

30 July 2020

LILAC CONSISTENTLY PRODUCING HIGH CONCENTRATE LITHIUM CHLORIDE INDEPENDENT ASSAY LAB TO PRODUCE BATTERY-QUALITY LITHIUM

- **High concentrations of lithium chloride are being consistently produced from Lilac's pilot plant module with results similar to prior bench top testing.**
- **Processing continues of initial 20,000 litres of brine from Lake's Kachi Lithium Brine Project.**
- **Established independent commercial assay laboratory to now produce larger battery-quality lithium carbonate samples on advice from some downstream participants.**
- **Lake and Lilac are confident that high purity lithium carbonate samples will be produced – first third party assayed carbonate samples to be reported in ~5 weeks.**

Clean lithium developer **Lake Resources NL (ASX:LKE; OTC:LLKKF)** with its technology partner, Lilac Solutions Inc, report that high concentrations of lithium chloride are being consistently produced from Lilac's direct lithium extraction (DLE) pilot plant module using brines from Lake's Kachi Lithium Brine Project. Results obtained are similar to prior bench top testing.

The initial 20,000 litres of Kachi brines are being progressively processed through Lilac's pilot plant in California. The results continue to confirm the successful scale-up of processing from lab scale to pilot plant scale. Only a minor scale-up is required to achieve targeted commercial scale.

An established independent assay laboratory will be used for the next critical step of converting these lithium chloride samples to lithium carbonate. This will produce larger battery quality lithium carbonate samples with the first expected in ~5 weeks, and then further samples in the month following. Downstream participants that are monitoring this program have advised that using an established third-party to provide independent data for samples for potential offtake partners which will also be used for commercial scale development planning and a DFS. Lake and Lilac are confident that high purity lithium carbonate will be confirmed.

Lake is making meaningful progress towards delivering high purity, cleaner, responsibly sourced lithium. Detailed analyses are still commercial-in-confidence due to the patented innovative and disruptive technology created by Lilac, but final lithium carbonate results will be released when available.

Lake's Managing Director, Steve Promnitz said: *"Continuing to demonstrate successful production of clean, highly concentrated lithium chloride at pilot scale is a major advancement. This product from the direct extraction process is then converted to lithium carbonate using conventional methods by a respected third-party lab with the aim to meet the quality requirements of off-takers, who are looking for responsibly sourced scalable supplies of battery-quality product. However, the process is taking a little longer than anticipated."*

Lake's recent Kachi Pre-Feasibility Study (PFS) (refer ASX announcement 30 April 2020) based on production of high purity lithium carbonate demonstrated from direct extraction (refer ASX announcement, 9 January 2020) shows the disruptive, cost competitive, sustainable and scalable nature of the Lilac process which will be employed at Kachi and its ability to produce a premium, battery-quality product sought by battery and cathode manufacturers globally.

LAKE RESOURCES NL

Level 5, 126 Phillip Street
Sydney NSW 2000
+61 2 9188 7864

LAKERESOURCES.COM.AU
ASX:LKE FRA:LK1 OTC:LLKKF

For further information please contact:

Steve Promnitz, Managing Director

+61 2 9188 7864

steve@lakeresources.com.au

Follow Lake on Twitter: https://twitter.com/Lake_Resources

Follow on LinkedIn: <https://www.linkedin.com/company/lake-resources/>

Website: <http://www.lakeresources.com.au>

For media queries, contact:

Anthony Fensom, Republic PR, +61 (0) 407 112 623 , anthony@republicpr.com.au

Henry Jordan, Six Degrees Investor Relations: +61 (0) 431 271 538 , henry.jordan@sdir.com.au

About Lake Resources NL (ASX:LKE OTC:LLKKF) - Cleaner high purity lithium using efficient disruptive clean technology

Lake Resources NL (ASX:LKE, OTC: 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.

1. **Clean-Tech:** Efficient, disruptive clean technology to produce sustainable high purity lithium, with a smaller environmental footprint, in demand by Tier1 EV makers and battery makers. This is a cost-competitive technology provided by our partner in California, Lilac Solutions, who have received the backing of the Bill Gates-led Breakthrough energy fund and MIT's The Engine fund.

2. **High Purity:** High Purity Lithium Carbonate samples (99.9%) with very low impurities has been produced from lithium brines from Lake's flagship project (refer ASX announcement 9 January 2020). The growth of higher density batteries to drive the latest electric vehicles has significantly increased demand for a high purity product with low impurities, and the process delivers this consistently for a premium price.

3. **Prime Location, Large Projects:** Lake's projects are located in the Lithium Triangle, in Argentina, the prime location globally for low cost lithium production from large projects. The Kachi project covers 70,000 ha over a salt lake south of Livent's lithium operation with a large indicated and inferred resource of 4.4 Mt LCE (Indicated 1.0Mt, Inferred 3.4Mt) (refer ASX announcement 27 November 2018). A pre-feasibility study (PFS) by a tier 1 engineering firm over Kachi shows a large, long-life low-cost potential operation with competitive production costs at the lower end of the cost curve similar to current lithium brine producers (refer ASX announcement 28 April 2020).

4. **Sustainable ESG Benefit:** The environmental footprint is far smaller than conventional brine evaporation processes or of hard rock mining. By using a benign water treatment process to produce lithium, Lake avoids any mining and returns virtually all water (brine) to its source without changing its chemistry (apart from lithium removal). This avoids the "water politics" in arid environments and is a better outcome for local communities. Tier 1 electric vehicle makers and Tier 1 battery makers have been seeking more sustainable, responsibly sourced materials in their supply chain which has driven demand for our products.

An innovative direct extraction technique, based on a well-used ion exchange water treatment method, has been tested for over 18 months in partnership with Lilac Solutions, with a pilot plant module operating on Kachi brines and has shown 80-90% recoveries. Battery quality lithium carbonate (99.9% purity) has been produced from Kachi brine samples with very low impurities (Fe, B, with <0.001 wt%) (refer ASX announcement 9 January 2020). Test results were incorporated into a Pre-Feasibility Study (PFS). The Lilac pilot plant module in California is producing samples for downstream participants. A pilot plant on site is planned to produce larger battery quality lithium samples. Discussions are advanced with downstream entities, as well as financiers, to develop the project.

On 3 July 2020, Lake Resources announced that the first samples of lithium chloride had been successfully produced from Lilac Solution's direct extraction pilot plant module, supporting the scale-up from previously successful lab-scale work. In the coming weeks, lithium carbonate samples will be available for downstream supply chain participants and off-takers. The sector continues to see positive news around demand and issues have been highlighted with a pending shortfall of supply of clean battery quality lithium.

Lake's other projects include the Olaroz and Cauchari brine projects, located adjacent to major world class brine projects in production or construction, including Orocobre's Olaroz lithium production and adjoins the impending production of Ganfeng Lithium/Lithium Americas' Cauchari project. Lake's Cauchari project has shown lithium brines over 506m interval with high grades averaging 493 mg/L lithium (117-460m) with up to 540 mg/L lithium. These results are similar to lithium brines in adjoining leases and infer an extension and continuity of these brines into Lake's leases (refer ASX announcements 28 May, 12 June 2019).

For more information on Lake, please visit <http://www.lakeresources.com.au/home/>