# Lake Resources NL: and Lilac Solutions Announce Achievement of Major Milestone for Project Kachi

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Brisbane, Australia - Clean lithium developer Lake Resources NL (ASX:LKE) (FRA:LK1) (OTCMKTS:LLKKF) and its direct lithium extraction technology partner, Lilac Solutions ("Lilac"), today announced the production of 2,500kg of lithium carbonate equivalents (LCE) at Project Kachi, a world-class lithium pilot plant located in Argentina. Based on this successful result, Lilac has increased its ownership of the Kachi Project from 10% to 20%. The project is now on track to move from its pilot phase into commercial-scale development, which will make it the first lithium brine project in South America to produce lithium at commercial scale without the use of evaporation ponds for lithium concentration.

The achievement at the Kachi Project represents a historic advancement in lithium production technology. This is the first successful implementation of ion exchange for lithium production in South America, home to most of the world's lithium brine resources.

The 2,500 kg of LCEs was extracted at Kachi with 80% lithium recovery, 90% plant uptime, 1,000x less land compared with evaporation ponds, and 10x less water compared with conventional aluminum-based absorbents. The results speak for themselves:

- Speed to Production: Lake and Lilac commissioned the plant on-site in under a month, more than 10x faster than conventional processes, and immediately began continuous production of lithium chloride;

- High Lithium Recoveries: Lake and Lilac are achieving 80% lithium recovery from a brine with 200-300 mg/L of lithium, roughly double the lithium recoveries of most brine production despite having a lithium grade 2x-7x lower;

- High Water Efficiency: This technology is extremely water efficient, enabling production of lithium chloride with 10x less water compared to conventional aluminum-based absorbents;

- Product Purity: The lithium chloride being produced is low in impurities, enabling efficient production of high-purity lithium carbonate for battery manufacturers. Rejection of boron, a troublesome impurity for brine projects, is greater than 99.9%;

- Continuous Operations: The plant has been operating 24/7, with 90% uptime; this is a reliable automated plant designed for scalable manufacturing and operations;

- No Evaporation Ponds: Lilac's ion exchange technology does not require evaporation ponds for brine concentration, unlike other so-called "direct extraction" technologies which rely on evaporation ponds to concentrate the lithium;

- Validated Performance: An independent engineer has visited the plant and analyzed more than one hundred samples from across the plant to validate performance and confirm consistency with engineering work.

When fully developed by Lake and Lilac, the Kachi project is expected to produce 50,000 tonnes per annum of battery-grade lithium products.

In a joint statement from Lilac and Lake, the company CEOs commented: "Today's announcement marks a new era in scalable lithium production. Lithium is a cornerstone of the energy transition - but limitations in production technology have led to increased costs, scarcity, and extreme price volatility. Today, we've proven that it is possible to produce high-purity lithium faster and without evaporation ponds - all while protecting surrounding communities and ecosystems. We are grateful for the strong partnership between our companies in developing this project, and we look forward to our continued success as we chart a new path in lithium production."

About Lilac Solutions:

Lilac Solutions is a lithium extraction technology company based in Oakland, California. In the coming years,

the electric vehicle industry will require a 20-fold increase in lithium supply. To meet this demand, Lilac has developed a patented ion exchange technology that facilitates production of lithium from brine resources with high efficiency, minimal cost, and ultra-low environmental footprint.

About Lake Resources NL:

Lake Resources NL (ASX:LKE) (OTCMKTS:LLKKF) is a clean lithium developer utilising clean, direct extraction technology for the development of sustainable, high purity lithium from its flagship Kachi Project, as well as three other lithium brine projects in Argentina. The projects are in a prime location within the Lithium Triangle, where 40% of the world's lithium is produced at the lowest cost.

This method will enable Lake Resources to be an efficient, responsibly-sourced, environmentally friendly and cost competitive supplier of high-purity lithium, which is readily scalable, and in demand from Tier 1 electric vehicle makers and battery makers.

Source:
Lake Resources NL

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