

#### **ASX RELEASE**

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# FURTHER HIGH-GRADE LITHIUM BRINE INTERSECTIONS AT MARICUNGA PROJECT

- Positive assay results received for the second and third drill holes at the Maricunga lithium brine project in Chile.
- Drill hole M1, within the Cocina tenement, recorded 1,447 mg/l lithium grade (average) over the 75m test interval, with peak assay of 1,946 mg/l lithium. Further drilling will occur at M1 shortly.
- Drill hole M2, within the San Francisco tenement, recorded 931 mg/l lithium grade (average) over the 198m test interval, with a peak assay of 1,700 mg/l lithium. M2 hole finished in mineralised lithium brine at depth.
- Drilling continues across all JV tenements, with further assay results pending.
- The current drilling program confirms the high-grade pedigree of the Maricunga lithium brine project, with a new JORC report due in 1H17.

Lithium Power International Limited (ASX: LPI) ("LPI" or "the Company") is pleased to report further encouraging assay results from the second and third holes drilled in the Maricunga lithium brine project in northern Chile.

### **Exploration Drill Hole M1**

Drill hole M1 is located in the north east of the "old code" Cocina tenements, and to the north of the existing lithium resource\* within the Litio tenements. Brine samples from M1 averaged 1,447 mg/l lithium and 9,903 mg/l potassium over the 75m test interval (out of 77m total depth), with a peak individual assay of 1,946 mg/l lithium and 12,610 mg/l potassium at 15m depth.

These assay results are very positive for the Maricunga project, as they indicate that high brine grades continue north from Litio, and also increase in lithium grade in this section of Cocina. Drilling at M1 ceased early due to technical issues, and a replacement hole will be drilled to 200m shortly, at no additional cost to the company.



#### **Exploration Drill Hole M2**

Drill hole M2 is located in the "old code" San Francisco tenement, which was acquired by LPI as part of the JV formation. Brine samples from M2 averaged 931 mg/l lithium and 6,605 mg/l potassium over its 198m test interval, with the hole finishing in mineralised lithium brine. The maximum assay was 1,700 mg/l lithium and 11,820mg/l potassium at 9m depth.

These assay results are particularly encouraging as M2 was drilled on the western edge of the salar, confirming that elevated lithium grades extend across the northern section from Cocina and Litio (see Figure 1 below). For reference, M2 is located 3.4km west from the previously reported M10 high-grade drill hole (refer ASX announcement on 10<sup>th</sup> November 2016).

As with drill hole M1, brine at M2 was sampled on a 6m spacing over the depth of the hole, with procedures in place to minimise any risk of contamination between samples. The assay results confirm the positive indications from field measurements which showed brine densities of 1.2 g/cc.

# **Exploration Drilling Progress**

Two further drill holes have now been completed to 200m depth within the San Francisco (hole S3) and Salamina (hole S5) tenements. Assay results will be reported as they become available. Pump test well P4 has also been completed, and will now undergo 30-day production flow test.

Hole No	Coordinates (WGS 84 zone 19S)		Elevation m above mean	Total Depth (m)	Azimuth	Dip	Drilling method
	UTM mN	UTM mE	sea level				
M1	7,028,190	494,270	3,760	77	0	-90	Core/Rotary
M2	7,028,210	490,570	3,765	198	0	-90	Core/Rotary
P4	7,027,180	493,440	3,760	180	0	-90	Rotary
M10	7,027,170	493,450	3,760	200	0	-90	Rotary
S3	7,026,300	490,560	3,765	200	0	-90	Rotary
S5	7,026,390	488,540	3,765	200	0	-90	Rotary
S13	7,030,020	492,310	3,765	underway	0	-90	Rotary

Table 1: Details of drill hole locations at the Maricunga project. Drill locations will confirmed by a surveyor at the completion of the drilling program. All coordinates are in WGS84 Zone 19 South.

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

"The high lithium grades reported for drill holes M1 and M2 are very positive, and further reinforce the strong pedigree of the Maricunga project. These assays confirm that the high lithium grades continue north from Litio into Cocina, and also west into San Francisco, validating LPI's purchase of that asset.

With drilling ongoing across San Francisco and Salamina, more assay results are pending, ahead of a JORC lithium resource update due in 1H17."



#### **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 project globally, with a very high grade of both lithium and potassium. The Litio properties in the salar has been subject to significant past exploration by our JV partners, Minera Salar Blanco and Li3 Energy, in order to generate the existing lithium and potassium resource\*. The current drilling program is targeting an expansion of that resource on the existing properties and additional properties acquired since the original resource, with a new JORC compliant resource estimate due in 1H17.

#### For further information, please contact:

Martin C Holland - CEO

Lithium Power International E: info@lithiumpowerinternational.com

Ph: +612 9276 1245

Media enquiries to Sam Burns, Six Degrees Investor Relations, M: +61 400 164 067

www.lithiumpowerinternational.com

@LithiumPowerLPI

This work was completed prior to three years before the joint venture on the project was announced by LPI on 20/07/16. A competent person has not done sufficient work to classify the foreign estimate as mineral resources or ore reserves in accordance with the JORC Code. It is uncertain that following evaluation and/or further exploration work that the foreign estimate will be able to be reported as mineral resources or ore reserves in accordance with the JORC Code. As the Maricunga resource estimate was not undertaken under the JORC code LPI intends to verify this foreign estimate as part of the 4Q16 drilling and assaying program on the Maricunga project. Work will consist of drilling diamond and detailed sampling and analysis with an accompanying QA/QC program. Future reporting will be under the JORC code.

<sup>\*</sup> The reader is referred to the previous announcement by LPI on the 28 July, 2016, which provided details of the Maricunga project resource and information regarding what is considered by ASX as a production target. With regards to the resource LPI confirms that it is not in possession of any new information or data relating to the resource, (which is considered by ASX to be a foreign estimate), that materially impacts on the reliability of the estimate or the mining entity's ability to verify the foreign estimate as mineral resources in accordance with Appendix 5A (JORC Code). LPI confirms that all the material assumptions underpinning the production target provided in that announcement continue to apply. LPI confirms that the supporting information provided in the announcement by LPI on the 28 July, 2016 continues to apply and has not materially changed. LPI Cautions that the foreign estimate was not reported in accordance with the JORC code.

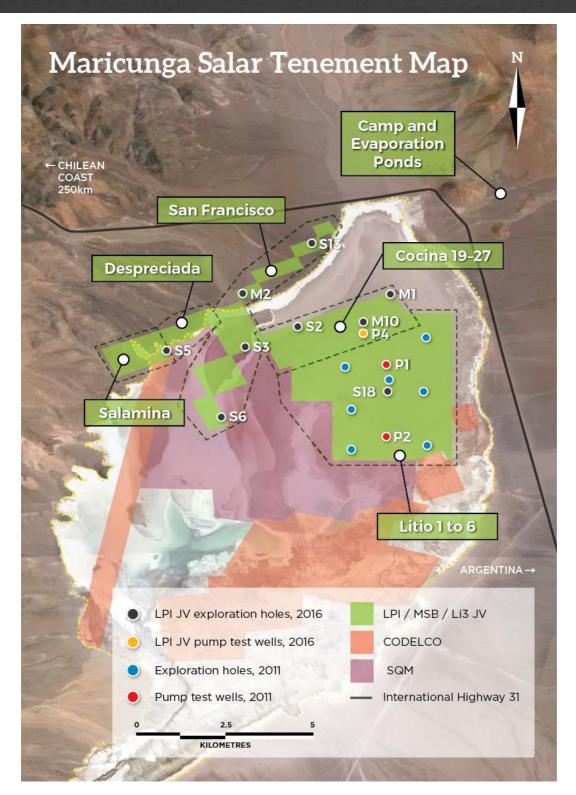


Figure 1: Maricunga lithium brine project tenements - with the location of the drill holes.



Li mg/l 1500	K mg/l 10630	
	10630	
4044	10000	
1914	12410	
1946	12610	
1650	11240	
1130	8320	
863	6740	
1170	7960	
1263	8270	
1583	10950	
1447	9903	
Hole M2		
1700	11820	
1697	11960	
860	6090	
707	4870	
1313	9430	
1480	10880	
	8440	
	9620	
	8490	
	8520	
	8810	
	6370	
	6020	
	7540	
	7250	
930	6590	
890	6240	
810	5700	
837	5700	
733	5050	
777	5230	
780	5360	
750	5070	
740	5940	
643	4270	
700	4490	
660	4520	
707	4710	
700	4810	
707	5110	
707	5020	
	4250	
	3810	
	6605	
	1650 1130 863 1170 1263 1583 1447 Hole M2 1700 1697 860 707 1313 1480 1110 1290 1130 1165 1193 883 830 1040 1017 930 890 810 837 733 777 780 750 740 643 700 660 707 700 707	

Table 2: Summary of sample results from drill holes M1 and M2 at the Maricunga lithium brine project.



# 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 initial 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	<ul> <li>Drill cuttings were taken during rotary drilling. These are low quality drill samples, but provide sufficient information for lithological logging and for geological interpretation</li> <li>Brine samples were collected at 6 m intervals during drilling. This involved purging brine from the drill hole and then taking a sample corresponding to the interval between the casing and the bottom of the hole.</li> <li>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.</li> </ul>
Drilling technique	<ul> <li>Rotary drilling – This method was used with brine for lubrication during drilling, to minimize the development of wall cake in the holes that could reduce the bore flow rate.</li> <li>Rotary drilling allowed for recovery of drill cuttings and basic geological description. During rotary drilling, cuttings were collected directly from the outflow from the drill collar. Drill cuttings were collected over one 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 one metre interval).</li> </ul>
Drill sample recovery	<ul> <li>Rotary drill cuttings were recovered from the well head in porous cloth bags to retain drilling fines, but to allow brine to drain from the sample bags (brine is collected by purging the hole every 6 m and not during the drilling directly, as this uses recirculated brine for drilling fluid.</li> </ul>
Logging	<ul> <li>Rotary drilling was carried out for the collection of drill cuttings for geologic logging. Drill cuttings were logged by a geologist.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>Brine samples collected following the purging of the holes are homogenized as brine is extracted from the well using a bailer device. No sub-sampling is undertaken in the field.</li> <li>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.</li> </ul>



Quality of assay data and laboratory tests	<ul> <li>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 program. They also analyzed blanks, duplicates 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.</li> <li>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.</li> </ul>
Verification of sampling and assaying	<ul> <li>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.</li> <li>Duplicate samples in the analysis chain were submitted to the University of Antofagasta as unique samples (blind duplicates) during the drilling process.</li> <li>Stable blank samples (distilled water) were inserted to measure cross contamination during the drilling process.</li> <li>The anion-cation balance was used as a measure of analytical accuracy and was always considerably less than +/-5%, which is considered to be an acceptable balance.</li> </ul>
Location of data	The well was located with a hand held GPS.
points	• The location is in UTM Zone 19, with the Provisional South American 1956 datum.
Data spacing and distribution	Lithological data was collected throughout the drilling.
Orientation of data in relation to geological structure	<ul> <li>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.</li> </ul>
Sample security	<ul> <li>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.</li> <li>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.</li> </ul>
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	<ul> <li>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.</li> <li>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 since the resource estimate on the Litio properties.</li> <li>The properties are located in the northern section of the Salar de Maricunga.</li> <li>The tenements are believed to be in good standing, with payments made to relevant government departments.</li> </ul>	
Exploration by other parties	<ul> <li>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.</li> <li>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.</li> <li>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.</li> <li>Prior to this the salar was evaluated by Chilean state organization Corfu, using hand dug pit samples.</li> </ul>	
Geology	The sediments within the salar consist of halite, sands, gravels, silts and clays deposits that	

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	have accumulated in the salar from terrestrial sedimentation and evaporation of brines within the salar.
	<ul> <li>Brines within the salar are formed by solar concentration, with brines hosted within the different sedimentary units.</li> </ul>
	<ul> <li>Geology was recorded during drilling to of all the wells and piezometers.</li> </ul>
Drill hole data	• Lithological data was collected from the holes as they were drilled as drill cuttings, with the field parameters (electrical conductivity, density, pH) measured on the brine samples taken on 6 m intervals.
	<ul> <li>Brine samples were collected at 6 m intervals and sent for analysis to the university of Antofagasta, together with quality control/quality assurance samples.</li> </ul>
Data aggregation	• Samples taken from the holes every 6 m represent composite samples over this interval.
Relationship between	• The lithium-bearing brine deposits extend across the properties and over a thickness of >
mineralisation widths	150 m, limited by the depth of the drilling.
and intercept lengths	• The drill holes are vertical and perpendicular to the horizontal sediment layers in the salar.
Diagrams	<ul> <li>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.</li> </ul>
Balanced reporting	<ul> <li>This announcement presents representative key results from drilling at the Maricunga salar.</li> <li>Further information will be provided following additional drilling and field activities.</li> </ul>
Other substantive	Refer to the information provided in Technical report on the Maricunga Lithium Project
exploration data	Region III, Chile. NI 43-101 report prepared for Li3 Energy May 23, 2012.
Further work	<ul> <li>The company will consider additional drilling on the properties which have been added to the project since the 2012 public report.</li> </ul>