i>Diagrams</i>	<ul style="list-style-type: none"> • Diagrams are provided in Technical report on the Maricunga Lithium Project Region III, Chile NI 43-101 report prepared for Li3 Energy May 23, 2012
<i>Balanced reporting</i>	<ul style="list-style-type: none"> • This announcement presents representative key results from pump testing completed to date
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> • Refer to the information provided in Technical report on the Maricunga Lithium Project Region III, Chile. NI 43-101 report prepared for Li3 Energy May 23, 2012
<i>Further work</i>	<ul style="list-style-type: none"> • The company will consider additional drilling on the properties which have been added to the project since the 2012 public report