

27 January 2021

## LPI Maricunga Stage One Lithium Project Activity Update

Lithium Power International Limited (ASX: LPI) (LPI or the Company) is providing an update on the working program for its Maricunga Lithium Brine Project in Chile.

The company's proposed Maricunga Stage One has a nameplate capacity of 15,000 tonnes per annum of lithium carbonate production, with significant future expansion potential from subsequent stages. The Maricunga project, the highest-grade, undeveloped lithium project in Chile, is managed by Minera Salar Blanco (MSB), which is owned by LPI (51%), Borda Group (31%) and Bearing Lithium (18%).

### Maricunga Stage One Update

A new field program will be undertaken from February 2021 to update detailed engineering work to re-size and optimise the revised Maricunga Stage One development. The program consists of 2,400m of drilling, along with sampling and hydraulic testing activities. This work is in line with the announcement made by LPI on 9 December 2020 to advance the Maricunga project in a number of stages and by fast-tracking a Stage One development based on the tenements known as "Old Code" concessions.

The target is to expand the current resource, which is from near surface to 200m depth, to include the interval between 200m and 400m. Drilling for the project's 2019 Definitive Feasibility Study established that there was a thick sequence of volcanoclastic material (established by MSB's historical S-19 exploration hole drilled to 362m, Figure 1) beneath gravel and near surface clay units in the "Old Code" concessions. This zone has high drainable porosity and permeability that is considerably higher than near surface units. Expansion of the resource would result in expansion of the project brine reserve, potentially supporting a 20 year-plus mine life for the project.

Drilling contracts have been awarded to international companies Major Drilling and Andinor, and all drilling equipment has been mobilised to site.

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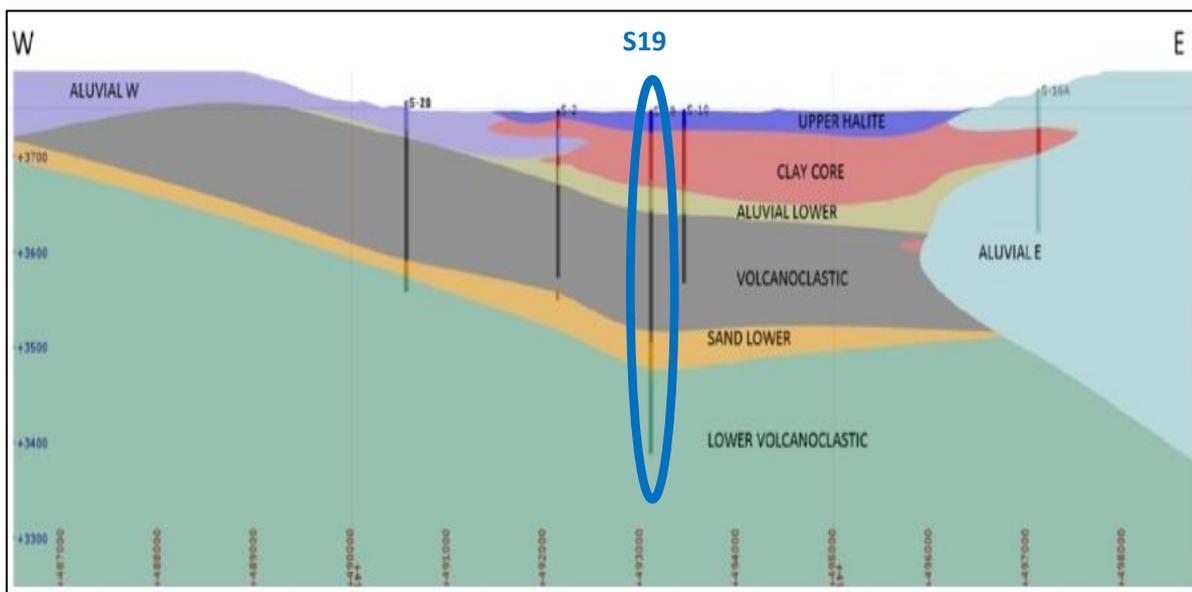
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Additionally, conceptual and numerical hydro-geological models including LEAPFROG, SGeMS and FEFLOW will be updated by Atacama Waters (formerly FloSolution) with the new exploration information and all existing information from the Definitive Feasibility Study. That would allow the existing resources and reserves within the “Old Code” concessions to be fully revised.

An updated Definitive Feasibility Study will then be prepared by Worley and GEA Messo in accordance with JORC and NI 43-101 international standards.

In parallel with this Stage One work, the Company will continue to evaluate and progress alternative development plans for the subsequent stages with Codelco, potential other parties and the Chilean authorities. The aim of these subsequent stages is to continue with the original strategy to consolidate the Maricunga Salar by developing the remainder of its mining concessions, known as “New Code” concessions, to provide substantial organic growth for the project.

Activities associated with engineering and financing will continue, complementing the adjustments on the Stage One design of the project and to ensure continuity in fast-tracking the development timeline through 2021.



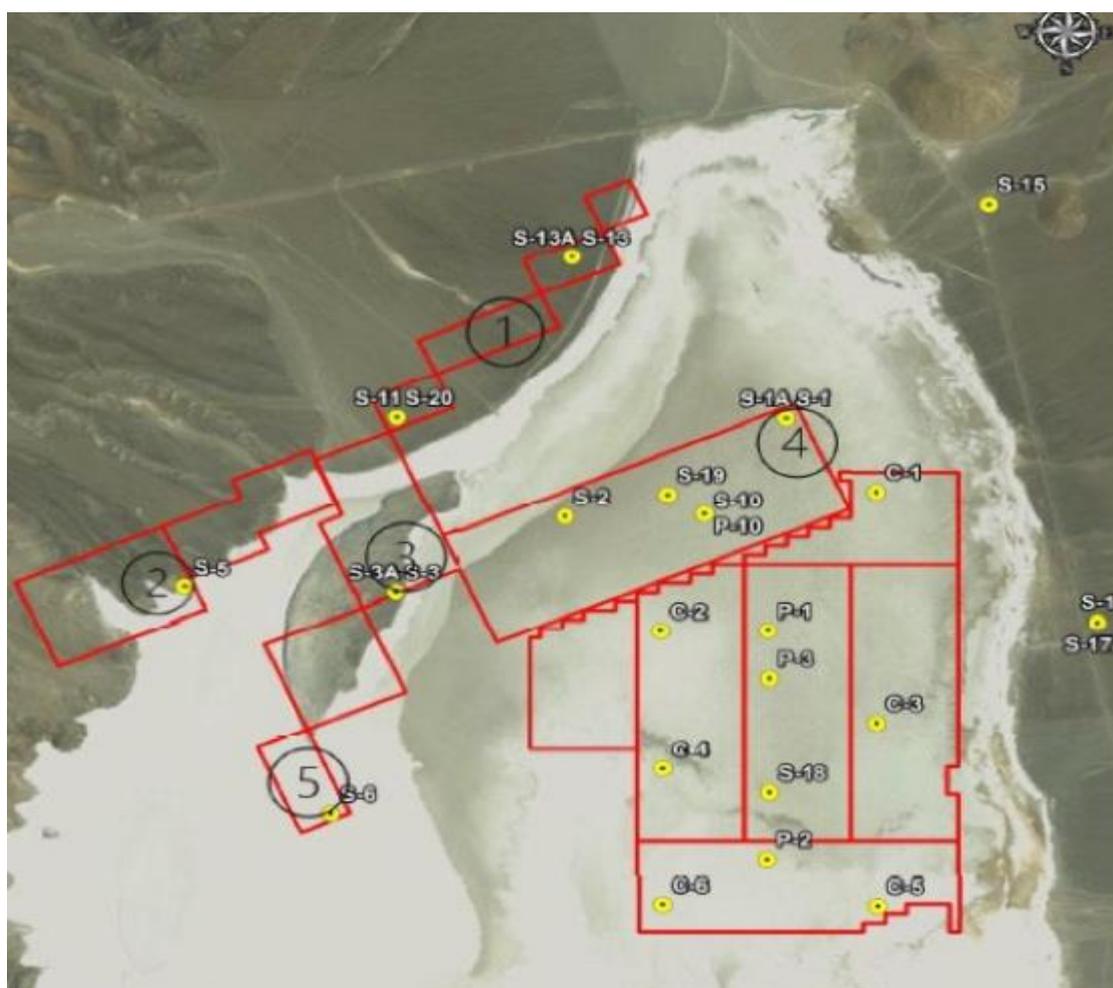
**Figure 1 - West to East section, looking north, through historical drilling, with the target for the 400 m holes the lower volcanoclastic. Historical MSB hole S19 drilled to 362 m**

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### Stage One Working Plan

- **Drilling Program**

- Five diamond core exploration holes to 400m depth. The boreholes once completed will be habilitated as monitoring wells, with 3-inch diameter slotted and blank PVC casing to selected depth intervals.
- Brine porosity samples will be collected during the core drilling at 24m depth intervals in the 0m – 200m interval and 12m intervals between 200m – 400m.



**Figure 2 - Proposed locations of the Five boreholes and the locations of the boreholes from the 2018-19 drilling program**

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**Figure 3 - Drilling of the S19 borehole to 362 m in the 2018-19 drilling program**

- **Drainable Porosity and Brine Chemistry Analysis**
  - 140 core samples, including QA/QC samples, will be analysed for drainable porosity and other hydraulic parameters by international laboratories, GeoSystem and Corelab.
  - A Magnetic Resonance Register (BMR) will be also used to confirm drainable porosity parameters.
  - 150 brine samples, including QA/QC samples, from the exploration boreholes will be analysed by Universidad de Antofagasta and Alex Steward Assayers.

- **Production wells and pumping test**

- One production well of 17-inch diameter will be drilled using rotary methods at to a depth of 400m. It will be complemented by a 12-inch 316 SS production casing for the 0m – 200m interval and an 8-inch 316 SS production casing for the 200m – 400m interval.
- One 30-day, 24/7 pumping test will be carried out on the new production well to evaluate hydraulic parameters of the area and monitor lithium concentrations during the test.



**Figure 4 - Production Well –P 10 pump testing from the 2018-19 drilling program**

- **Update of the Conceptual and Numerical models**

- The conceptual hydro-geological model for the Salar will be updated with the new information obtained from the field program. It will include the LEAPFROG geological model for the updated resource estimate and the updated numerical model configuration.
- The SGeMS 3D lithium concentrations distribution model will be updated with the new drainable porosity data and brine chemistry analyses, and will be used to prepare an update on the Resource estimate from the 2019 DFS for the “Old Code” concessions to a depth of up to 400m. Reporting will be done according to JORC and NI 43-101 international standards.
- The FEFLOW hydro-geological model will be updated with the new LEAPFROG geological model and the updated 3D distribution of drainable porosity. The bottom of the FEFLOW model will be extended to the bedrock contact, based on the exiting geophysical data from the 2019 DFS (AMT and gravity). The model will be re-calibrated in Steady State and in Transient State using the results of the P-5 pumping test. The updated 3D distribution of lithium concentrations from the SGeMS model will be used as the initial condition for the transport simulations. The updated model will then be used to carry out predictive simulations for brine production scenarios from the “Old Code” concessions only, optimise wellfield configurations and production schedules and to evaluate potential effects from the brine production within the restrictions set out in the Project’s RCA environmental permit awarded in February 2020.
- Finally, a new lithium reserve estimate will be prepared according to JORC and NI 43-101 international standards for the “Old Code” concessions to support the 15,000 tonnes per annum production of lithium carbonate for 20 years.

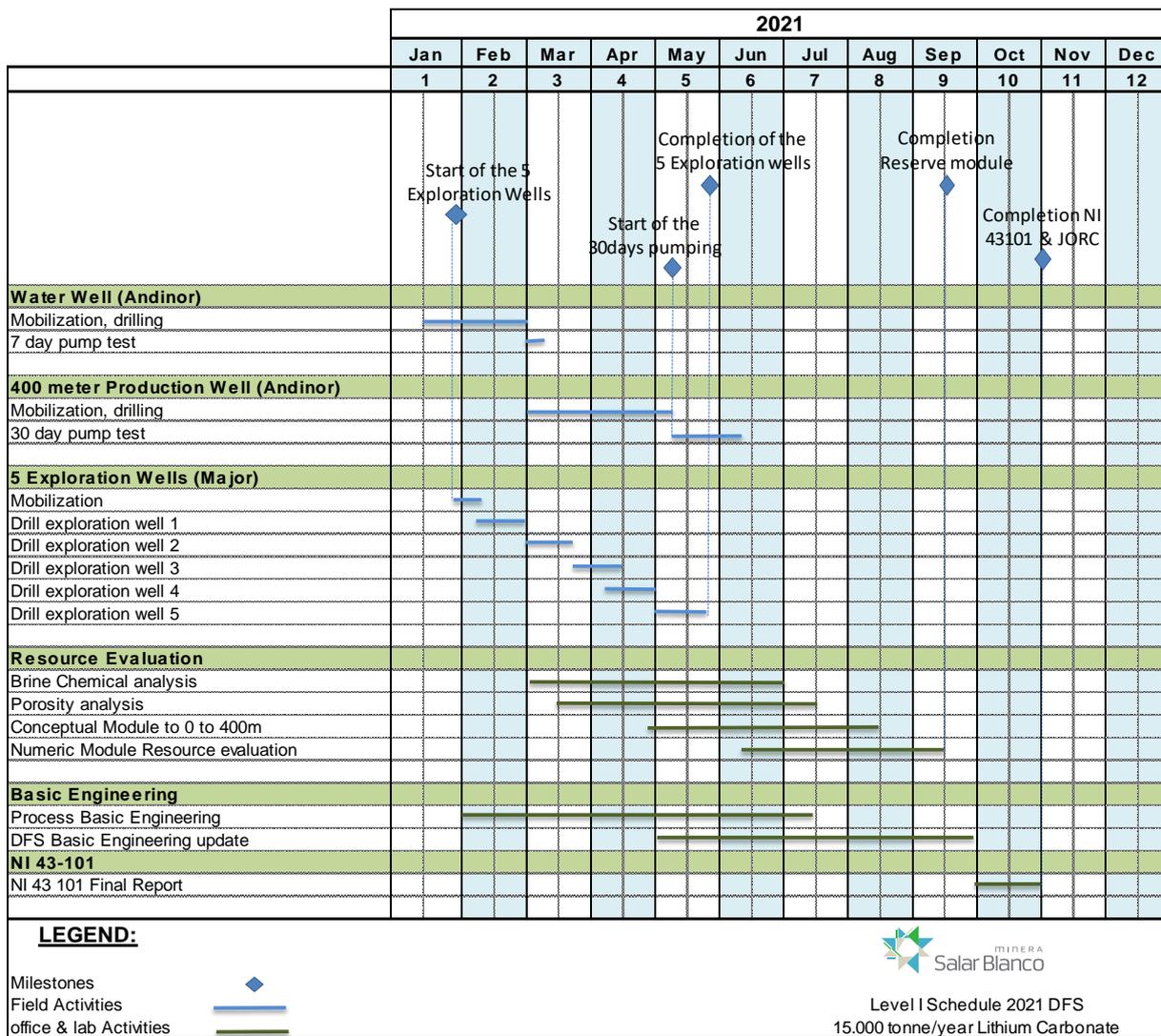
- **Definitive Feasibility Study (DFS) update**

- GEA Messo will update the Basic Engineering (BE) for a 15,000 tonnes per annum capacity plant and reconfirm the process plant equipment flowsheet.
- Worley will update for all the other disciplines of the plant, evaporation ponds, utilities and facilities incorporating GEA’s BE information.
- Economics for the Stage One will include an update of the lithium price estimates and will complete the DFS Report expected to be released by October 1, 2021.

• **Stage One Timeline**



**MSB Level 1 Schedule 2021 Exploration and DFS Report  
15.000 tonne/year Lithium Carbonate Plant**



**Figure 5- Stage One Timeline for the updated Exploration and DFS Report**

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## Camp Operation

To support drilling and other future site activities the existing MSB camp has been expanded, to accommodate contractor personnel. The temporary camp will continue to operate until project construction activities begin.



**Figure 6 - Existing Camp to be expanded for the commencing of the Exploration program.**

## Additional water exploration

A new water supply exploration well will be drilled in the area to potentially have an alternative supply to the existing CAN-6 well for the project. Despite fresh water supply have been secured with the existing CAN-6 well, it's deemed strategically important to explore for further water sources as an alternative or backup. The well will be drilled as a large diameter production well, with an installed surface casing diameter of 24 inches. The water well will be drilled to a depth of up to 200m. Following installation and cleaning, the well will be subject to a 30 day pumping test to confirm the aquifer characteristics and the size of pump which is optimum for operation of this new well.

**Lithium Power International’s Chief Executive Officer, Cristobal Garcia-Huidobro, commented:**

“We are pleased to announce that work program is already underway for the Maricunga Stage One strategy. Building on the already extensive technical work will not only let us significantly expand the current resource, but also strengthening the profile of the project. Our world class group of technical partners have mobilized already and we look forward to providing regular updates on the progress. In addition, and in line with the current market interest, we continue evaluating strategic and financing alternatives to maximize the value of the Project for its shareholders.”

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**For further information, please contact:**

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