

ASX Market Announcements Office

FURTHER CONDUCTIVE BRINES IN CAUCHARI DRILLING

- Further conductive brines have been intersected with high flows at Lake's Cauchari Lithium Brine Project, Argentina.
- Drill rig currently below 300m targeting a 350-450m horizon within the next 7-10 days that is anticipated to show higher lithium values within a sand horizon.
- Results show continuity of lithium brine horizons from adjoining world-class major project in pre-production stage.

Lake Resources NL (ASX: LKE) announced today further conductive brines with high flows were intersected in drilling at its 100% owned Cauchari Lithium Brine Project in Argentina as the hole progresses to the target depth.

The drill rig is below 300m, after having encountered challenging drilling conditions due to high fluid pressures and gravel/sand horizons. The target is a sand horizon estimated between 350-450m which has recorded higher lithium values and fluid flows in the adjoining project.

Recent lithium brine results with lithium values up to 538 mg/L show continuity of a number of lithium brine horizons into Lake's leases from adjoining major projects (Figures 1-4) in pre-production with Ganfeng/Lithium Americas (LAC). Conductive brines under pressure were intercepted and sampled at a depth around 290m, with high conductivities and density readings of 1.200 g/cm3. This further increases Lake's confidence in Cauchari and Lake's ability to replicate the success of nearby multi-billion-dollar projects located in the heart of the Lithium Triangle.

Current drilling aims to unlock value from this exciting project, which is growing in scale located immediately adjacent to a world-class brine project in pre-production in the Lithium Triangle, approximately 500m from the Ganfeng/Lithium Americas Cauchari project.

Commenting on the latest update, Lake's Managing Director Steve Promnitz said: "Lake is on track to finally reach the target horizon soon at Cauchari and declare a major discovery. A series of brine horizon continue to be intersected prior to the target horizon.

"Cauchari is rapidly gaining momentum as a highly valuable project for Lake, adding to our portfolio of 100% owned projects in the heart of the Lithium Triangle, including Olaroz and the world-class Kachi project. With talks progressing with potential development partners, we are in an excellent position to deliver increased value for shareholders."

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Figure 1: Foraco diamond drill rig (right) and rotary rig at Cauchari overlooking the Cauchari salt lake and development of the adjoining pre-production areas of Ganfeng / Lithium Americas.



Figure 2: Lithium bearing brines flowing out of the drill head (pale yellow upside down cup shape) from high pressure horizons

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Figure 3: Foraco diamond drill rig (left) and rotary rig at Cauchari.



Figure 4: Cauchari Lithium Project, with adjoining Ganfeng / Lithium Americas project and Orocobre / Advantage Lithium project showing interpreted West Fan Unit and the targeted Lower Sand Unit (Orocobre announcement and Advantage Lithium announcement 24/04/19 – Figure 7.10 from NI43-101 report). Lake interprets the western boundary (left hand side) to be steep and faulted rather than dipping 45 degrees as in this diagram.

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Figure 5: Cauchari Lithium Project, with adjoining Ganfeng / Lithium Americas combined resource and Orocobre / Advantage Lithium combined resource with (Orocobre announcements 7/11/2017, 4/12/2017, 18/01/2018, 15/03/19; Advantage Lithium announcement 5/3/2018, 10/01/2019, 7/03/19, 24/04/19). (Third Party Resource details summarised in LKE's ASX announcement dated 6 Sept 2018)

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Exploration Hole	Drilling Method	Easting	Northing	Elevation	Total Depth (m)	Azimuth / Dip (deg)	Assay Interval (m)	Lithium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)
CW01D01	Diamond	3418810	7373543	3948	205 (*)	90	136m	148	586	1290
							186m	452	1590	4330
							186m	480	1650	4580
							196m	TBA		
							214m	TBA		
							256m	TBA		
							261m	538	1200	3270
							274m	TBA		
							280m	TBA		
							286m	TBA		
							TBA			
CW01R02	Rotary	3418801	7373545	3948	230 (*)	90				

Table 1: Cauchari Lithium Project – details of drill-hole locations

* = Hole advancing, not completed

Coordinates are Argentine POSGAR Zone3 (UTM19)

Competent Person's Statement – Kachi Lithium Brine Project

The information contained in this ASX release relating to Exploration Results has been compiled by Mr Andrew Fulton. Mr Fulton is a Hydrogeologist and a Member of the Australian Institute of Geoscientists and the Association of Hydrogeologists. Mr Fulton has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a competent person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Andrew Fulton is an employee of Groundwater Exploration Services Pty Ltd and an independent consultant to Lake Resources NL. Mr Fulton consents to the inclusion in this announcement of this information in the form and context in which it appears.

About Lake Resources NL (ASX:LKE)

Lake Resources NL (ASX:LKE, Lake) is a lithium exploration and development company focused on developing its three lithium brine projects and hard rock project in Argentina, all owned 100%. The leases are in a prime location among the lithium sector's largest players within the Lithium Triangle, where half of the world's lithium is produced. Lake holds one of the largest lithium tenement packages in Argentina (~200,000Ha) secured in 2016 prior to a significant 'rush' by major companies. The large holdings provide the potential to provide consistent security of supply, scalable as required, which is demanded by battery makers and electric vehicle manufacturers.

The Kachi project covers 69,000 ha over a salt lake south of FMC's lithium operation and near Albemarle's Antofalla project in Catamarca Province. Drilling at Kachi has confirmed a large lithium brine bearing basin over 20km long, 15km wide and 400m to 800m deep. Drilling over Kachi (currently 16 drill holes, 3100m) has produced a maiden indicated and inferred resource of 4.4 Mt LCE (Indicated 1.0Mt and Inferred 3.4Mt) (refer ASX announcement 27 November 2018).

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A direct extraction technique is being tested in partnership with Lilac Solutions, which has shown 80-90% recoveries and lithium brine concentrations in excess of 25000 mg/L lithium. Phase 1 Engineering Study results have shown operating costs forecast at US\$2600/t LCE in the lowest cost quartile (refer ASX announcement 10 December 2018). This process is will be trialed on site with a pilot plant in tandem with conventional methods as part of the PFS underway. Discussions are advanced with a number of downstream entities, mainly battery makers, to jointly develop the project.

The Olaroz-Cauchari and Paso brine projects are located adjacent to major world class brine projects either in production or being developed in the highly prospective Jujuy Province. The Olaroz-Cauchari project is located in the same basin as Orocobre's Olaroz lithium production and adjoins Ganfeng Lithium/Lithium Americas Cauchari project, with high grade lithium (600 mg/L) with high flow rates drilled immediately across the lease boundary.

A new drill rig is being used to increase the depth capacity and speed at Cauchari. High grades and high flow rates have been reported over a series of horizons, similar to lithium brine horizons announced from adjoining pre-production areas under development. Results provide further confirmation of the continuity of lithium bearing horizons and demonstrate that Lake is drilling in the same basin as adjoining world-class major projects (refer ASX announcements 28 May, 12 June 2019). Better results are anticipated at depth. High fluid pressures have meant that conditions are challenging. This will be followed by drilling extensions to the Olaroz area in LKE's 100% owned Olaroz leases.

Significant corporate transactions continue in adjacent leases with development of Ganfeng Lithium/Lithium Americas Cauchari project with Ganfeng announcing a US\$237 million for 37% of the Cauchari project previously held by SQM, followed by a further US\$160 million to increase Ganfeng's equity position to 50% on 1 April 2019, together with a resource that had doubled to be the largest on the planet. Ganfeng then announced a 10 year lithium supply agreement with Volkswagen on 5 April 2019. Nearby projects of Lithium X were acquired via a takeover offer of C\$265 million completed March 2018. The northern half of Galaxy's Sal de Vida resource was purchased for US\$280 million by POSCO in June-Dec 2018. LSC Lithium was acquired in Jan-Mar 2019 for C\$111 million by a mid-tier oil & gas company with a resource size half of Kachi. These transactions imply an acquisition cost of US\$55-110 million per 1 million tonnes of lithium carbonate equivalent (LCE) in resources.

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

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