For personal use only

ASX & OTC
ANNOUNCEMENT

LAKE RESOURCES
CLEANER LITHIUM FOR AN ELECTRIC WORLD

21 Nov 2022

Lake Resources Provides Kachi Project Update

- **Lake Resources and Lilac Solutions have concluded dispute resolution in the form of contract amendment, proceeding with a "one team" approach for project delivery**
- **Demonstration plant operating continuously at 90 percent of steady state, over 600 hours to date, toward the 1,000-hour requirement**
- **Lithium Chloride concentrates produced well within specified concentration limits, confirming previous test results**
- **Demonstration plant on-site observation and validation by Hatch Ltd is planned to take place in the near term**

Clean lithium developer Lake Resources NL (ASX: LKE; OTC: LLKKF) (LAKE) is pleased to advise that a contract amendment has been signed to resolve the dispute between Lilac Solutions ("Lilac") and Lake Resources ("Lake"). This amendment allows the teams to reset the relationship and jointly focus on delivery of the world class Kachi Project which will lead the industry in terms of high-quality Lithium produced with a minimal environmental footprint. In resolving the dispute, Lake and Lilac have agreed to an amended timeline which both are confident can be achieved; as before, Lake will have certain buy back rights if Lilac does not meet agreed testing criteria in a timely manner.

Lilac and Lake continue work at the Kachi Project Demonstration Plant, with performance of the plant in line with expectations. The Demonstration Plant has now produced more than 15% of the total Demonstration Plant forecast output in the short period since the Plant came online this quarter. 20,000 litres of LiCl have been produced to date and ongoing production is proceeding, consistent with the Demonstration Plant's planned operational schedule.

The Demonstration Plant is currently operating continuously at 90 percent of steady state capacity, volume, and production. Hatch Ltd engineering personnel will travel to Argentina to observe and validate the operations of demonstration plant in steady state in coming weeks.

The Kachi Demonstration Plant continues to produce in-spec LiCl solution between 1900 and 3800 mg/L. Previous testing on Kachi brines at Lilac's California headquarters Oakland delivered 1400-2354mg/L.

Lilac Solutions is preparing samples for shipment to Saltworks and Lilac's facility in Oakland CA for conversion into Lithium Carbonate.

Lake CEO and MD David Dickson said the progress and test work being achieved was promising.

"We are fortunate to be working with Lilac as our partner, who is equally interested in doing things differently so we can efficiently deliver the large volumes of high-quality lithium chemicals needed by battery makers.

"Importantly, this lithium can be produced cleanly and in a way that respects and involves local communities and protects the environment.

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

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

"Lilac has worked extensively with Kachi brine since 2020, generating the data needed for engineering studies. These next steps, along with the strong alignment of our companies, are quite encouraging," he said.

Lilac Solutions CEO David Snydacker commented, "Lilac and Lake are working together closely to set a new standard for pace of project development in the lithium industry. Progressing the on-site plant from completion of construction to shipping of on-spec bulk samples of lithium chloride in just two months is significantly faster than conventional projects move, where commissioning of evaporation ponds typically takes many years. We expect to continue to improve upon the traditional project development timeline as we advance toward commercial production, ultimately bringing the Kachi project on-line years ahead of competing projects. This will put the Kachi project in an excellent position to supply the lithium raw material urgently needed by automakers and capture the high prices we see in the market due to the failure of conventional approaches."

This announcement has been authorised for release by Executive Chairman Stu Crow following approval from the Lake Resources board.

For personal use only

Lake Investors please contact:
Twitter: https://twitter.com/Lake_Resources
LinkedIn: https://www.linkedin.com/company/lake-resources/
Facebook: https://www.facebook.com/LakeResources
Website: http://www.lakeresources.com.au
Join Lake's mailing list: http://eepurl.com/gwA3o9
IR: Anthony Fensom, Republic PR, +61 (0) 407 112 623, anthony@republicpr.com.au

For media queries, please contact:
Nigel Kassulke at Teneo
M: +61407904874
E: Nigel.Kassulke@teneo.com

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

Clean high purity lithium using efficient disruptive clean technology - in demand by EV makers and lithium-ion batteries

Lake Resources NL (ASX:LKE, OTC: LLKKF) is a clean 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 among three other projects covering 220,000 ha.

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.

1. **Climate-Tech**: Efficient, disruptive, clean, cost-competitive technology using well-known water treatment re-engineered for lithium (not mining). Technology partner, Lilac Solutions Inc, is supported by the Bill Gates led Breakthrough Energy fund, MIT's The Engine fund, Chris Sacca's Lowercarbon Capital, BMW, Sumitomo, and SK Materials. Lilac will earn in to the Kachi Project, up to a 25% stake, based on certain milestones and then be expected to fund their c.US$50 million pro-rata share (refer ASX announcement 22 September 2021)

2. **High Purity**: 99.97% purity lithium carbonate samples for a premium price. Demonstrated high quality in nickel rich NMC622 lithium-ion batteries (refer ASX announcement 20 October 2020; 2 March 2021).

3. **Sustainable /ESG**: Far smaller environmental footprint than conventional methods, that returns virtually all water (brine) to its source with a low CO2 footprint.

4. **Prime Location, Large Projects**: Flagship Kachi project in prime location among low-cost producers with a large lease holding (74,000 ha) and expandable resource (4.4 Mt LCE) of which only 20% is used for 25 years production at 25,500tpa (JORC Resource: Indicated 1.0Mt, inferred 3.4Mt, refer ASX announcement 27 November 2018). Pre-feasibility study by tier 1 engineering firm shows large, long-life low-cost operation with US$1.6 billion NPV pre-tax, and annual EBITDA of US$260 million from 2024 (refer ASX announcement 17 March 2021; 28 April 2020). (No changes to the assumptions in the resource statement or the PFS have occurred since the announcement date. The DFS will use a base case of 50,000 tpa LCE.)

5. **Finance Indicatively Available**: Long duration, low-cost project debt finance for the Kachi Lithium Project is indicatively available from the United Kingdom's Export Credit Agency UKEF and Canada's EDC with Expressions of Interest to support approx. 70% of the total finance required for Kachi's development, subject to standard project finance terms (refer ASX announcements 11 August 2021; 28 September 2021).

An innovative ion exchange extraction technology, 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 in California operating on Kachi brines and has shown 80-90% recoveries. Battery quality lithium carbonate (99.97% purity) has been produced from Kachi brine samples with very low impurities (refer ASX announcement 20 October 2020). The first samples of high purity (99.97% purity) battery quality lithium carbonate were tested in a NMC622 battery by Novonix with excellent results (2 March 2021).

This method of producing high purity lithium can revolutionise and disrupt the battery materials supply industry as it's scalable, low cost, and delivers a consistent product quality with a significant ESG benefit.

Lake's other projects include the Olaroz and Cauchari brine projects, located adjacent to major world class brine projects in production or construction, including Allkem'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 12 June 2019, 23 March 2021).

For personal use only