

ASX & OTC ANNOUNCEMENT

26 March 2024

LAKE RESOURCES ANNOUNCES THE SUBMISSION OF ITS PRODUCTION ENVIRONMENTAL IMPACT ASSESSMENT FOR PHASE ONE OF THE KACHI PROJECT

- Submission of the Production EIA to Catamarca Mining Authority marks an important milestone for Kachi and represents the culmination of extensive field work and community engagement completed over the past three years.
- The development plan for Kachi is designed to minimize the consumption of fresh water and maintains the hydrogeologic system as close to baseline conditions as possible.
- The innovative Project development plan consumes less than 2.5 percent of the average annual natural groundwater replenishment to the basin (i.e., recharge), highlighting Kachi's exceptionally small water footprint.
- The Project will provide significant economic and social benefits to Catamarca Province.

Clean lithium developer Lake Resources N.L. (ASX: LKE; OTC: LLKKF) ("Lake" or "the Company"), is pleased to report the submission of the Production Environmental Impact Assessment (the "Production EIA" or "EIA") for its flagship Kachi Project ("Kachi" or "the Project") to the Catamarca Ministry of Mining in Catamarca Province, Argentina. Lake's innovative and sustainable Project development plan will result in a small water footprint, amongst the lowest for lithium brine projects per tonne.

The Production EIA, which was submitted in accordance with Lake's operational timeline, is a statutory requirement under the Argentina mining and environmental regimes and is intended to demonstrate that due attention has been given to the potential impact of the mining operations on the environment and local community.

The EIA was prepared by Knight Piésold A.C.S.A., a global engineering consulting firm, in accordance with the General Environmental Law No. 25,675, the National Law No. 24,585 on Environmental Protection for Mining Activity in Argentina, (Annex III), the Mining Code of the Nation (Title 13, Section 2), the SAA Provision No. 74/2010 and the M.M. Resolution No. 1014/2023.

The EIA is based on the production scenario presented in the Definitive Feasibility Study¹ in which lithium brine is extracted via production wells, pumped to the Direct Lithium Extraction ("DLE") plant for lithium recovery and then injected back into the subsurface via injection wells. The Lilac ion exchange process requires a fraction of the water required for evaporation ponds and absorption DLE technology.

Lake has also incorporated a Zero Liquid Discharge unit that further reduces freshwater consumption by about 75%¹. The injection of spent brine allows Lake to design a system that maximizes lithium recovery while maintaining the hydrological/hydrogeological system as close to baseline conditions as possible during operations. Other significant environmental benefits of Kachi include a smaller land footprint and lower solid waste output compared to traditional evaporation ponds and hard rock projects.

¹ Refer to ASX announcement, Kachi Phase One Definitive Feasibility Study, on 19 December 2023.

Lake's CEO, David Dickson said: "The timely submission of the EIA underscores Lake's firm commitment to conducting operations in a manner that prioritizes care for the environment and fosters collaboration with our neighboring communities. Kachi stands as a testament to our adoption of a prudent and groundbreaking approach to lithium brine extraction, aiming for the advancement of sustainable and responsible lithium production. We look forward to bringing future employment and economic growth to Catamarca Province, while contributing to the global energy transition."

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

Lake Resources N.L. 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.

Forward Looking Statements:

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 statements due to the inherent uncertainty therein. Lake does not undertake to update any forward-looking information, except in accordance with applicable securities laws.