

## ASX RELEASE

LPI.ASX

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# MARICUNGA LITHIUM BRINE PROJECT ACHIEVES 99.9% LITHIUM CARBONATE PURITY UPDATED RESULTS FROM ANNOUNCEMENT MADE 4 APRIL 2018

## 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.

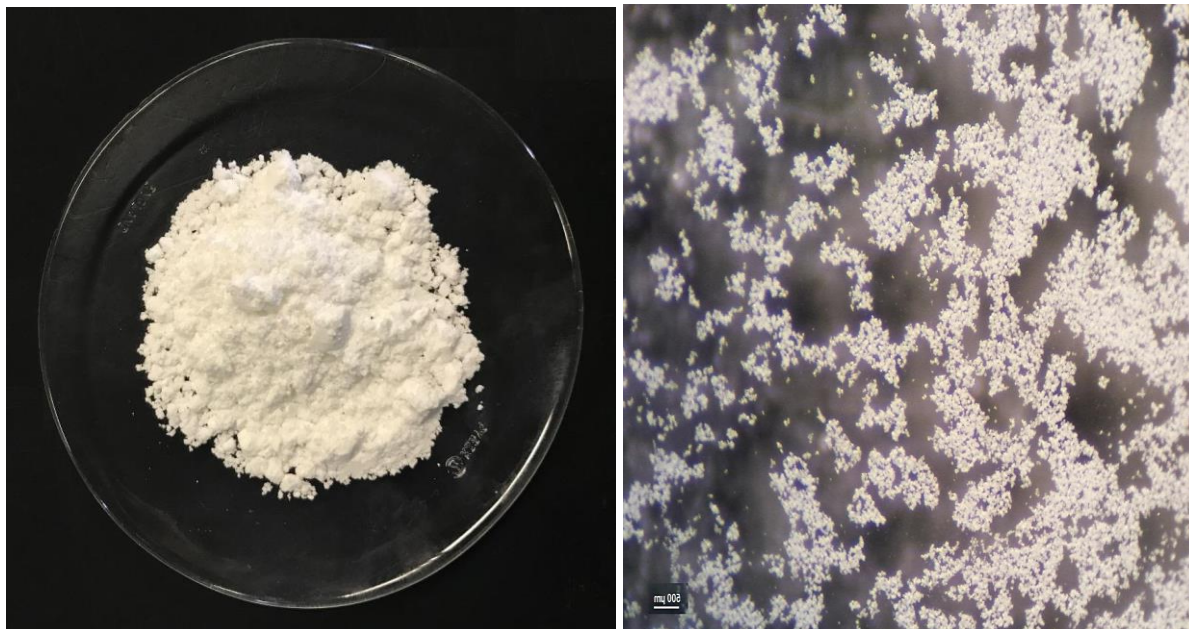
Lithium Power International Limited (LPI or the Company) is pleased to advise that in addition to the previous announcement of 19 February 2018, where initial lithium carbonate sample with purity of 99.4% had been achieved, the globally recognised chemical company Veolia Water Technologies has produced lithium carbonate samples of 99.9% purity from concentrated brine produced from the Salar de Maricunga. This is an update from the announcement made on 4 April 2018, providing further clarification of the results achieved.

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 contaminants 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 be observed in the table below.

Analytical Parameter	Units	Target	Final Product
<b>Veolia Sample No.</b>	•	•	<b>244-27-01</b>
Li <sub>2</sub> CO <sub>3</sub>	%	99.2	99.9 <sup>1</sup>
Sodium	ppm	600	385
Iron	ppm	10	<1
Calcium	ppm	100	78
Sulfate (SO <sub>4</sub> )	ppm	300	<100
Potassium	ppm	50	<15
Chloride	ppm	100	<100
Magnesium	ppm	100	51
Chromium	ppm	10	<1
Nickel	ppm	10	<1
Copper	ppm	10	<1
Lead	ppm	10	<1
Aluminum	ppm	10	<10
Zinc	ppm	10	<1
Boron	ppm	10	<5

<sup>1</sup> Results provided by Veolia Water Technologies, these are on a Dry Basis, with exclusion of Loss of Ignition



**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.”

**For further information, please contact:**

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### **Competent Person's Statement – MARICUNGA LITHIUM BRINE PROJECT**

The information contained in this ASX release relating to the chemical process has been approved by Mr Peter Ehren. Mr Ehren is a Process Engineer and Member of the Australian Institute of Mining and Metallurgy (AusIMM). Mr Ehren has sufficient experience that is relevant to the style of mineralisation and type of mineral 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 Ehren is an employee of Ehren Gonzalez Limitada and an independent consultant to Lithium Power International and Minera Salar Blanco. Mr Ehren 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 development of the lithium extraction process from brine at the Maricunga project.

Additional details are provided in the JORC Table 1 provided below. The reader is further referred to information provided by the company in the updated resource on the 12<sup>th</sup> July 2017 and on the project Preliminary Economic Assessment (PEA) on the 5<sup>th</sup> January 2018.

APPENDIX 1 - JORC Code, 2012 Edition - Table 1 Report: Maricunga Salar

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<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>Drill core was recovered in lexan polycarbonate liners and plastic bags alternating every 1.5 m length core run during the sonic drilling.</li> <li>Brine samples were collected at 6 m intervals during drilling (3 m in 2011 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. Brine samples below 204 m in hole S19 were taken every 12 m. Fluorescein tracer dye was used to distinguish drilling fluid from natural formation brine.</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 marked with the sample number and details of the hole.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Rotary drilling (using HWT size casing) – 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 HWT casing. Drill cuttings were collected over two 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.</li> <li>Sonic drilling (M1A, S2, S18 and S20) produced cores with close to 100% core recovery. This technique uses sonic vibration to penetrate the salt lake sediments and produces cores without the rotation and drilling fluid cooling of the bit required for rotary drilling – which can result in the washing away of more friable unconsolidated sediments, such as sands.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse</li> </ul>	<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). Fluorescein tracer dye was used to distinguish drilling fluid from natural formation brine.</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
	<i>material.</i>	<ul style="list-style-type: none"> <li>Sonic drill core was recovered in alternating 1.5m length lexan tubes and 1.5 m length tubular plastic bags.</li> </ul>
<b>Geologic Logging</b>	<ul style="list-style-type: none"> <li><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li><i>Whether logging is qualitative or quantitative in nature. Core (or corestem, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>Rotary (using HWT size casing) drilling was carried out from the collection of drill cuttings for geologic logging and for brine sampling. Drill cuttings were logged by a geologist.</li> <li>Sonic holes are logged by a geologist who supervised cutting of samples for porosity sampling then splits the plastic tube and geologically logs the core.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>Core samples were systematically sub-sampled for laboratory analysis, cutting the lower 15 cm of core from the polycarbonate core sample tube and capping the cut section and taping the lids tightly to the core. This sub-sample was then sent to the porosity laboratory for testing. Sampling was systematic, to minimize any sampling bias.</li> <li>Brine samples collected following the purging of the holes during drilling are homogenized over the sampling interval, as brine is extracted from the hole using a bailer device. No sub-sampling is undertaken in the field. Fluorescein tracer dye was used to distinguish drilling fluid from natural formation brine.</li> <li>The brine sample was collected in one-litre sample bottles, rinsed and filled with brine. Each bottle was 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 drill hole number.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and the derivation, etc.</i></li> <li><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<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> <li>Duplicate and standard analyses are considered to be of acceptable quality.</li> <li>Samples for porosity test work are cut from the base of the plastic drill tubes every 3 m.</li> <li>Down hole geophysical tools were provided by a geophysical contractor and these are believed to be calibrated periodically to produce consistent results.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data</i></li> </ul>	<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</li> </ul>

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
	<p><i>storage (physical and electronic) protocols.</i></p> <ul style="list-style-type: none"> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<p>independent (or umpire) laboratory.</p> <ul style="list-style-type: none"> <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 analytical 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>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The hole was located with a hand held GPS in the field and subsequently located by a surveyor on completion of the drilling program.</li> <li>• The location is in WGS84 Zone 19 south.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Lithological data was collected throughout the drilling. Drill holes have a spacing of approximately 2 km.</li> <li>• Brine samples have a 6 m vertical separation and drill cutting lithological samples are on 2 m intervals (in 2011 drilling samples were taken every 3 m). Porosity samples were taken every 3 m in sonic core holes.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The salar deposits that host lithium-bearing brines consist of sub-horizontal beds and lenses of halite, sand, gravel and clay. The vertical holes are essentially perpendicular to these units, intersecting their true thickness.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<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>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No audits or reviews have been conducted at this point in time.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<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 properties known as <i>Litio 1 -6</i>. In addition, the <i>Cocina 19-27</i> properties, <i>San Francisco</i>, <i>Salamina</i> and <i>Despreciada</i> properties (1,125 ha) were purchased between 2013 2013 and 2015.</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>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>SLM Litio drilled 58 vertical holes in the <i>Litio</i> properties on a 500 m x 500 m grid in February 2007. Each hole was 20 m deep. The drilling covered all of the <i>Litio 1 – 6</i> 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 Corfo, using hand dug pit samples.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<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. These units are interpreted to be essentially flat lying, with unconfined aquifer conditions close to surface and semi-confined to confined conditions at depth.</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 of all the holes.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Lithological data was collected from the holes as they were drilled as drill cuttings, and at the geological logging facility for sonic cores, 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>



Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
	<ul style="list-style-type: none"> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole collars, surveyed elevations, dip and azimuth, hole length and aquifer intersections are provided in tables within the text.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Brine samples taken from the holes every 6 m represent brine over the sample interval.</li> <li>No outlier restrictions were applied to the concentrations, as distributions of the different elements do not show anomalously high values.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>The lithium-bearing brine deposits extend across the properties and over a thickness of &gt; 150 to 200 m (depending on the depth of drilling), limited by the depth of the drilling. Mineralisation in brine is interpreted to continue below the depth of the resource.</li> <li>The drill holes are vertical and essentially perpendicular to the horizontal sediment layers in the salar (providing true thicknesses of mineralisation)</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Diagrams are provided in the text of this announcement and 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>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>This announcement presents representative data from drilling at the Maricunga salar, such as lithological descriptions, brine concentrations and chemistry data, and information on the thickness of mineralisation.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<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 the Maricunga Joint Venture August 25, 2017 for all geophysical and geochemical data.</li> <li>Information on pumping tests has been provided by the Company following the completion of pumping tests at holes P4 and P2.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>The Company will consider additional drilling. The brine body is open at depth and there is an exploration target defined in this area which could potentially be incorporated into the resource subject to positive drilling results.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Considerations for Mineral Brine Projects
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>Data was transferred directly from laboratory spreadsheets to the database.</li> <li>Data was checked for transcription errors once in the database, to ensure coordinates, assay values and lithological codes were correct.</li> <li>Data was plotted to check the spatial location and relationship to adjoining sample points.</li> <li>Duplicates and Standards have been used in the assay process.</li> <li>Brine assays and porosity test work have been analysed and compared with other publicly available information for reasonableness.</li> <li>Comparisons of original and current datasets were made to ensure no lack of integrity.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The JORC Competent Person visited the site multiple times during the drilling and sampling program.</li> <li>Some improvements to procedures were made during visits by the Competent Person.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>There is a high level of confidence in the geological model for the Project. There are relatively distinct geological units in essentially flat lying, relatively uniform, clastic sediments and halite.</li> <li>Any alternative interpretations are restricted to smaller scale variations in sedimentology, related to changes in grain size and fine material in units.</li> <li>Data used in the interpretation includes sonic, rotary and reverse circulation drilling.</li> <li>Drilling depths and geology has been used to separate the deposit into different geological units.</li> <li>Sedimentary processes affect the continuity of geology, whereas the concentration of lithium and potassium and other elements in the brine is related to water inflows, evaporation and brine evolution in the salt lake.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul style="list-style-type: none"> <li>The lateral extent of the resource has been defined by the boundary of the Company's properties. The brine mineralisation consequently covers 25.64 km<sup>2</sup>.</li> <li>The top of the model coincides with the topography obtained from the Shuttle Radar Topography Mission (SRTM). The original elevations were locally adjusted for each borehole collar with the most accurate coordinates available. The base of the resource is limited to a 200 m depth. The basement rocks underlying the salt lake sediments have not yet been intersected in drilling.</li> <li>The resource is defined to a depth of 200 m below surface, with the exploration target immediately underlying the resource.</li> </ul>

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<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>• <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The resource estimation for the Project was developed using the Stanford Geostatistical Modeling Software (SGeMS) and the geological model as a reliable representation of the local lithology. Generation of histograms, probability plots and box plots were conducted for the Exploratory Data Analysis (EDA) for lithium and potassium. Regarding the interpolation parameters, it should be noted that the search radii are flattened ellipsoids with the shortest distance in the Z axis (related to the variogram distance). No outlier restrictions were applied, as distributions of the different elements do not show anomalously high values.</li> <li>• No grade cutting, or capping was applied to the model. The very high lithium concentration values obtained near surface during the drilling and sampling are considered to be representative of the upper halite unit locally.</li> <li>• Results from the primary porosity laboratory GSA were compared with those from the check laboratory Core Laboratories, and historical porosity results when assigning porosity results and historical results were normalized within the complete data set based on the results from the total data set.</li> <li>• Potassium is the most economically significant element dissolved in the brine after lithium. Potassium can be produced using the evaporative process as for lithium. However, the final production of potassium requires independent processing from the lithium brine. The potassium recovery process is well understood and could be implemented in the project. Potassium has been estimated as a by-product of the lithium extraction process. As a resource this makes no allowance for losses following brine extraction, in evaporation ponds and the processing plant.</li> <li>• Interpolation of Lithium and Potassium for each block in mg/l used ordinary kriging. The presence of brine is not necessary controlled by the lithologies and lithium and potassium concentrations are independent of lithology. Geological units had hard boundaries for estimation of porosity.</li> <li>• Estimation of resources used the average drainable porosity value for each geological unit, based on the drill hole data.</li> <li>• The block size (50 x 50 x 1m) has been chosen for being representative of the thinner units inside the geological model.</li> <li>• No assumptions were made regarding selective mining units and selective mining can be difficult to apply in brine deposits, where the brine flows in response to pumping.</li> <li>• No assumptions were made about correlation between variables. Lithium and potassium were estimated independently.</li> <li>• The geological interpretation was used to define each geological unit and the property limit was used to enclose the reported resources. The lithium and</li> </ul>

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		<p>potassium concentration is not necessary related to a particular lithology.</p> <ul style="list-style-type: none"> <li>The Inferred resource was extrapolated in this area on the basis that it is within the salt lake and occupies the same geological unit as Measured resource in the adjacent Cocina property.</li> <li>Validation was performed using a series of checks including comparison of univariate statistics for global estimation bias, visual inspection against samples on plans and sections, swath plots in the north, south and vertical directions to detect any spatial bias.</li> <li>An independent nearest-neighbor (NN) model was generated for each parameter in order to verify that the estimates honor the borehole data. The NN model also provides a de-clustered distribution of borehole data that can be used for validation.</li> <li>Visual validation shows a good agreement between the samples and the OK estimates. A global statistics comparison shows relative differences between the ordinary kriging results and the nearest-neighbor is below 0.3% for measured resources and below 3% for indicated resources which is considered acceptable.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Moisture content of the cores was not Measured (porosity and density measurements were made), but as brine will be extracted by pumping not mining this is not relevant for the resource estimation.</li> <li>Tonnages are estimated as metallic lithium and potassium dissolved in brine.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>No cut-off grade has been applied as the highest grades are present within the upper halite unit and are considered to be real and consistent and a relatively small volume of the total resource.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>The resource has been quoted in terms of brine volume, concentration of dissolved elements, contained lithium and potassium and their products lithium carbonate and potassium chloride.</li> <li>No mining or recovery factors have been applied (although the use of the specific yield = drainable porosity is used to reflect the reasonable prospects for economic extraction with the proposed mining methodology).</li> <li>Dilution of brine concentrations may occur over time and typically there are lithium and potassium losses in both the ponds and processing plant in brine mining operations. However, potential dilution will be estimated in the groundwater model simulating brine extraction.</li> <li>The mining method will recover brine from the salt lake via a network of wells, that pump to evaporation ponds, from where the brine is concentrated and then pumped into the processing plant.</li> </ul>

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		<ul style="list-style-type: none"> <li>Detailed hydrologic studies of the lake are close to completion (groundwater modelling) to define the extractable resources and potential extraction rates.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>Assessment of the preferred brine processing route has advanced considerably since 2017, using major global chemical engineering companies Veolia and GEA to conduct test work under the supervision of the project process engineer. This has confirmed the proposed lithium extraction flow sheet.</li> <li>Lithium and potassium would be produced via conventional brine processing techniques and evaporation ponds to concentrate the brine prior to processing.</li> <li>Process test-work (which can be considered equivalent to metallurgical test-work) has been carried out on the brine following initial test-work initiated under Li3 Energy in 2012.</li> <li>The 2017/2018 process test-work by major chemical companies Veolia and GEA has confirmed that high purity lithium carbonate can be produced from the Maricunga brine, which is an important milestone for the company on the road to full scale commercial production.</li> <li>This quality of lithium carbonate meets the requirements for battery grade product.</li> <li>The company continues to optimise the production process to minimize the cost of chemical reagents to obtain the best possible operating cost in the project DFS.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>Impacts of a lithium and potash operation at the Maricunga project would include; surface disturbance from the creation of extraction/processing facilities and associated infrastructure, accumulation of various salt tailings impoundments and extraction from brine and fresh water aquifers regionally.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li><i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> <li><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>Density measurements were taken as part of the drill core assessment. This included determining dry density and particle density as well as field measurements of brine density. Note that no mining is to be carried out as brine is to be extracted by pumping and consequently sediments are not mined but the lithium and potassium is extracted by pumping.</li> <li>However, no bulk density was applied to the estimates because resources are defined by volume, rather than by tonnage.</li> <li>The salt unit can contain fractures and possibly vugs which host brine and add to the drainable porosity.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li><i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in</i></li> </ul>	<ul style="list-style-type: none"> <li>The resource has been classified into the three possible resource categories based on confidence in the data collected and the estimation.</li> <li>The Measured resource reflects the predominance of sonic drilling, with porosity samples from drill cores and well constrained vertical brine sampling in the holes.</li> </ul>

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	<p><i>continuity of geology and metal values, quality, quantity and distribution of the data).</i></p> <ul style="list-style-type: none"> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Indicated resource reflects the lower confidence in the brine sampling in the rotary drilling and lower quality geological control from the drill cuttings.</li> <li>• The Inferred resource underlying the Measured resource in the <i>Litio</i> properties reflects the limited drilling to this depth together with the likely geological continuity suggested by drilling on the adjacent <i>Cocina</i> property and the geophysics through the property.</li> <li>• In the view of the Competent Person the resource classification is believed to adequately reflect the available data and is consistent with the suggestions of Houston et. al., 2011 and the CIM Best Practice Guidelines.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• This Mineral Resource was estimated by independent consultancy Flosolutions, who are contracted by the Maricunga JV for hydrological services. This work has been reviewed by the Competent Person.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• An independent estimate of the resource was completed using a nearest-neighbour estimate and the comparison of the results with the ordinary kriging estimate is below 0.3% for measured resources and below 3% for indicated resources which is considered to be acceptable.</li> <li>• Univariate statistics for global estimation bias, visual inspection against samples on plans and sections, swath plots in the north, south and vertical directions to detect any spatial bias shows a good agreement between the samples and the ordinary kriging estimates. .</li> </ul>

#### References

Houston, J., Butcher, A., Ehren, P., Evans, K., and Godfrey, L. The Evaluation of Brine Prospects and the Requirement for Modifications to Filing Standards. *Economic Geology*. V 106, p 1225-1239.

CIM Best Practice Guidelines for Resource and Reserve Estimation for Lithium Brines.