ASX RELEASE

LPI.ASX

18 May 2017

VERY HIGH LITHIUM BRINE FLOW RATES FROM NEAR SURFACE SALT UNIT AT MARICUNGA, CHILE

- **A pump test was completed on the upper 16 m of well P2 in the south of the Litio tenement, with pumping sustained at a constant 45 litres/second over 7 days**
- **No change in the brine concentration over the pump test, with the brine concentration averaging 1,140 mg/l lithium and 8,322 mg/l potassium over the 7 days of test pumping**
- **Pump test only extracted brine from the upper salt unit, which contains higher than average grades to potentially sustain early project production**
- **This test confirms the high brine flows that can be achieved in the project, demonstrating that the upper salt unit supports the highest brine flow rates recorded to data on the project**

Lithium Power International Limited (ASX: LPI) ("LPI" or "the Company") is pleased to advise the results of a pump test completed on well P2 at the Maricunga lithium brine project in northern Chile. This pumping test demonstrated an excellent flow and brine concentration and LPI is very encouraged by the results, which as presented previously, compare very favourably to other lithium brine projects currently in production and in development within South America.

Maricunga Pump Test Well P2

Pump test well P2 was installed in the south of the Litio tenements to a depth of 150m (see Figure 1) in 2011 with a network of monitoring wells installed surrounding the well. Initial pump testing on the well was conducted in 2015, with the well producing from the upper salt unit and lower aquifer at 37 l/sec over 28 days (LPI announcement 13 September 2016).

To provide specific information on the capacity of the upper salt unit a new pump test was conducted by the MSB joint venture. This involved isolating the filter section of the upper 16 m of the hole with a packer device located at 40 m down the hole in the solid well casing.

With the lower section of the well isolated from the pumping the well was pumped at increasing rates to measure hydraulic parameters and then pumped at a continuous rate of 45 l/sec over 7 days. Over this period there was only a minor decline in the water level.

The upper salt aquifer consists of salt, with some interbeds of clay, which is distinct from the lower aquifer where sand and gravel are of greater importance.

Over the 7 days the brine outflow was continuously monitored for both lithium grade and flow rate.

Assays averaged 1,140 mg/l lithium and showed only minor variation over the length of the test. These test results provide additional information regarding the favourable hydraulic parameters of the Maricunga aquifers. In particular, this test illustrates the potential to achieve high brine flows, at higher than average grades from shallow depths providing significant production advantage in the early years of the project.

As previously noted (LPI announcement 23 February, 2017) flow rates from the Maricunga salar are amongst the highest observed at lithium projects currently in production or at an advanced stage of development.

Salar Permeability

Brine pump tests are important as they provide information on the permeability, lithium grade and flow rates of the different sediment units that host brine within the salar. Further, high flow rates suggest less capex requirement for future well field development, which is attractive for brine project economics. The Maricunga project has an upper aquifer comprising salt, plus a deeper aquifer with sand and gravel units, all of which are favourable for pumping of brine.

Salar Porosity

Porosity is a related characteristic to permeability, and refers to the percentage of pore space between grains of sediment that can host lithium brine. There are several different measures of porosity, but the most important metric for brine deposits is the "drainable porosity". This represents brine that can be extracted from an aquifer during pumping and processed for lithium production. The drainable porosity value is lower for fine grained sediments (clays and silts) and higher for coarser sediments (salt, sands and gravels).

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

"The new Maricunga P2 pump test demonstrated extremely strong brine flow rates from the upper salt unit, in addition to very high lithium grades, both very positive characteristics of the Maricunga project. As we move towards completion of the resource estimate and undertaking engineering studies for the project we look forward to providing information on the project advances."

Maricunga JV Background

The Maricunga JV is 50%-owned by LPI. The project is regarded by LPI management as one of the highest quality undeveloped pre-production lithium brine project globally, with a very high lithium grade and strong flow rates. The company continues to advance towards a new JORC compliant resource estimate by the end of 2Q17, based on results of the drilling & pump testing program, with the project scoping study (Preliminary Economic Assessment) currently underway by consultants Worley Parsons for delivery in late 2017.

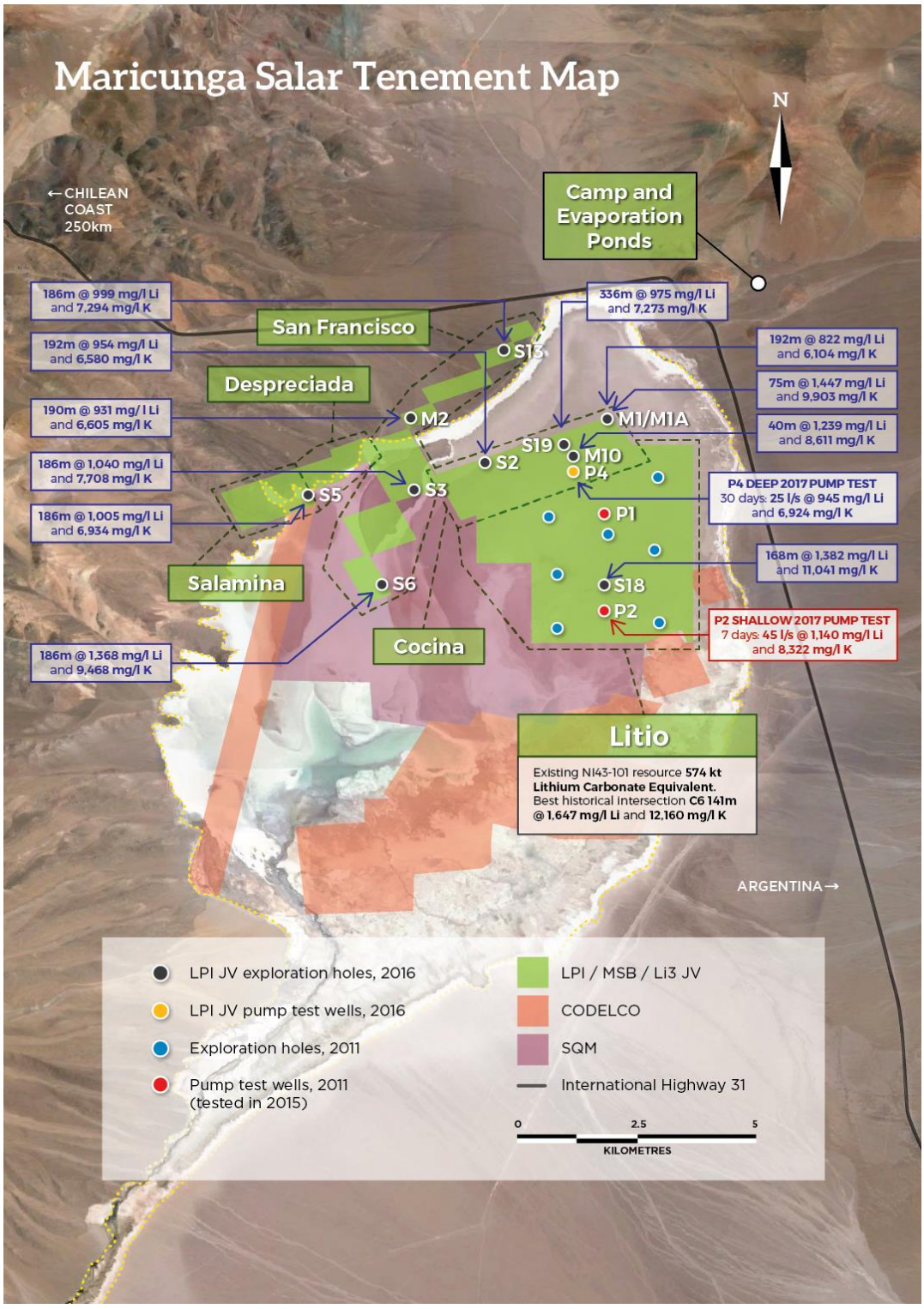

Figure 1: Maricunga lithium brine project tenements - with the location of pump well P2 shown

For further information, please contact:

Martin C Holland – CEO
Lithium Power International
E: info@lithiumpowerinternational.com
Ph: +612 9276 1245
www.lithiumpowerinternational.com
@LithiumPowerLPI

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. Mr Brooker 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.

Mr Brooker is an employee of Hydrominex Geoscience Pty Ltd and an independent consultant to Lithium Power International. It should be noted that Mr Brooker was awarded a number of shares and options at the recent lithium Power International AGM and Mr Brooker hereby declares this ownership. Mr 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 drilling at the Maricunga project.

APPENDIX 1 - JORC Code, 2012 Edition

Table 1 Report: Maricunga Salar

Criteria	Section 1 - Sampling Techniques and Data
Sampling techniques	• Drill cuttings were taken during RC drilling, used to install the test production well P2 in 2011. These are low quality drill samples, but provide sufficient information for lithological logging. • Brine samples were collected at different times during the pump testing undertaken. Water levels were monitored extensively during and following the test period using data loggers and manual measuring equipment. Pumping is undertaken using a submersible pump, powered by a portable generator. • The brine samples were collected in clean plastic bottles 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 well and the time of the sample were noted. Samples were taken at different times throughout the pumping test.
Drilling technique	• RC drilling – This method was used to install the pump well in 2011, with the use of brine for lubrication during drilling, to minimize the development of wall cake in the hole that could reduce the well flow rate. • Drilling allowed for recovery of drill cuttings and basic geological description. During RC drilling, cuttings were collected directly from the outflow from the drill collar. Drill cuttings were collected over two metre intervals in plastic bags that were marked with the well number and depth interval. Sub-samples were collected from the sample bag by the site geologist to fill chip trays (also at two metre intervals).
Drill sample recovery	• RC cuttings were recovered from the well head.
Logging	• RC drilling was carried out for the collection of drill cuttings for geologic logging. Drill cuttings were logged by a geologist.
Sub-sampling techniques and sample preparation	• Brine samples collected during the pumping are homogenized as brine flows from the well and no sub-sampling is undertaken in the field. • The brine sample was collected in one-litre sample bottles, rinsed and filled with brine. Each bottle was taped and marked with the well number and details of the pump test.
Quality of assay data and laboratory tests	• The University of Antofagasta in northern Chile is used as the primary laboratory to conduct the assaying of the brine samples collected as part of the drilling and pump testing program. The drilling and pump testing program included the analysis of blanks, duplicates and standards, as blind control samples in the analysis chain as part of the project. Only duplicate samples were included in the batch of samples from the P2 pump test. 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. The company has completed a round robin program, where standards used in the program have been analysed in four additional laboratories.
Verification of sampling and assaying	• A full QA/QC program for monitoring accuracy, precision and to monitor potential contamination of samples and the analytical process was in operation during the drilling and pump testing program. 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. • The anion-cation balance of analyses is used as a measure of analytical accuracy.
Location of data points	• The P2 well was located with a hand held GPS and the location subsequently confirmed by a surveyor. • The location is in WGS84 Zone 19 south

Data spacing and distribution	• Lithological data was collected throughout the drilling.
Orientation of data in relation to geological structure	• The salar deposits that host lithium-bearing brines consist of subhorizontal beds and lenses of halite, sand, silt and clay. The vertical well is essentially perpendicular to these units, intersecting their true thickness
Sample security	• Samples were transported to the city of Copiapo and re-labelled with sequential sample numbers (without reference to hole number and depth) before transportation by contractors to the University of Antofagasta (primary and duplicate samples) in the city of Antofagasta, Chile. Samples for chemical analysis were sealed in 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.
Review (and Audit)	• No audit of data has been conducted to date.
Section 2 - Mineral Tenement and Land Tenure Status	
Mineral tenement and land tenure status	• 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 Litio 1 through Litio 6. In addition the Cocina 19-27 properties, San Francisco, Salamina and Despreciada properties have been added to the property package since initial drilling reported in 2012. • 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
Exploration by other parties	• SLM Litio drilled 58 vertical holes in the Litio properties on a 500 m x 500 m grid in February, 2007. Each hole was 20 m deep. The drilling covered all of the Litio 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 samples.
Geology	• The sediments within the salar consist of salt (halite), sands, gravels, silts and clays 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 of the wells and all the other drill holes in the program
Drill hole data	• The well was installed with several observation wells surrounding it to monitor changes in water level, in addition to the information collected from the logging of drill cutting. There are three deep and two shallow observation wells for the pump testing.
Data aggregation	• Brine samples taken from the pump well represent composite samples
Relationship between mineralisation widths and intercept lengths	• The lithium-bearing brine deposits extend across the properties and over a thickness of > 200 m, limited by the depth of the drilling • The drill holes are vertical and perpendicular to the horizontal sediment layers in the salar
Diagrams	• Diagrams were provided in Technical report on the Maricunga Lithium Project Region III, Chile NI 43-101 report prepared for Li3 Energy May 23, 2012. See attached location map
Balanced reporting	• This announcement presents representative key results from pump testing during the pump testing operation.
Other substantive exploration data	• 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
Further work	• The company will consider additional drilling on the properties which have been added to the project since the 2012 public report