

Lake Resources begins DFS at Argentine low impurity lithium brine project

smallcaps.com.au/lake-resources-dfs-argentine-low-impurity-lithium-brine-project/

January 11, 2021

By

Robin Bromby

-



Lake Resources (ASX: LKE) has kicked off a definitive feasibility study (DFS) at its Kachi lithium brine project in Catamarca province, Argentina, the results to be available in the first quarter of 2022.

Kachi's big advantage is that the brine is very low on impurities and the company has already delivered lithium carbonate samples at 99.97% purity.

The company has been working with Lilac Solutions at Oakland, California, with a pilot plant.

Lake will be using Lilac's sustainable direct lithium extraction technology.

Lake Resources says the DFS builds upon the "compelling and robust" pre-feasibility study which was released last April.

“The DFS is an important milestone in the development of the Kachi lithium brine project as a sustainable and commercially successful producer of high-quality lithium product for the rapidly growing battery market,” the company says.

Biden plan to boost lithium demand

This latest development comes on the brink of a Biden administration taking office in Washington D.C. with its commitment to an ambitious renewable energy and battery storage program that is expected to boost demand for lithium.

The latest developments the Europe also back projects producing lithium with environmental safeguards.

Managing director Steve Promnitz said that, last month, the European Commission proposed tighter regulations on all types of batteries, including the use of responsibly sourced materials and carbon footprint labelling.

“Lake Resources, with its technology partner Lilac, is uniquely positioned to deliver this high-quality lithium product with leading ESG (environmental, social, governmental) credentials,” he added.

‘Perfect storm’ for lithium

Meanwhile, chairman Stuart Crow says the lithium sector is now in the “perfect storm”, with trillions of dollars being committed globally to renewable energy projects.

The company is looking to supply auto manufacturers with a sustainable product.

Apart from the DFS, Lake is proceeding with its environmental impact study, continuing to engage with the local community, and looking to commission an on-site demonstration plant later this year.

Lake has also appointed one of its non-executive directors, Nicholas Lindsay, as technical director. Dr Lindsay is experienced in South American feasibility studies.

Kachi is located in the “lithium triangle” — a vast basin of brine resources straddling the borders of Argentina, Chile and Bolivia.

Kachi was last year ranked as one of the world’s top 10 brine resources.

In November 2018, Lake announced a maiden JORC resource at its Kachi Project of 4.4 million tonnes (Mt) of contained lithium carbonate equivalent, and an exploration target ranging between eight and 17 million tonnes.

Of that 4.4Mt, only 20% will be used for the first 25 years of production.

New process slashes production time

Mr Promnitz, in acquiring the four brine and one pegmatite deposits, applied the lessons learned from his years working at a couple of mine majors by taking a large landholding and all 100% controlled.

Lake will be using a direct extraction process.

Rather than wait months for extracted water to evaporate, the ion-exchange method extracts the lithium within a few hours versus nine to 24 months for the evaporation process.

The process has been tested over an 18-month period by Lilac.

Moreover, the quality of the water sent back to the aquifer is not significantly changed.

“This method of producing high purity lithium can revolutionise and disrupt the battery metals supply industry as it’s scalable, low cost and delivers a consistent quality product,” the company says.

Kachi covers 70,000 hectares.

Join Small Caps News

Get notified of the latest news, events, and stock alerts.