

ASX RELEASE

28 July 2017

Activity Report for the Quarter ended June 2017

Lithium Power International Limited (ASX: LPI) ('LPI' or 'the Company') is pleased to submit its quarterly Activity Report for the period ended 30 June 2017.

HIGHLIGHTS

- Major resource upgrade at the Maricunga lithium brine project in Chile with a 3.7 fold increase of high grade Measured, Indicated and Inferred resource to 2.15 million tonnes (Mt) of lithium carbonate equivalent (LCE) and 5.7 Mt potassium chloride (KCl) to a depth of 200m in accordance with JORC Code (2012) – an outstanding result for the company.
- High quality resource, with one of the highest average resource concentrations globally of 1,160 mg/l lithium and 8,500 mg/l potassium, with very favourable porosity and permeability – which are essential for resource extraction.
- Process test work advancing, with preliminary engineering and design underway and a pre-feasibility study targeted for release in 4Q CY17.
- Ratification of issue of shares and options at the Annual General Meeting.

CHILE

MARICUNGA – CHILE JOINT VENTURE

The Maricunga project (MJV) is located in northern Chile, home to the largest and highest-grade lithium brine mines in the 'Lithium Triangle' (Figure 1) and source of the world's lowest cost lithium production. Maricunga is regarded as one of the highest quality pre-production lithium brine projects globally. The Litio 1–6 properties in the Maricunga salar (salt lake) were subject to significant past exploration by our Joint Venture partners, who generated the historical 2012 Canadian NI43–101 resource estimate.

The 2016–17 drilling program was undertaken to expand the resource on the existing Litio properties and those acquired since the 2012 resource estimate (Cocina, San Francisco, Despreciada and Salamina). This provides a new expanded mineral resource estimate for the combined property package in Table 1 below, reported in accordance with the JORC Code (2012) and estimated by a Competent Person as defined by the JORC Code. The 2016–17 program expanded the resource 3.7 fold through discovery of higher porosity sediments in the more recently acquired properties and below 150 m depth in the Litio 1–6 properties.

The Measured and Indicated categories comprise 80% of the updated resource, with the Inferred category the remaining 20% of the total 2.15 Mt LCE resource defined to only 200m. One deep hole (S19) was drilled to 360 m. This hole encountered a continuation to depth of the aquifers hosting lithium resources above 200 m.

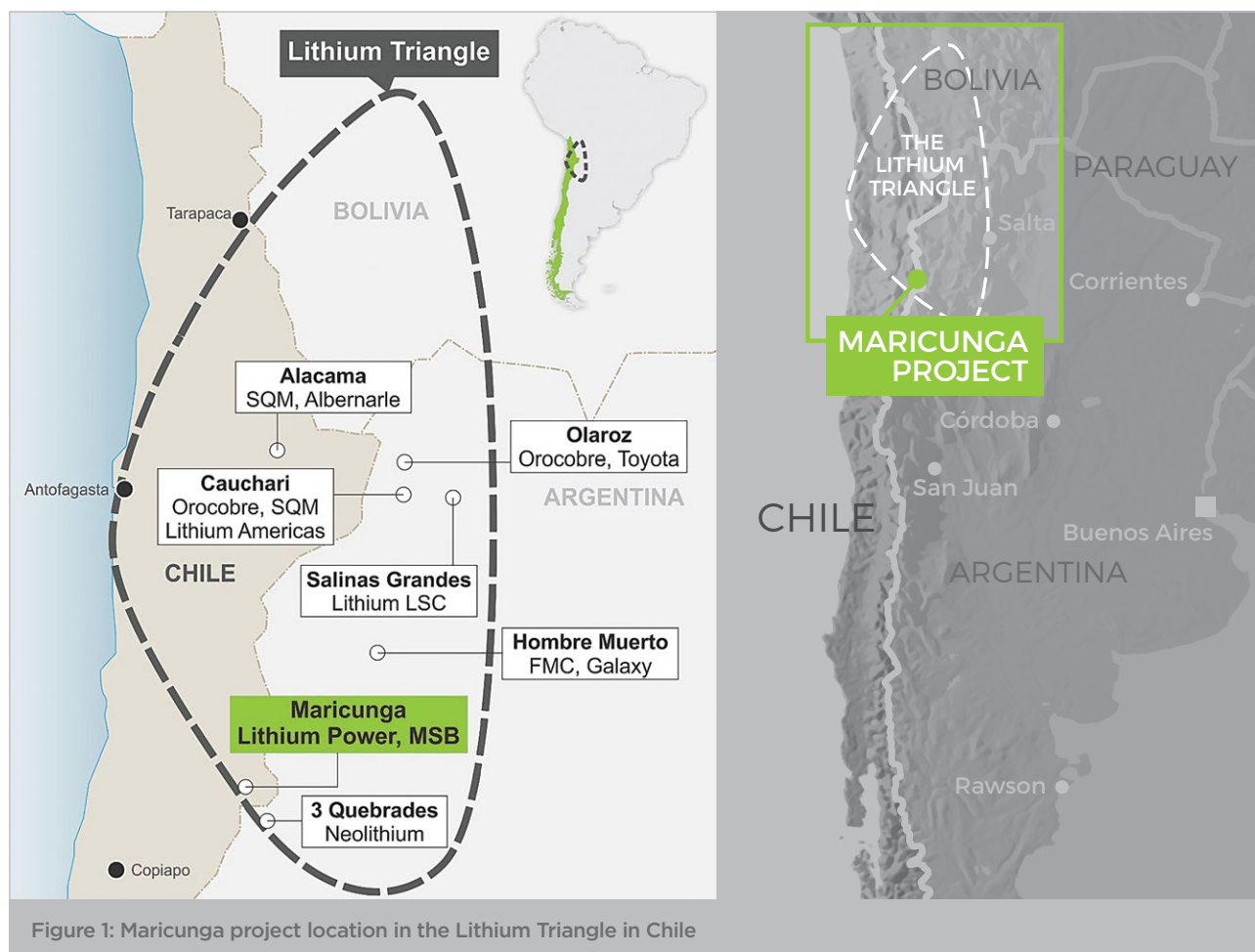


TABLE 1: JULY 2017 MARICUNGA JV MINERAL RESOURCE ESTIMATE

	Measured		Indicated		Inferred		Measured+Indicated		Total Resource	
Area km ²	18.88		6.76		14.38 [^]		25.64		25.64	
Aquifer volume km ³	3.06		1.35		0.72		4.41		5.13	
Brine volume km ³	0.15		0.14		0.06		0.30		0.36	
Mean drainable porosity % (Specific yield)	5.02		10.65		8.99		6.75		7.06	
ELEMENT	Li	K	Li	K	Li	K	Li	K	Li	K
Mean grade g/m ³ of aquifer	56	409	114	801	114	869	74	529	79	577
Mean concentration mg/l	1,174	8,646	1,071	7,491	1,289	9,859	1,143	8,292	1,163	8,512
Resource tonnes	170,000	1,250,000	155,000	1,100,000	80,000	630,000	325,000	2,350,000	405,000	2,980,000
Lithium Carbonate Equivalent tonnes	900,000		820,000		430,000		1,720,000		2,150,000	
Potassium Chloride tonnes	2,400,000		2,100,000		1,200,000		4,500,000		5,700,000	

Lithium is converted to lithium carbonate (Li₂CO₃) with a conversion factor of 5.32. Values may not add due to rounding. No cut-off grade is applied in the resource.

Potassium is converted to potassium chloride (KCl) with a conversion factor of 1.91

[^] Inferred underlies the Measured in the Lito properties

An exploration target* of 1.0 to 2.5 Mt of lithium carbonate equivalent (LCE) and 2.9 to 6.6 Mt of potassium chloride (KCl) is defined below the base of the resource at 200 m, to a depth up to 400 m (Table 2). With the exploration target* (Figure 2 and Figure 3) there is significant potential for resource expansion. Figure 2 illustrates the comparison of the 2012 resource estimate and the updated July 2017 estimate. Figure 3 shows growth of the Maricunga resource and exploration target* and how Maricunga, with very high grades, compares to other lithium brine projects.

TABLE 2: MARICUNGA EXPLORATION TARGET*

The target is based on limited drilling and geophysical data suggesting continuation of lithium and potassium mineralised brine below the updated resource

SUBAREA	Area <i>km²</i>	Thickness <i>m</i>	Mean drainable porosity %	Brine volume <i>million m³</i>	Lithium Concentration <i>mg/L</i>	Contained Lithium <i>tonnes</i>	Lithium Carbonate LCE <i>tonnes</i>	Potassium Concentration <i>mg/L</i>	Contained Potassium <i>tonnes</i>	Potassium Chloride KCl <i>tonnes</i>
UPPER RANGE SCENARIO										
Western	4.23	100	10%	42.3	1,000	40,000	200,000	6,500	270,000	500,000
Central	21.41	200	10%	428.0	1,000	430,000	2,300,000	7,500	3,200,000	6,100,000
	Continues from directly below the resource					470,000	2,500,000		3,470,000	6,600,000
LOWER RANGE SCENARIO										
Western	4.23	100	6%	25.4	600	15,000	80,000	5,000	130,000	240,000
Central	21.41	200	6%	257.0	700	180,000	950,000	5,500	1,400,000	2,700,000
	Continues from directly below the resource					195,000	1,030,000		1,530,000	2,940,000

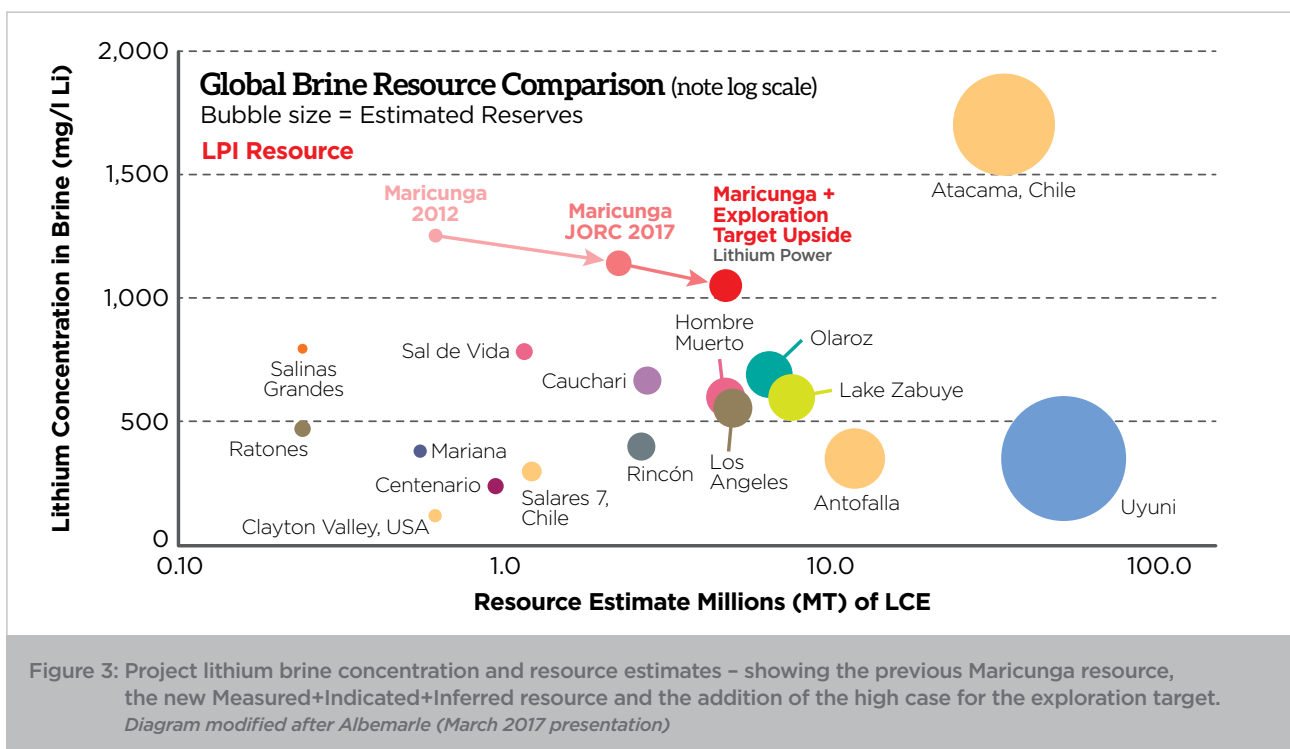
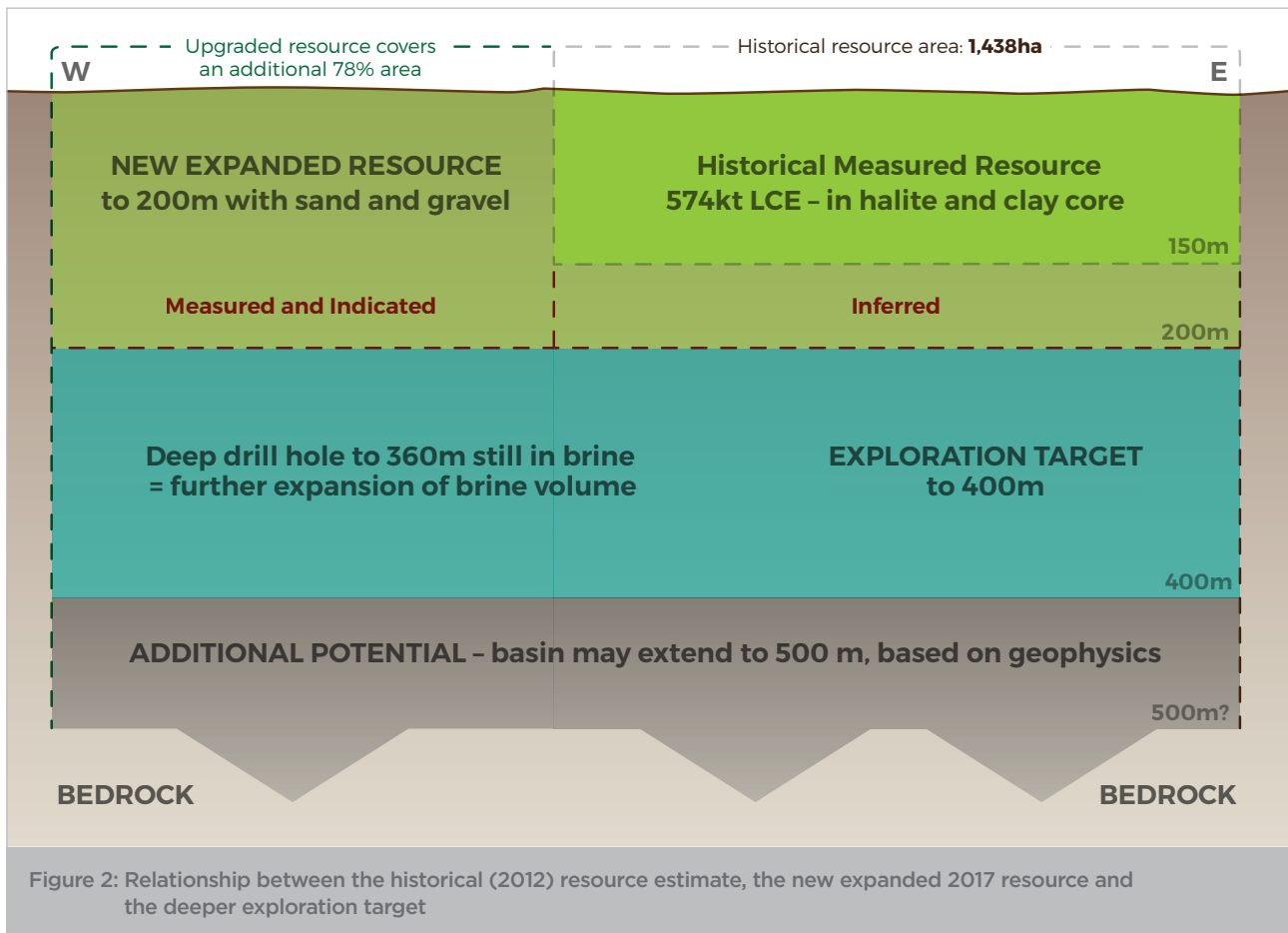
Lithium is converted to lithium carbonate (Li₂CO₃) with a conversion factor of 5.32. Numbers may not add due to rounding.

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* It must be stressed that an exploration target is not a mineral resource. The potential quantity and grade of the exploration target is conceptual in nature, and there has been insufficient exploration to define a Mineral Resource in the volume where the Exploration Target is outlined. It is uncertain if further exploration drilling will result in the determination of a Mineral Resource in this volume.

The upgraded mineral resource estimate in accordance with the JORC Code (2012) is an excellent result for the company, as the Maricunga lithium brine project now has the scale to potentially sustain a long mine life. Not only is the resource much larger than defined in 2012 but deeper drilling suggests there is a reasonable expectation that deeper drilling would add further resources to the project.

In addition to a favourable resource base our technical team has also confirmed the positive porosity and permeability characteristics of sediments hosting the brine for future extraction. All this is in addition to the very high lithium and potassium grades contained in the brine. With these excellent characteristics we look forward to completing the project feasibility studies and moving forward to production as a low cost lithium producer.



GEOLOGICAL INTERPRETATION

Correlation between Maricunga drill holes has allowed recognition of different sediment units, which vary in thickness and lateral extent. These represent variations between lithologies originally deposited in a dry salt lake environment (salt, clays) and those deposited by flooding and transportation of coarser grained material (sands, gravels, volcaniclastic). The distribution of these units is shown in Figures 4 and 5. Interpretation is based on the 2016–17 drilling (S- and M-holes) and the 2011 C-series (sonic) and P-series (Reverse circulation) drill holes. The general distribution of units from top to bottom consists of the:

- Upper Halite unit (salt) with salt+clay intervals. This unit is present at surface in the north of the salar. The upper halite unit thickness is up to ~55 m and thins to the east, west and north through the project area. This upper halite unit has relatively high drainable porosity and permeability, with clay interbeds reducing the drainable porosity and permeability at different depths;
- Clay Core – This clay unit is located predominantly beneath the Litio 1–6 properties and thickens towards the south and east, extending to a depth of approximately 100 m in C1 and C2 and to a depth of 170 m in S18. This unit is absent in the western properties, which contain dominantly coarser material. The clay unit has low drainable porosity and was the predominant unit intersected in the 2012 drilling campaign;
- Deeper halite – This localized deeper halite (salt) unit within the clay core was intersected in holes S18 and C3. It has a thickness of approximately 20 m and represents a previous salar surface and has relatively lower drainable porosity than the upper halite unit due to compaction;
- Eastern Gravel unit – This unit consists of clean gravels to clayey gravels, and has moderate drainable porosity. This unit is present to the east of the Litio 1–6 properties and becomes interbedded with sediments of the clay core and sands within the salar. The unit is heterogeneous, with gravel fragments in a matrix of sand, silt and clay;
- Northwest Gravel – This unit consists of a well sorted gravel and sandy gravel (Figure 6) in the north and west of the project area and is part of the alluvial / fluvial fan system entering the salar from the west and northwest. The unit may locally contain sub-rounded fragments and sand. The northwest gravel unit has a high drainable porosity.
- Lower Alluvial – This unit consists dominantly of sands and is spatially interpreted as the distal part of Northwest gravel alluvial/fluvial system that enters the salar from the northwest. This unit is interbedded with the clay core further east in the salar;
- Upper Volcaniclastic – This upper volcaniclastic unit (Figure 7) is very friable and matrix supported, with sub angular fragments including pumice material. A maximum thickness of 139 m was intersected in hole M2 and it is interpreted to thin further east in the salar. The Upper Volcaniclastic have a high drainable porosity;
- Lower Sand – A lower sand unit is recognised separating the upper and lower volcaniclastic units and is interpreted as reworked material from the lower volcaniclastic unit. This unit consists of medium to fine sand which has moderate sorting and a moderate porosity due to the presence of a finer grained matrix; and
- Lower Volcaniclastic – A lower volcaniclastic unit has been intersected to the base of the current drilling including in deep hole (S-19) to a depth of 360 m. The unit is homogeneous and friable with a fine to medium sand texture and some silt, also containing some pumice fragments. The Lower Volcaniclastic has a high drainable porosity.

POROSITY TEST WORK

Porosity testing of sediment samples by four reputable laboratories and pumping tests carried out by the MJV indicate that the porosity and permeability characteristics of the sediments containing brine are favourable for brine extraction by pumping (refer to announcements by the company on the 23 February and 17 May 2017 regarding pumping test results).

Based on all the results collected for the project to date average drainable porosity values have been assigned to each of the geological units, reflecting their composition of different sediment types. The results used for resource estimation are consistent with reasonable values for drainable porosity used on other brine projects globally.

POROSITY AND PERMEABILITY OBSERVATIONS

The 2016–17 drilling program by the MJV established the presence of coarser grained sediments with relatively high drainable porosity in the more recently acquired Cocina, San Francisco, Salamina and Despreciada properties and beneath the clay core in the Litio 1–6 properties. For pumping of brine the porosity and permeability characteristics of the upper halite, sand, gravel and volcaniclastic units are very positive.

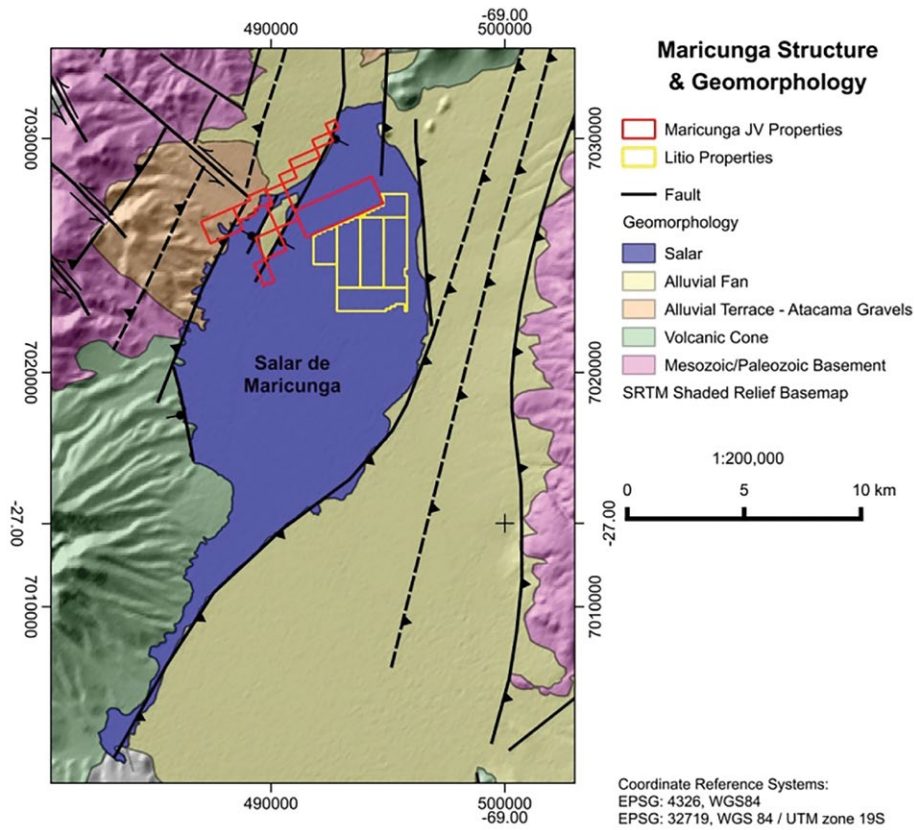


Figure 4: Geological map of the Maricunga Basin showing the section line of Figure 5.

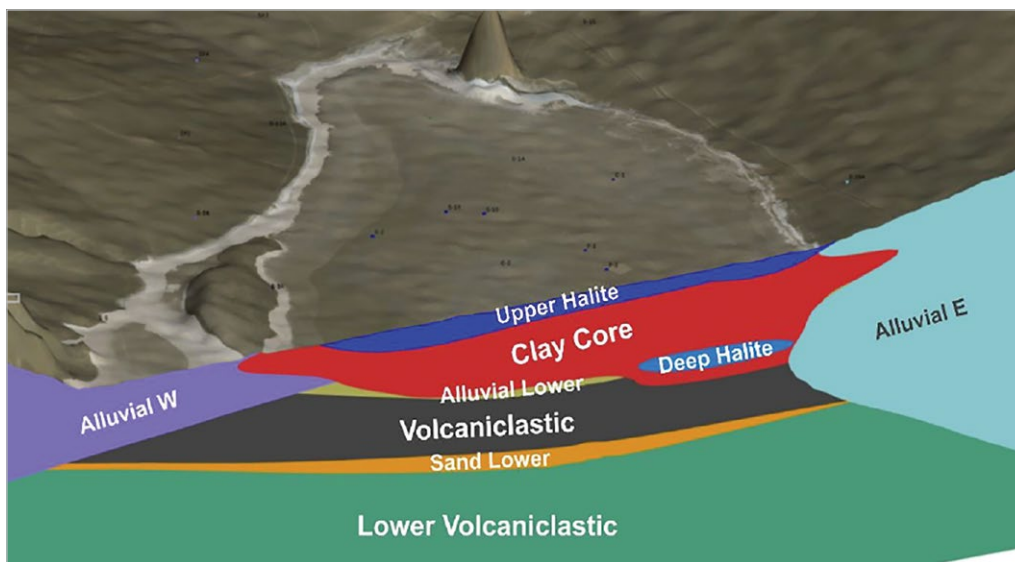


Figure 5: East-West cross section looking north, showing the major geological units, with a 7 times vertical exaggeration



Figure 6: Coarse gravel in the west of the properties



Figure 7: Volcaniclastic unit which underlies the project area

PROCESS TEST WORK

Process test work completed to date on extracting lithium and potassium from the Maricunga brine has also been positive. It is considered there are reasonable grounds for future economic extraction of the resource, considering the necessary modifying factors and using wells installed to and beyond the depth of current drilling. Lithium brine has been extracted from salars in Chile and Argentina for over 34 years for production of lithium chemicals. Test work is ongoing with major process engineering companies Veolia and GEA to optimise lithium extraction. The results of the process optimisation will be reported prior to and in the Pre-Feasibility Study.

Field evaporation test work continues in ponds at the Maricunga project site, providing valuable information regarding brine evolution under site environmental conditions. The project weather station is providing important information on local evaporation conditions.

INFRASTRUCTURE AND ENVIRONMENTAL STUDIES

Studies of the infrastructure required for the project continue. The project is very well supported with existing infrastructure, being located beside a well maintained international road crossing to Argentina and by having cellular phone coverage. The project is 2.5 hours from the mining support centre of Copiapo, where a wide range of support services to the mining industry are available.

PRE-FEASIBILITY STUDY

Evaluation of the power and water supply options are well advanced. The Company's environmental consultants are advancing with environmental monitoring for the Environmental Impact Assessment to support the project pre-feasibility study.

Tier-1 engineering consultancy Worley Parsons is advancing with preliminary engineering design for the project, including the sizing and location of the evaporation ponds and plant.

WESTERN AUSTRALIA

PILGANGOORA – PILBARA

The 100% owned granted Pilgangoora tenement (E45/4610) is situated adjacent to the Pilbara Minerals and Altura Mining lithium pegmatite deposits which combined form one of the largest global lithium pegmatite resources. Lithium power is exploring for lithium pegmatites in a continuation of the same sequence of rocks immediately west of these companies.

PILGANGOORA DRILLING PROGRAM

During this quarter the reconnaissance drilling program was completed with the drilling of 35 reverse circulation holes totalling 2,410m. This preliminary drilling program was undertaken in different areas across the tenement to drill test potential greenstone rocks interpreted in the aeromagnetic survey, as a significant area of the tenement is covered with soil and alluvium.

The reconnaissance drilling highlighted potential areas of interest and the company is actively collecting additional information in these areas and others not covered by the reconnaissance drilling. Drilling encountered the preferred greenstone host rock – and intervals of pegmatitic intrusive. Magnetic susceptibility (intensity) measurements have been made on the drill chips to refine interpretation of the aeromagnetic data.

Samples are being analysed for a broad suite of elements using the ICP analytical method.

TABBA TABBA AND STRELLEY PROJECTS

The Tabba Tabba and Strelley properties (E45/4637 and E45/4638) were granted on the 12 of May, 2017. Planning on the forward work programs to be undertaken on these properties north of Pilgangoora is well under way. Activities will include soil and rock chip sampling and geological mapping.

GREENBUSHES – SOUTHWESTERN WESTERN AUSTRALIA

A number of interesting areas have been identified through targeted rock and soil sampling programs and new geophysical interpretation of existing data sets. Planning for an expanded and more in depth sampling program is under way.

ARGENTINA

CENTENARIO – SALTA PROVINCE, ARGENTINA

There was no activity on this project during the quarter, with quotations received for geophysical exploration programs across the properties in northern Argentina.

Discussions continued with a number of companies following the decision by the board of LPI to divest this asset, to focus efforts on the Maricunga lithium brine project in Chile.

CORPORATE UPDATE

APPENDIX 5B

The Appendix 5B quarterly cashflow report for the quarter ended 30 June 2017, is submitted separately.

Following the successful capital raise and the finalisation of the Maricunga Joint Venture, the Company has a cash balance of AUD\$3.6 as at 30 June 2017.

This amount is currently held in Company bank accounts in Australia, Chile and Argentina, in Australia Dollars, US dollars or Argentine Pesos'. The Australia dollar equivalents for these foreign currencies are converted at the closing foreign exchange spot rate on.

In addition, funds within the Maricunga Joint Venture at the end of the quarter ended, totaled USD\$6.1m. These funds were provided by LPI as part of the Joint Venture Investment Agreement and to fast track the development of the Maricunga project. In addition LPI has the required cash at bank to make the November tranche to the joint venture company which will increase LPI's interest in the Maricunga project to 36.2% paid up capital.

GENERAL MEETING OF SHAREHOLDERS

In relation to the Notice of Meeting, dispatched to shareholders on 31 May 2017, the General Meeting of Shareholders was held on 6 July 2017, to consider and if seen fit, approve, nine Ordinary Resolutions. All nine Ordinary Resolutions were passed by way of show of hands. It is noted that the proxies received by the Company prior to the General Meeting, overwhelmingly approved all Resolutions.

CAPITAL STRUCTURE

Further to the approval of relative Resolutions at the General Meeting of Shareholders, 526,315 Ordinary Shares, 34,578,947 Listed Options and 4,000,000 Unlisted Options were issued on 7 July 2017. Should all Options be converted, the Company will raise circa AU\$46.1m.

This results in the Company having currently on issue:

- Ordinary Shares 195,914,852;
- Listed Options 72,105,270; and
- Unlisted Options 35,106,668.