

ASX ANNOUNCEMENT

19 July 2024

Lilac Solutions Technology Efficiencies Prompt Review of Kachi Project Costs

- **Lake technology and Kachi Project partner identifies cost savings of up to 50% for Direct Lithium Extraction (“DLE”) equipment construction cost**
- **Lilac Solutions confirms improved long-term lithium recovery rates at more than 90% for most brines**
- **Lake to review Kachi Project cost estimates in light of new data**

Lake Resources N.L. (ASX: LKE; OTC: LLKKF) (“Lake” or “the Company”) congratulates its technology and Kachi Project (“Kachi”, “Kachi Project” or “Project”) partner, Lilac Solutions (“Lilac”) on the release of its fourth-generation ion exchange technology and technical white paper.

The white paper shows that Lilac has improved long-term lithium recovery to over 90% on salar brines and reduced core extraction equipment cost up to 50%, resulting in total cost savings across the DLE technology package of up to 25%. In addition, 10% lower reagent consumption positively impacts project operating costs.

Lake will evaluate the impact of this new data on the project cost estimates released to the market on 19 December 2023 in the Kachi Phase One Definitive Feasibility Study (“DFS”).

“The technology advancements and cost savings announced by Lilac are significant,” Lake CEO and Managing Director David Dickson said. “Improvements in the technology in addition to an increase in the brine lithium grade could result in a reduction in overall project capital of up to 10% for the Kachi Project.”

Raef Sully, CEO of Lilac, said the industry has eagerly awaited commercially-scalable ion exchange DLE technology, which Lilac has successfully developed.

“Lilac is excited about the cost savings and operational efficiencies our latest generation ion exchange technology brings,” Sully said. “This advancement not only enhances lithium extraction efficiency but also boosts the sustainability and economic viability of lithium production,” he added.

Lake’s Kachi extraction plant has been conservatively designed with an assumption of 80% lithium recovery within the DLE process as well as a design basis for 205 mg/L lithium concentration against a minimum average of 245 mg/L across the reserve (see ASX announcements from 18 December 2023). These conservative assumptions for the Kachi Phase One DFS provide a potential significant opportunity for optimisation of the construction cost of the DLE portion of the facility.

“Lake was pleased to be part of the field demonstration of Lilac’s technology and these cost savings are another welcome development. We look forward to continuing our work with Lilac at Kachi,” Dickson said.

Lilac Solutions’ Technical White Paper can be accessed via their website and [here](#).

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About Lake Resources N.L. (ASX:LKE OTC:LLKKF)

Lake Resources N.L. (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 and the Company, 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

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