

14 February 2022

Lake Initiates Expansion Strategy - TARGET 100 Program - to Fast-track Lithium Projects in Argentina.

- **Lake Resources initiates expansion and integration strategy to fast-track its portfolio of assets in Argentina.**
- **TARGET 100 Program has the goal of annually producing 100,000 tonnes of high purity lithium chemical to market by 2030.**
- **Drilling and testing to commence across three new lithium projects.**
- **TARGET 100 Program brings forward the development of Lake's 100 %-owned Olaroz, Cauchari and Paso lithium projects to ensure multi-asset lithium expansion to address the anticipated supply deficit of high purity lithium.**
- **Follows planned production at Lake's flagship Kachi Lithium Brine Project being set at 50,000 tonnes/year (tpa) lithium carbonate in the Definitive Feasibility Study (DFS).**

Clean lithium developer Lake Resources NL (ASX: LKE; OTC:LLKKF) is bringing forward a US\$15 million program across its three 100-percent owned projects - **Olaroz, Cauchari and Paso** - for drilling and brine testing to fast-track these projects into feasibility studies in the TARGET 100 Program.

Lake has initiated an expansion and integration strategy to fast-track its portfolio of assets in Argentina to deliver the TARGET 100 Program – being the aspirational goal to produce annually 100,000 tonnes of high purity lithium to market by 2030.

A separate exploration and testing team dedicated to rapid development across Lake's three other brine projects in Argentina will be utilising the comprehensive data set developed during the Kachi project's direct extraction processing test work.

The drilling program has started with the first rotary well of a 4000m 10-hole program, in the northern areas of the Olaroz leases, which cover a 30km long area on the eastern side of established lithium producers. These projects are located in Jujuy province, in the north-west of Argentina, close to the Allkem (Orocobre) Olaroz operation and the Lithium Americas – Ganfeng JV Cauchari project.

The drill wells are designed to quickly quantify brines identified, develop the aquifers, and conduct pumping tests and provide data for initial feasibility studies. Rotary wells will be followed later by diamond holes.

Brines will be sampled and tested with environmentally friendly direct lithium extraction method, similar to previous work conducted on Kachi project lithium brines.

"Direct lithium extraction, to be used on Lake's multiple lithium projects, can deliver scalable projects faster to market and supply rapidly increasing demand", Lake's Managing Director, Mr Steve Promnitz, said.

Lake's Chairman, Mr Stu Crow, said that discussions with potential partners to assist the fast-tracking of these assets into production is underway as part of Lake's ongoing discussions with battery metals customers and Lake's desire to become an integrated and valuable part of the global supply chains.

LAKE RESOURCES NL

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

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

Mr Crow also said the four reasons in making the formal decision to expand the Kachi project has also given the company confidence to fast-track expansion and integration of Lake’s other assets in Argentina:

1. the increasing demand by prospective offtake partners for a secure supply chain of environmentally friendly high purity lithium carbonate;
2. the indicative support to fund new projects by Export Credit Agencies and the international bank panel. The UK and Canada Export Credit Agencies have already indicated a willingness to project debt finance around 70 percent of the Kachi project’s capital requirements (ASX announcement 11 Aug 2021);
3. the supportive investment policies of the Argentine Government who have announced a process to lower export taxes as part of the Strategic Plan for Mining Development;
4. the confidence of technology partner Lilac Solutions that its modular direct lithium extraction technology is scalable and cost effective.

“This, combined with increasing customer and consumer scrutiny around the environmental credentials of lithium production; and concerns about security of supply has given us the confidence to fast-track these developments,” Mr Crow said.

Lake Investors please contact:

Steve Promnitz, Managing Director

steve@lakeresources.com.au +61 2 9188 7864

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

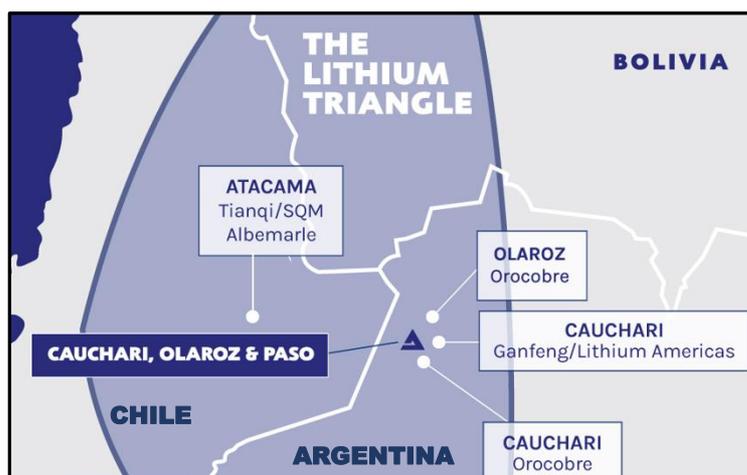


Figure 1. Location of Lake’s Cauchari, Olaroz and Paso Projects in Jujuy Province, Argentina.



Figure 2. The rotary drill rig operating at the first drillhole at Lake’s Olaroz Project.



Figure 3. Image of Lake’s Olaroz Project in the distance, looking east.



Figure 4. Previous Lake drill results at Cauchari Project from 2019, in relation to adjoining projects.



Figure 5. Location of Olaroz and Paso Projects in relation to other companies in the area.

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

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

Lake Resources NL (ASX:LKE, OTC: LLKF) is a clean lithium developer utilising direct 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 direct extraction method 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) used for 25 years production at 50,000tpa (JORC Resource: Indicated 1.0Mt, inferred 3.4Mt, refer ASX announcement 27 November 2018). Pre-feasibility study at 25,500tpa by tier 1 engineering firm shows large, long-life low-cost operation with US\$1.6 billion NPV pretax, and annual EBITDA of US\$260 million from 2024 using past pricing of US\$15,500/tonne lithium carbonate (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.)

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 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 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 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 12 June 2019, 23 March 2021).

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