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Lake Announces Successful Completion of Lithium Carbonate Test Program, an Important Milestone towards Completion of DFS

- One of the largest test programs undertaken by a DLE project
- Significantly de-risks Kachi project
- Large volume samples available for offtake consideration
- Data generated from the successful test program used to validate and inform process design
- Impurity elements are below design specifications and targeted battery grade limits

Lake Resources (ASX: LKE; OTC: LLKKF) (“Lake” or “the Company”) announces the successful completion of the Saltworks Technologies lithium carbonate test program to produce battery grade lithium carbonate from Lilac DLE lithium chloride eluate. Lake delivered 120,000 litres of concentrated lithium chloride eluate to Saltworks Technologies in Richmond, BC for this carbonate production test work. The eluate was produced from the Kachi Lilac DLE Demonstration plant in Catamarca Province, Argentina.

“Most DLE lithium carbonate announcements are based on a few kilograms of carbonate produced on a lab bench scale unit; we’ve produced more lithium carbonate than most DLE projects under development. This gives us great confidence in our process,” Lake CEO David Dickson said.

The DLE Demo Plant continues to operate in Catamarca having now produced over 150,000 litres of eluate and processed over 3 million litres of Kachi brine. The demonstration plant is expected to produce over 200,000 litres of eluate and process close to 4 million litres of Kachi brine from multiple wells before it is shut down in October.

“The extraction technology is now proven, and we are concentrating on designing well-structured project schedules for a facility with a target design life of 25 years at Kachi.”

Mr. Dickson said Lake remained on track for completion of a bankable Definitive Feasibility Study in December, as previously announced.

He said Saltworks had demonstrated the Kachi commercial flowsheet unit operations in the processing of the 120,000 litres of eluate solution:

- Reverse Osmosis
- Impurity removal (Ca, Mg)
- Evaporation
- Ion Exchange (Ca, Mg, B)
- Lithium Carbonate precipitation
- Centrifuge and Washing

Mr Dickson said these results, along with the recent successful extraction and injection testing, showed that the DLE process at Kachi was being paired with high-yield, production-scale extraction wells.

“Process plant design is underway, we have good optionality with our power supply, and environmental and community consultations are well underway, so we are very happy with the progress.”

“We have drilled deeper for better grades and improved our drilling performance by 40 percent this year.”

“Grades from recent extraction tests are 20 percent higher than exploration samples and we can expect further JORC updates prior to publishing the Phase 1 DFS results,” he said.

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About Lake Resources NL (ASX:LKE OTC:LLKKF)

Lake Resources NL (ASX:LKE, OTC: LLKKF) is a responsible lithium developer utilising state-of-the-art ion exchange extraction technology for production of sustainable, high purity lithium from its flagship Kachi Project in Catamarca Province within the Lithium Triangle in Argentina. Lake also has three additional early-stage projects in this region.

This ion exchange extraction technology delivers a solution for two rising demands – high purity battery materials to avoid performance issues, and more sustainable, responsibly sourced materials with low carbon footprint and significant ESG benefits.

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Certain statements contained in this announcement, including information as to the future financial performance of the projects, are forward-looking statements. Such forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Lake Resources N.L. are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies; involve known and unknown risks and uncertainties and other factors that could cause actual events or results to differ materially from estimated or anticipated events or results, expressed or implied, reflected in such forward-looking statements; and may include, among other things, statements regarding targets, estimates and assumptions in respect of production and prices, operating costs and results, capital expenditures, reserves and resources and anticipated flow rates, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions and affected by the risk of further changes in government regulations, policies or legislation and that further funding may be required, but unavailable, for the ongoing development of Lake’s projects. Lake Resources N.L. disclaims any intent or obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise. The words “believe”, “expect”, “anticipate”, “indicate”, “contemplate”, “target”, “plan”, “intends”, “continue”, “budget”, “estimate”, “may”, “will”, “schedule” and similar expressions identify forward-looking statements. All forward-looking statements made in this announcement are qualified by the foregoing cautionary statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking

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