

**ASX RELEASE**

LPI.ASX

21 December 2016

**THICK HIGH-GRADE LITHIUM INTERSECTION  
AT WESTERN MARICUNGA TENEMENT**

- Further high grade assay results received from the fourth drill hole at the Maricunga lithium brine project in Chile.
- Drill hole S5, drilled within the Salamina tenement to 200m, recorded 1,005 mg/l lithium grade (average) over the 186m test interval, with peak assay of 1,270 mg/l lithium.
- S5 hole finished in mineralised lithium brine at depth, similar to all other drill holes at the Maricunga project to date.
- Drilling will continue across the JV tenements until the end of January 2017, with further assay results pending.
- The assay result for S5 confirms the continuation of high lithium grades into the JV's western tenements. A new JORC report is due in 1H17.

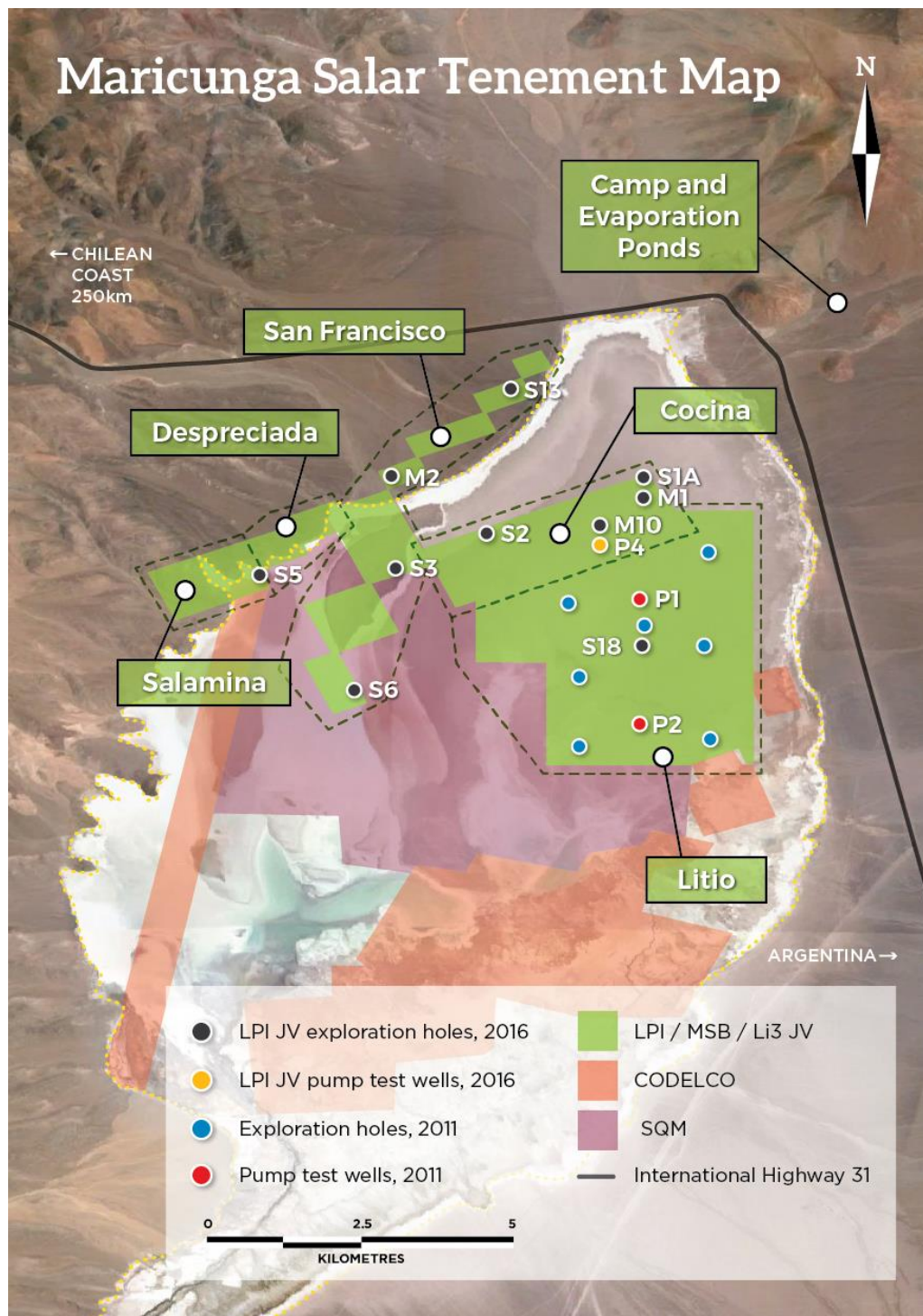
Lithium Power International Limited (ASX: LPI) ("LPI" or "the Company") is pleased to advise the assay results from the fourth exploration hole drilled in the Maricunga lithium brine project in northern Chile.

**Drill hole S5**

Drill hole S5 is located within the "old code" Salamina tenement, which was acquired by LPI as part of the recent JV formation. The hole was completed to 200m by rotary drilling, and sampled on a 6m vertical spacing over its depth. S5 is located approximately 5km west from the existing lithium resource\* within the Litio tenements (see Figure 1).

Brine samples from S5 averaged 1,005 mg/l lithium and 6,934 mg/l potassium over the 186m test interval (from 14 to 200m). The maximum individual assays were 1,270 mg/l lithium (at 80m) and 8,980 mg/l potassium (at 14m). These results are comparable to the high lithium grades reported for hole M2 (931 mg/l lithium average over 198m, approx. 2.5km away), and for hole M1 (1,447 mg/l lithium average over 75m, approx. 6km away), which were announced on 7<sup>th</sup> December 2016.

As with all other drill holes at Maricunga to date, S5 finished in mineralised brine at depth. The hole was completed within a favourable sand and gravel sequence. Given its location on the western side of the project area, the assay results for S5 confirm that elevated lithium grades extend from the Litio tenement in the east, to Cocina and San Francisco in the north/north-west, and to Salamina in the west.



**Figure 1:** Maricunga project properties - with the location of drill holes.

## Exploration Drilling Progress

Drilling is continuing at Maricunga, with two rigs now onsite (one rotary and one sonic, at the San Francisco and Cocina tenements respectively). Assays from completed rotary holes at sites S3 and S13 within San Francisco are pending, and will be reported as they become available. The sonic drill rig (see Figure 2) will obtain high quality core samples from Cocina to further assist the new JORC lithium resource estimate. The JV's drilling program is expected to finish by the end of January 2017.

Hole No	Coordinates (WGS 84 zone 19S)		Elevation m above mean sea level	Total Depth (m)	Azimuth	Dip	Drilling method
	UTM mN	UTM mE					
S5	7,026,390	488,540	3,765	200	0	-90	Rotary
S1A	7,028,180	494,260	3,760	underway	0	-90	Sonic
M1	7,028,190	494,270	3,760	77	0	-90	Rotary
M2	7,028,210	490,570	3,765	198	0	-90	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
S13	7,030,020	492,310	3,765	200	0	-90	Rotary

**Table 1:** Details of drill hole locations at the Maricunga project. Drill locations will be 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 excellent assay results from hole S5 within Salamina confirms the extension of high-grade lithium brine to the south and west of previous drill holes. This is tremendous news for the company, and further validates LPI's purchase of these tenements. The Company looks forward to completing the drilling program into January, and then updating the market with a new JORC report on our lithium resource 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.





**Figure 2:** Sonic drill rig onsite at Maricunga lithium brine project.

**For further information, please contact:**

**Martin C Holland – CEO**

Lithium Power International

E: [info@lithiumpowerinternational.com](mailto:info@lithiumpowerinternational.com)

Ph: +612 9276 1245

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

[www.lithiumpowerinternational.com](http://www.lithiumpowerinternational.com)

@LithiumPowerLPI

\* 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.

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.

#### **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. 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 initial drilling at the Maricunga project.

Hole S5		
Depth m	Li mg/l	K mg/l
14	1260	8980
20	513	3580
26	883	6650
32	873	6770
38	840	6110
44	860	6210
50	1010	7230
56	1026	7180
62	1010	7070
68	1067	7330
74	1183	8470
80	1270	8490
86	1217	8230
92	1210	8470
98	1250	8570
104	1077	7220
110	1100	7530
116	883	5930
122	1103	7490
128	1060	6950
134	1020	6730
140	1030	7100
146	1000	6610
150	940	6080
158	956	6220
164	950	6080
170	1030	6840
176	806	5580
182	1203	8620
188	793	5430
194	783	5490
200	956	6650
<b>14-200m</b>	<b>1005</b>	<b>6934</b>

**Table 2:** Summary of sample results from drill hole S5 in the west of the Maricunga lithium brine 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"> <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 rods 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 hole and the time of the sample were noted.</li> </ul>
<i>Drilling technique</i>	<ul style="list-style-type: none"> <li>Rotary drilling – This method was used with natural formation brine for lubrication during drilling, to minimize the development of wall cake in the holes that could reduce the inflow of brine to the hole and affect brine quality.</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 cloth bags that were marked with the drill hole number and depth interval. Sub-samples were collected from the cloth bag by the site geologist to fill chip trays (also at a one metre interval).</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>Rotary drill cuttings were recovered from the hole 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>
<i>Logging</i>	<ul style="list-style-type: none"> <li>Rotary drilling was carried out for the collection of drill cuttings for geologic logging and for brine sampling. Drill cuttings were logged by a geologist.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>Brine samples collected following the purging of the holes are homogenized as brine is extracted from the hole 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 drill hole number and details of the sample. Prior to sending samples to the laboratory they were assigned unique sequential numbers with no relationship to the hole number.</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <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>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <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) following 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>
<i>Location of data</i>	<ul style="list-style-type: none"> <li>The hole was located with a hand held GPS.</li> </ul>

<i>points</i>	<ul style="list-style-type: none"> <li>The location is in WGS84 Zone 19 south.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>Lithological data was collected throughout the drilling. Drill holes have a spacing of approximately 2 km.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>The salar deposits that host lithium-bearing brines consist of subhorizontal beds and lenses of halite, sand, gravel and clay. The vertical holes are essentially perpendicular to these units, intersecting their true thickness.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>Samples were transported to the University of Antofagasta (primary, duplicate and QA/QC 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>
<i>Review (and Audit)</i>	<ul style="list-style-type: none"> <li>No audit of data has been conducted to date.</li> </ul>

<b>Section 2 - Mineral Tenement and Land Tenure Status</b>	
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <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/properties are believed to be in good standing, with payments made to relevant government departments.</li> </ul>
<i>Exploration by other parties</i>	<ul style="list-style-type: none"> <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>
<i>Geology</i>	<ul style="list-style-type: none"> <li>The sediments within the salar consist of halite, sand, gravel and clay which have accumulated in the salar from terrestrial sedimentation and evaporation of brines within the salar.</li> <li>Brines within the salar are formed by solar concentration, with brines hosted within the different sedimentary units.</li> <li>Geology was recorded during drilling to of all the holes.</li> </ul>
<i>Drill hole data</i>	<ul style="list-style-type: none"> <li>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.</li> <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>
<i>Data aggregation</i>	<ul style="list-style-type: none"> <li>Samples taken from the holes every 6 m represent composite samples over the sample interval</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>The lithium-bearing brine deposits extend across the properties and over a thickness of &gt; 150 to 200m (depending on the depth of drilling), limited by the depth of the drilling.</li> <li>The drill holes are vertical and perpendicular to the horizontal sediment layers in the salar.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <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>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>This announcement presents representative key results from drilling at the Maricunga salar. Further information will be provided following additional drilling and field activities.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>The company will consider additional drilling on the properties which have been added to the project since the 2012 public report.</li> </ul>