



## HIGHLIGHTS

- **Major 4.4 million tonnes lithium carbonate (LCE) JORC Resource released at the Kachi Lithium Brine Project with 1.0 million tonnes Indicated and 3.4 million tonnes Inferred resource categories.**
- **Kachi brine resource amongst the Top 10 global lithium brine resources, based on 15 holes (3150 metres) to depths of 400 metres in permeable sands.**
- **Phase 1 Engineering Study showed US\$2600/tonne LCE operating costs (+/-30%) with Lilac Solutions direct lithium extraction process for the Kachi lithium brine.**
- **Rapid, robust, low-cost process Lilac option for producing lithium at Kachi generating a brine concentrate of over 25,000 mg/L lithium.**
- **Exploration Target defined at Kachi with 8-17 million tonnes LCE potential over a 20km x 15km area.**
- **Cauchari and Olaroz drilling program outlined for the coming months adjoin large scale lithium brine resources Orocobre production (ASX:ORE) and Ganfeng/Lithium Americas pre-production areas (NYSE:LAC).**
- **Drilling continues at Cauchari to test extensions of adjoining world-class brine resources.**
- **Leases expanded to over 200,000 hectares with four lithium projects in prime locations in Argentina, including an increase of 25% at Kachi.**
- **Funding of \$1.25 million raised in December in notes and options conversions.**

31 January 2019

**Lake Resources N.L.**  
**ASX:LKE**

Shares on Issue:  
366,141,783

Options Unlisted:  
5,052,083 (5c, 21 Oct'19)  
9,500,000 (28c, Dec'20)

Unsecured Notes:  
9,900,000 (25 Jun'20)

Market Capitalisation:  
\$23 million (@6.3c)

Share Price Range:  
\$0.06 – 0.30 (12mth)

Cash Position:  
\$0.5 million

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**LAKE RESOURCES N.L.**  
**QUARTERLY REPORT – ENDING 31 DECEMBER 2018**

Lake Resources NL is an exploration and development company with one of the largest lithium lease holdings in Argentina recently expanded to over 200,000 hectares with four prime lithium projects: 3 brine projects and 1 hard rock project.

The Kachi Lithium Brine Project has a recently announced maiden resource of 4.4 million tonnes lithium carbonate (LCE) within an exploration target of 8-17 million tonnes LCE, within consolidated mining leases enlarged to cover 69,000 hectares over almost an entire salt lake. This places the resource amongst the Top 10 global lithium brine resources (Figure 2).

The Olaroz-Cauchari and Paso Projects in Jujuy province are adjacent to Orocobre and Ganfeng/Lithium Americas and are being drilled for the first time. The objective is to show that extensions to known major resources of over 15 million tonnes LCE continue into Lake's properties

The Catamarca Pegmatite Lithium Project, recently enlarged to over 80,000 hectares, is at an early exploration stage and displays large pegmatite swarms over an area of past production within a 150km long belt.

## **OPERATIONS**

### **Kachi Lithium Brine Project - Catamarca Province, Argentina**

#### **Summary**

Lake Resources' 100%-owned Kachi Lithium Brine Project in Catamarca province, NW Argentina, covers a consolidated package of 36 mining leases recently expanded to 69,000 hectares (170,000 acres), centred around a previously undrilled salt lake within a large lithium brine-bearing basin. Kachi is one of the few salt lakes in Argentina with substantial identified lithium brines fully controlled by a single owner.

The Kachi Project maiden JORC Mineral Resource estimate released in late November 2018 is 4.4 million tonnes of contained Lithium Carbonate Equivalent (LCE) in Inferred and Indicated Categories extending to 400m below ground level in porous permeable sediments. This contains 1 Mt LCE as Indicated resources, and 3.4 Mt of LCE as Inferred resources, with a resource depth of 400m for both areas (see Table 1) at an average grade of 211 mg/L lithium and Mg/Li ratio of 4.7,. In total, this is 1,092,500 tonnes of lithium metal (4.4 million tonnes of lithium carbonate), and 30 million tonnes of Potassium Chloride. This is within the Top 10 lithium brine projects globally and a similar size to major lithium brine producers in Argentina and Chile. Brine-bearing sediments remain open at depth and laterally, with the opportunity for resource expansion through additional deeper drilling and extending the exploration footprint

The Phase 1 Engineering Study with technology partner Lilac Solutions shows potential for lithium production costs to be US\$2600/tonne (+/-30%), which is in the lowest quartile of the cash cost curve, using Lilac's direct extraction process on the Kachi brines. High lithium recoveries of 85-90% were confirmed from multiple brine samples, with lithium concentrations greater than 25,000 mg/L produced from ~300 mg/L lithium brine. An on-site pilot plant is planned for 2019 as part of pre-feasibility study (PFS), which is a precursor to full-scale commercial project offering rapid, low-cost production with low environmental impact.

#### **Kachi Project**

The Kachi Project covers the lowest point (~3000 m altitude) of a large drainage area of over 6,800 square kilometres (2500 square miles), sourcing lithium from acid volcanics of Cerro Galan, which is interpreted to also provide the lithium for at the Salar de Hombre Muerto. This large drainage covers the areas immediately south of Livent's Hombre Muerto Lithium brine operation (NYSE:LTHM) which is Argentina's longest operating lithium

brine project and Galaxy Resources (GXY.ASX) Limited's Sal de Vida lithium brine project. It is also close to Albemarle Corp's Antofalla lithium potash brine development project.

Resource drilling and geophysics have confirmed a large scale, consistent lithium brine body within a large deep salt lake basin with an area of 20 x 15 kilometres and 400-800 metres deep. Drilling has returned positive lithium values in the southwest of the project, where the passive seismic geophysics suggests the basin is the deepest, and brine extends under cover to the south.

The Company has completed a total of 3150m of drilling to date in 15 rotary and diamond drill holes to depths up to 403m into the Kachi lithium brine-bearing sediments since November 2017. Results demonstrate thick permeable sand dominated sediments hosting the lithium brines that are expected to continue below current drilling depth limits and beyond the surface dimensions of the salt lake, and indicate the likely extension to the south potentially at similar grades and to greater depths.

Consistent results have been delivered, with highest grades to date from the most recent drill-hole K08R14 averaging 326 mg/L lithium with low impurities and low average Mg/Li ratio of 3.7 (3.4 – 4.8).

The table below (Table 1) outline the resource reported in accordance with the JORC Code (2012) and estimated by a Competent Person as defined by the JORC Code.

**Table 1: Kachi Mineral Resource Estimate - November 2018 (JORC Code 2012 Edition)**

RESOURCE ESTIMATE KACHI						
	Indicated		Inferred		Total Resource	
Area km <sup>2</sup>	17.10		158.30		175.40	
Aquifer volume km <sup>3</sup>	6		41		47	
Brine volume km <sup>3</sup>	0.65		3.2		3.8	
Mean drainable porosity % (Specific yield)	10.9		7.5		7.9	
Element	Li	K	Li	K	Li	K
Weighted mean concentration mg/L	289	5,880	209	4,180	211	4380
Resource tonnes	188,000	3,500,000	638,000	12,500,000	826,000	16,000,000
<b>Lithium Carbonate Equivalent tonnes</b>	<b>1,005,000</b>		<b>3,394,000</b>		<b>4,400,000</b>	
<b>Potassium Chloride tonnes</b>	<b>6,705,000</b>		<b>24,000,000</b>		<b>30,700,000</b>	

Lithium is converted to lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>) with a conversion factor of 5.32

Potassium is converted to potassium chloride (KCl) with a conversion factor of 1.91

Mg/Li ratio averages 4.7

Figure 1 and Table 3 provide drill hole location details and lithium results, which are averaged where multiple samples have been taken at a single interval.

### Brine Chemistry

Brines typically with a high density (1.18 - 1.22 g/cm<sup>3</sup>) have been intersected throughout the thick sandy aquifers. Analytical results for lithium to date have been highest (more than 300mg/L lithium) in drill-holes K03R03 and K08R14. Brine samples in these holes display encouraging densities with a favourable Mg/Li ratio of 3.8 to 4.3 respectively, averaging 4.7 across the resource. There is a very high correlation of Lithium with Potassium.

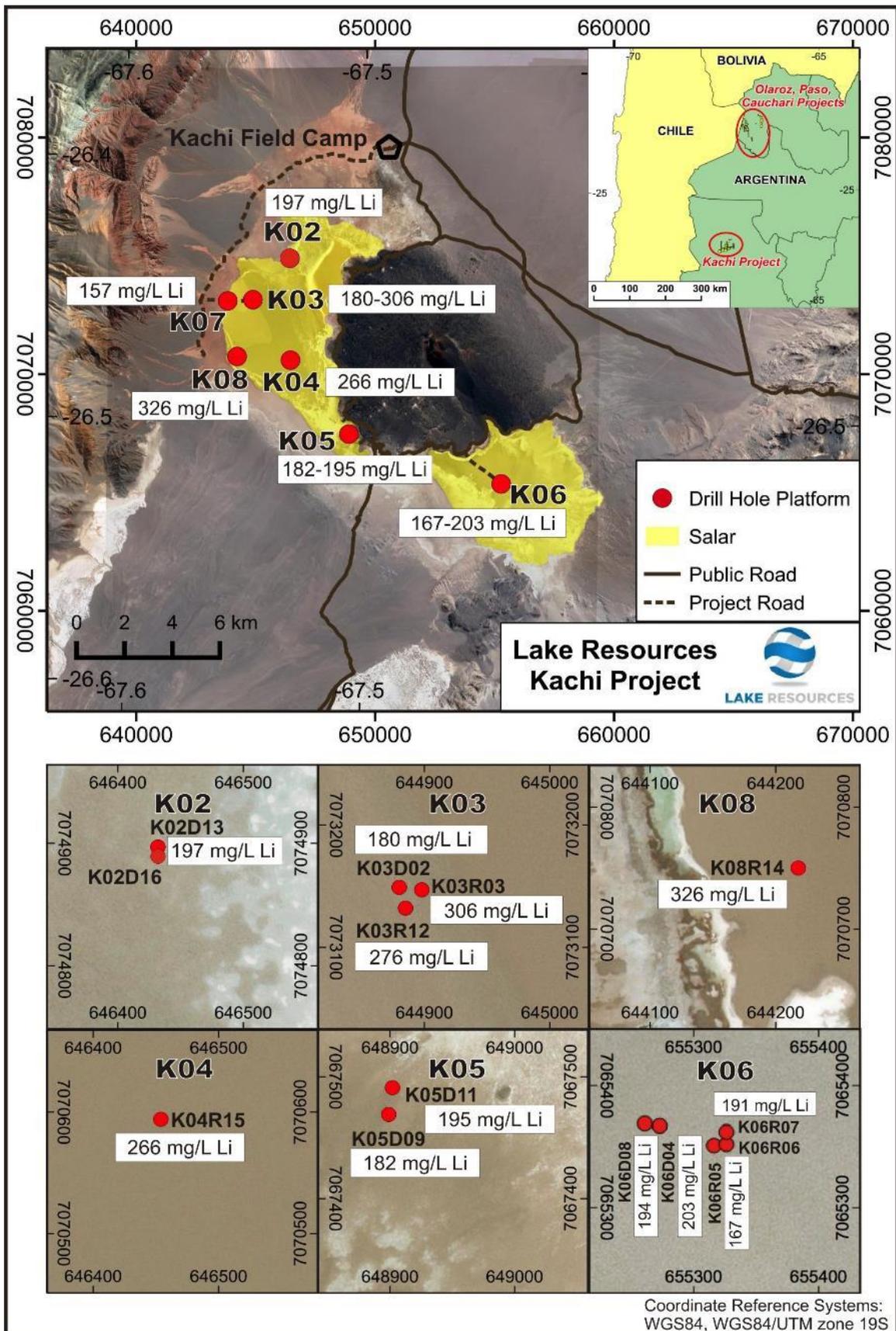


Figure 1. Kachi Lithium Project showing drilling locations and details of the drilling platforms with averaged lithium concentrations for each drill holes.

## Groundwater Hydrology

Diamond drilling intersected thick intervals of intercalated sands, gravels and sandy clays with some clay horizons. The predominant lithology is sand-dominant, and poorly consolidated, with relatively low core recoveries. Initial indications from field hydraulic testing indicate high permeabilities for the sandy material, which will be further tested with the installation of large diameter production test bores. Available down hole geophysics supports the presence of predominantly sandy material.

## Reasonable Prospects for Resource Extraction

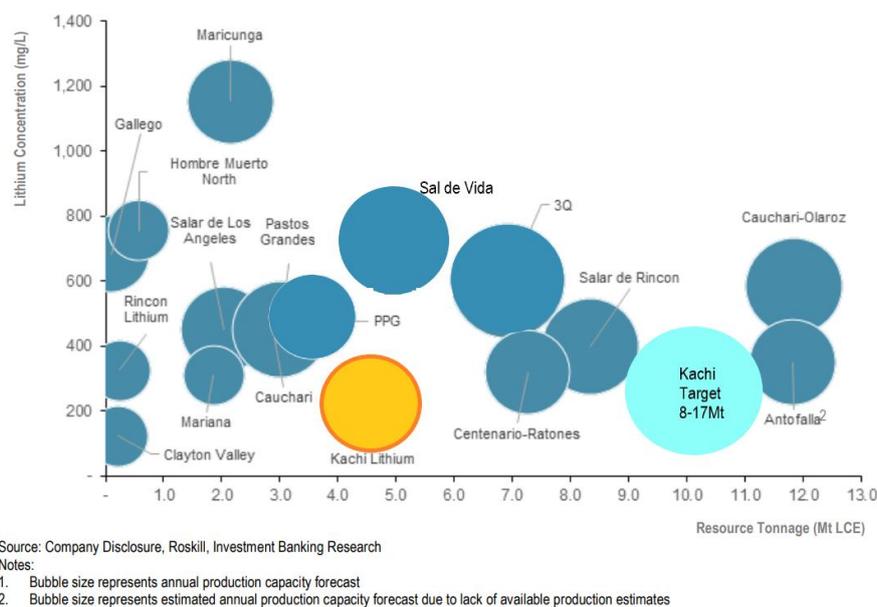
Porosity testing and air lift tests indicate that the porosity and permeability characteristics of the sediments in the resource area are very favourable for brine extraction by pumping. The company is working with lithium processing company Lilac Solutions to evaluate direct extraction of lithium from the Kachi brine. Direct extraction technologies provide many advantages over traditional evaporation pond concentration. As test work is ongoing the eventual potential cut-off grade that may apply to Kachi brine is yet to be determined. Consequently the resource is presented as a global tonnage without application of a cut-off grade.

## Geophysical Mapping

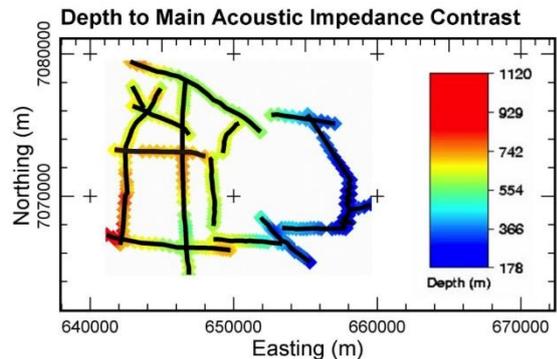
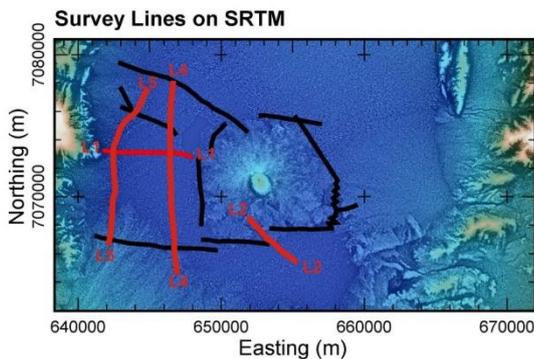
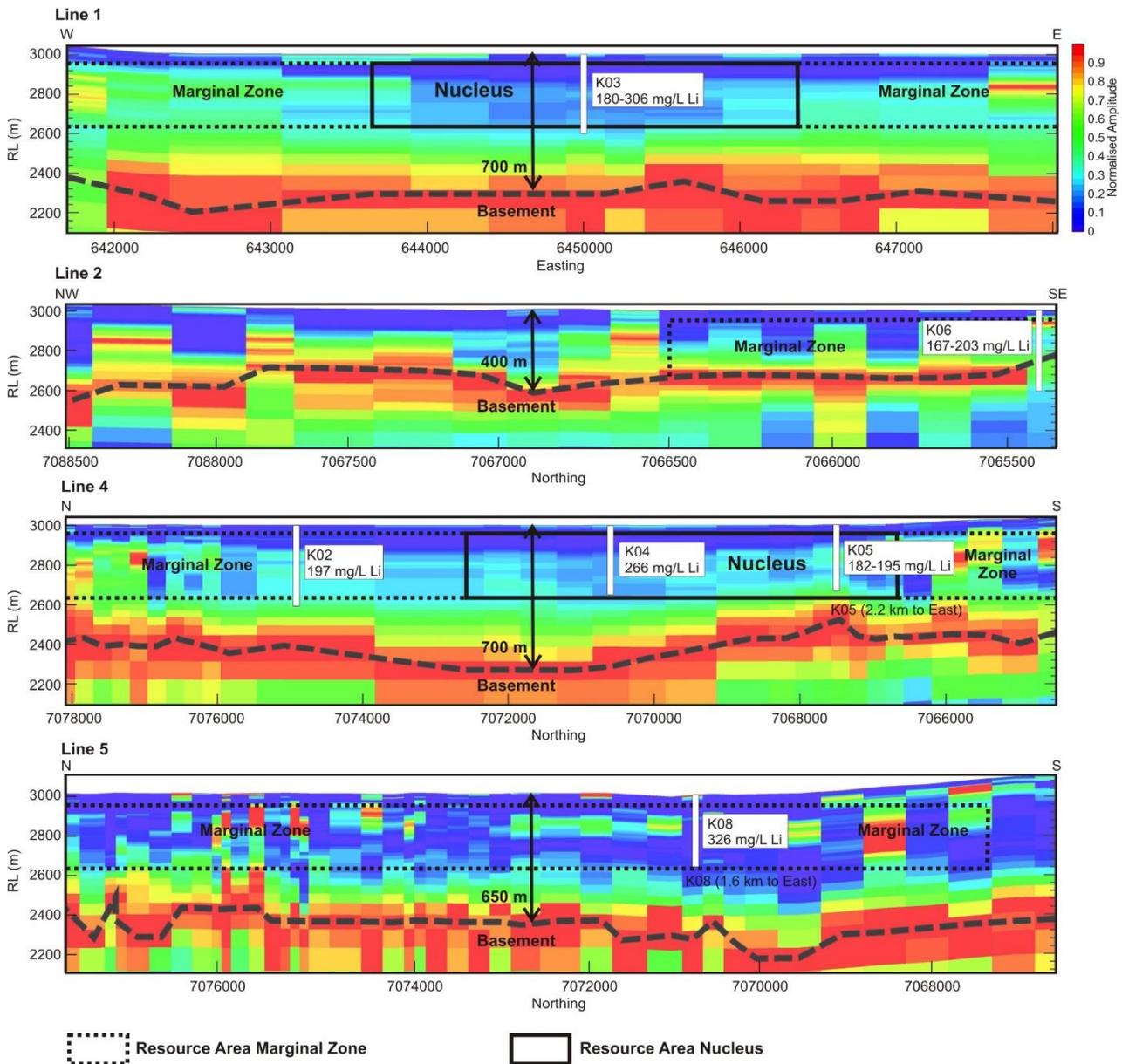
Seismic geophysical mapping of the basin thickness has been undertaken using passive seismic techniques, with the aim of developing an understanding of basin geometry and thickness of the sediments hosting the brine. This method distinguishes lithologies with highly contrasting seismic velocities such as unconsolidated lake sediments and harder cemented sediments, basement rocks or ignimbrites.

The distinct reflectors identified in the survey correlate well with denser lithologies such as a number of ignimbrite units within the predominantly sandy sediments and the thick partially cemented conglomerate likely to overlie basement rocks intersected at 300m depth in K06D08 in the southeast of the project area. Drilling at K06 provides a correlation with the seismic survey and indicates the presence of unconsolidated (probably sandy) sediments to a depth in excess of 500m under gravel cover away from the areas of surface salt where drilling is currently being conducted and in excess of 600m in the vicinity of site K03.

Figure 3 shows a schematic cross-section and raw data used for the interpretation. Importantly the seismic survey also suggests the majority of the basaltic shield forms a thin veneer overlying the salt lake and permeable basin infill likely to host brine also continues beneath surficial ignimbrite further south, considered very positive for the project as it further increases the volume of sediments that potentially host brines.



**Figure 2. Kachi Lithium Project - Current resource and exploration target in relation to global lithium brine projects. Kachi among Top 10 global lithium brine resources** (Source: Galaxy releases; Roskill; Company releases)



Coordinate Reference System  
 EPSG:32719  
 WGS84/UTM zone 19S

# Lake Resources Kachi Project



**Figure 3. Kachi Lithium Project Seismic Profiles showing location and depth to basement together with the depths used in the mineral resource estimate and exploration target calculation (thick dashed black line is the basement reflector).**

## Exploration Target (JORC)

The company released an initial exploration target in November 2018, under the JORC code guidelines, suggesting the potential dimensions of the Kachi project which include the resource statement area. The resource lies entirely within the area of the exploration target and is not additive to it. The geological exploration target area was generated based on the following lines of logic.

Additionally, a passive seismic survey has been undertaken over a large portion of the basin and this has provided a critical insight into basin delineation with summary data presented above showing basin depths in the west extending beyond 700m depth. The seismic profiles show a strong reflection boundary which has shown good correlation with drilling data from Platform K06 in the south east. This reflection boundary corresponds to partially cemented conglomerates, ignimbrites and basement lithologies. Above this are basin infill sediments with lower sediment density, which are sandy and relatively uniform in nature. These correlate to intercalated sands and clays to 400m depth in the drilling to date.

The exploration target area has three primary zones (refer to LKE announcement 7 November 2018). An inner zone with the highest concentration of seismic survey lines and in which all drilling has currently been undertaken. This is the high confidence volume given the data collected to date.

A second, moderate confidence zone, which has seismic profile data but no drilling, surrounds the central high confidence zone where trends from geological analysis indicate considerable thicknesses of lake sediments are present. The brine may also continue outside of this zone as geological and geophysical evidence suggests it is open to the north and south into the low confidence zone.

The inner high confidence zone is further delineated into an Eastern Sector and Western Sector, based around the drilling results and differences in sediment thickness. The western Sector occupies a zone west of the basalt shield volcano where indicated depths are more than 700m.

A range of specific yields was applied to the resulting volumetric zones, 7.5% and 10.9% respectively. Although the average data from physical property testing to date suggests a higher potential value with mean average of all data results for specific yields being 13%, there is some uncertainty of higher value results as these tend to be sand-dominant and easily disturbed during sample collection.

Conversion factors were applied to the resulting mass of Lithium to produce an estimate of Lithium Carbonate (5.32) and for Potassium to Potassium Chloride (1.91). The results are presented in Table 2.

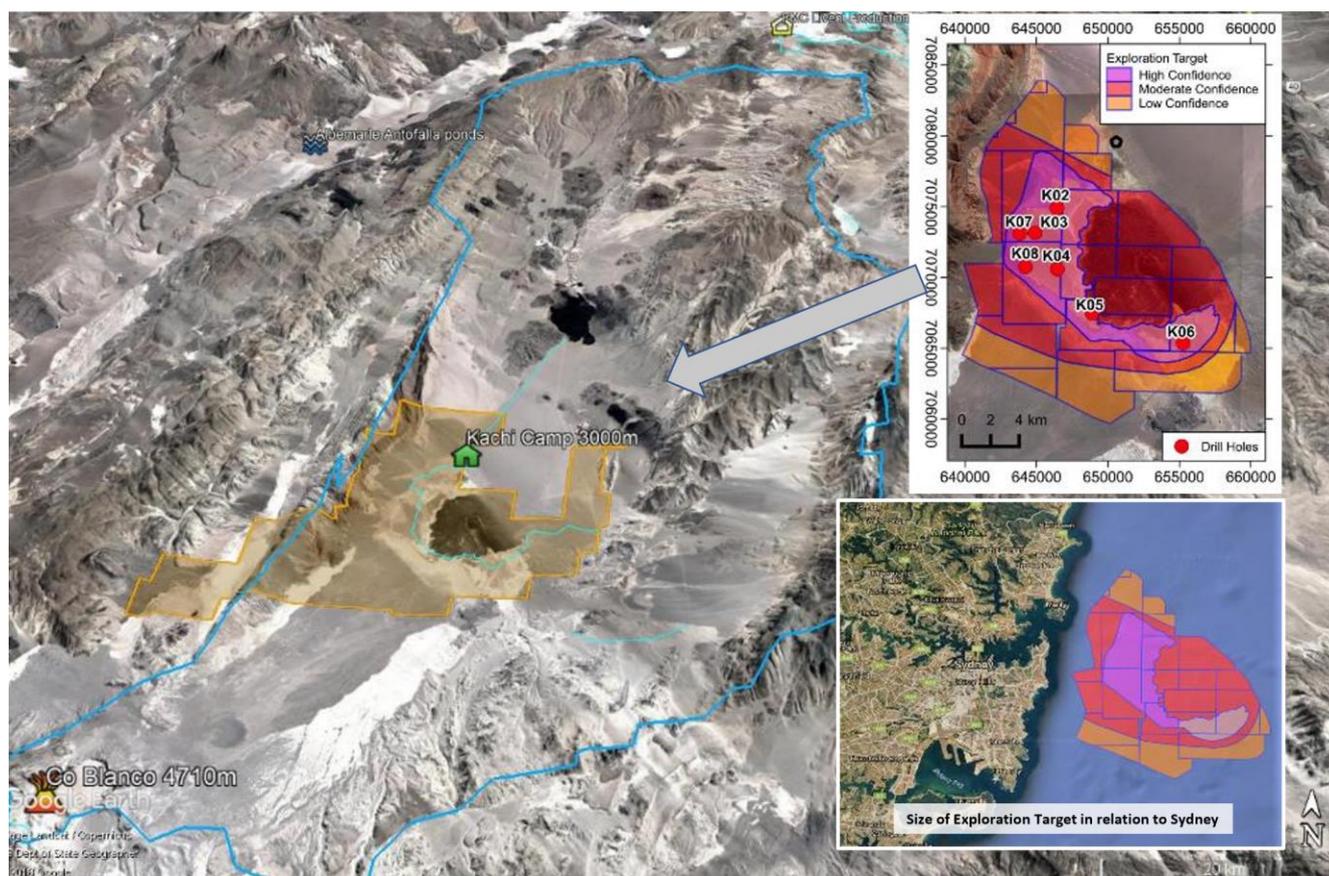
The geological exploration target is estimated to range between **8 million tonnes and 17 million tonnes LCE** (lithium carbonate equivalent) over an equivalent area of 20 kilometres x 15 kilometres, based on containing brines from near surface to 400 metre depths within approximately 13 cubic kilometres of brine (13,000 gigalitres).

Table 2 provides the details of the geological exploration potential in the confidence sectors defined. The upper and lower ranges of the geological potential were bounded by one standard deviation around the calculated average lithium concentration of the limited data collected to date. All indications are that the typical sediment infill stratigraphy of the basin system has excellent hydraulic characteristics. The geology of the Kachi basin suggests there is good potential to convert brine within the exploration target to a defined resource. The exploration target is based on completed exploration within the high probability zone, with the moderate probability zone subject to future exploration.

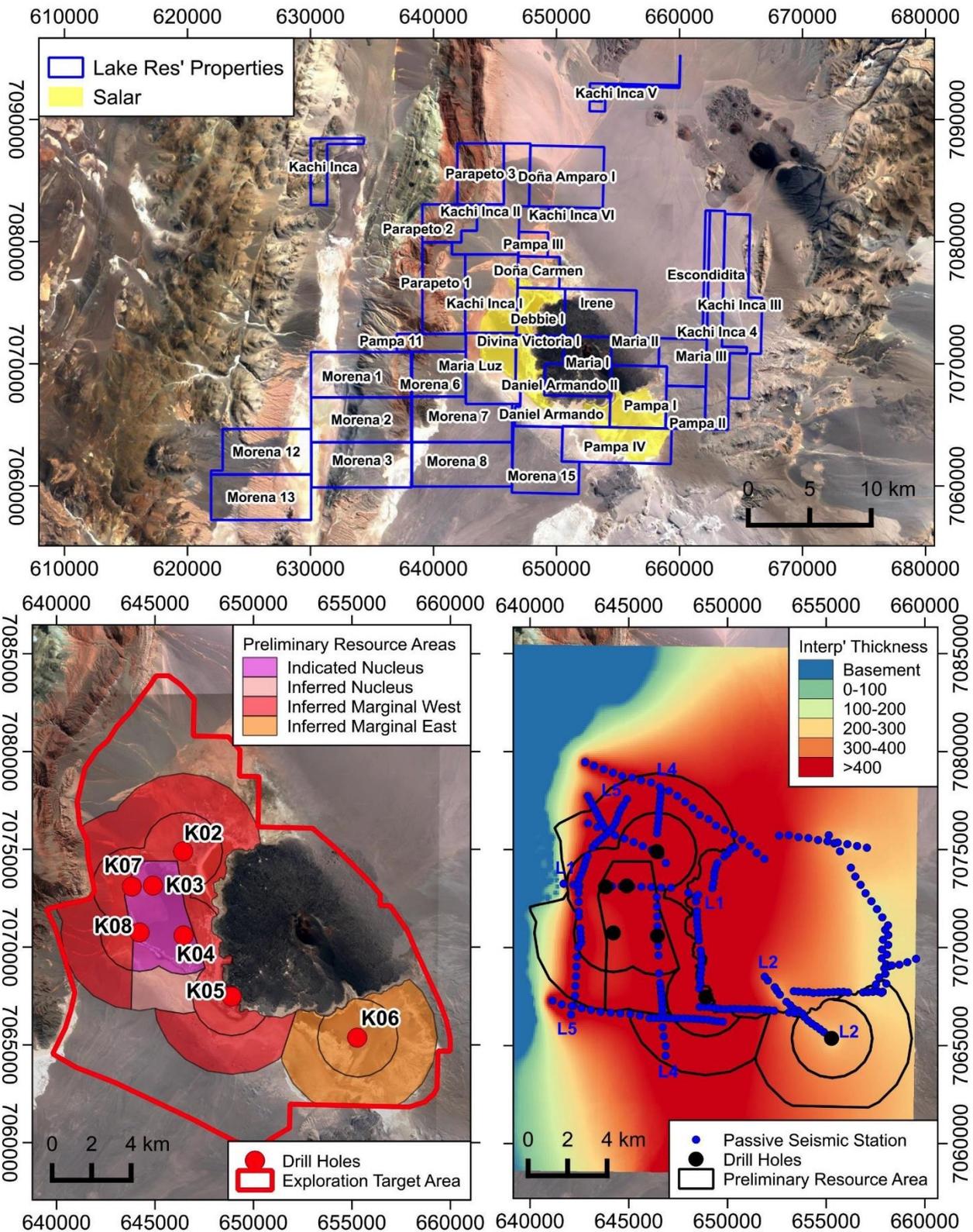
**Table 2: Kachi Project Potential – Exploration Target Estimate (under JORC guidelines)**

KACHI EXPLORATION TARGET ESTIMATE										
Subarea	Area km <sup>2</sup>	Average Thickness m	Specific yield %	Brine volume million m <sup>3</sup>	Lithium Concentration mg/L	Contained Lithium metric tonnes	Lithium Carbonate tonnes*	Potassium Concentration mg/L	Contained Potassium metric tonnes	Potassium Chloride tonnes*
<b>UPPER RANGE SCENARIO</b>										
High Confidence Western Sector	55.2	375	10%	2,801	310	641,000	<b>3,412,000</b>	5,880	16,470,000	31,457,000
High Confidence Eastern Sector	16.7	338	10%	873	250	141,000	752,000	5,880	5,133,000	9,804,000
Moderate Confidence Sector	150.7	350	10%	6,631	310	1,633,000	8,689,000	5,880	38,990,000	74,471,000
Low Confidence Sector	72.6	321	10%	2,733	310	723,000	3,849,000	5,880	16,070,000	30,694,000
<b>Total</b>						3,139,000	<b>16,700,000</b>		76,663,000	146,426,000
<b>LOWER RANGE SCENARIO</b>										
High Confidence Western Sector	55.2	375	7%	2,801	210	304,000	<b>1,618,000</b>	4,180	6,053,000	32,204,000
High Confidence Eastern Sector	16.7	338	7%	873	150	83,000	442,000	4,180	1,655,000	8,803,000
Moderate Confidence Sector	150.7	350	7%	6,631	210	774,000	4,120,000	4,180	15,415,000	82,009,000
Low Confidence Sector	72.6	321	7%	2,733	210	343,000	1,825,000	4,180	6,828,000	36,327,000
<b>Total</b>						1,480,000	<b>7,878,000</b>		29,951,000	159,342,000

Numbers may not add, due to rounding



**Figure 4. Kachi Lithium Project showing mining lease boundaries (yellow) at the lowest point of a large drainage basin of 6800km<sup>2</sup> (blue line) with insets showing the Exploration Target of 8-17Mt LCE and the same target in relation to the Sydney basin.**



## Lake Resources Kachi Project



Coordinate Reference System:  
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**Figure 5. Kachi Lithium Project showing mining lease boundaries and areas defined by levels of confidence to the mineral resource estimate and exploration target with the Seismic Survey Results.**

## Phase 1 Engineering Study with technology partner Lilac Solutions

The Phase 1 Engineering Study conducted by Lilac Solutions tested lithium recoveries and the upgrading of lithium concentrate from multiple brines samples from Lake's Kachi Lithium Brine Project. It also considered estimated operating costs of a commercial sized Lilac Solutions production plant. The results showed high lithium recoveries of 85-90% from multiple brine samples from Kachi.

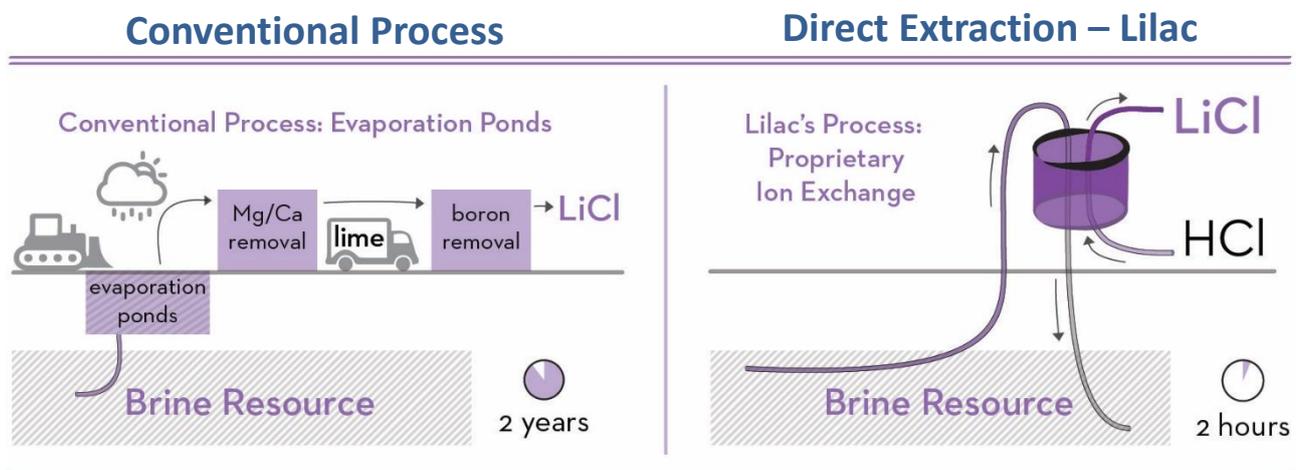
Lithium concentrations greater than 25,000 mg/L lithium were produced from ~300 mg/L lithium brine with low impurities (Mg, Ca, Sr, B), using the Lilac process, together with evaporative dewatering in just three hours. This compares favourably with conventional brine operations in South America, which have typical lithium recoveries below 50%, along with a lengthy 9 to 24 month waiting period for evaporation to produce a suitable lithium brine concentrate for processing.

The concentrate stream from the Lilac process could then be processed downstream into battery-grade lithium carbonate product using conventional purification in a conventional carbonate plant.

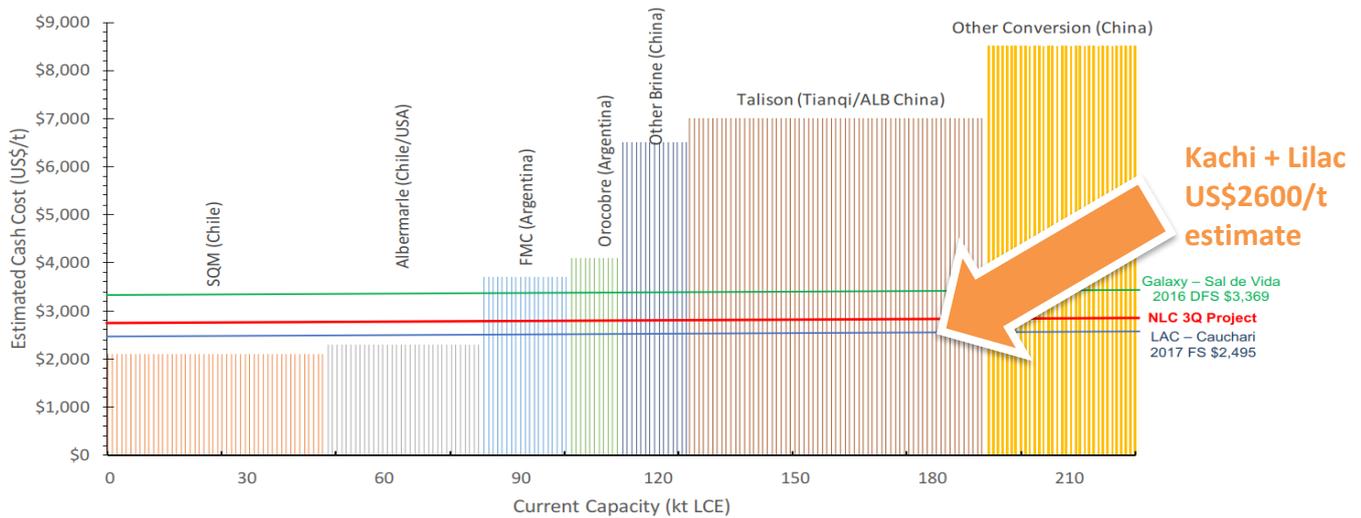
The study showed that the process offers the potential for a globally-competitive cost of production, estimated to be US\$2600/tonne (+/-30%) in the lowest cost quartile for lithium carbonate production. (Note: The estimated costs of production are preliminary estimates based on the Phase 1 Engineering study.)

As a result of the study, Lilac is in the process of providing a detailed proposal for an on-site pilot plant in 2019 as part of a PFS (Lake is also assessing conventional methods), with such a plant being a precursor to a full-scale commercial project. The planned approach is to produce a concentrate of purified lithium brine on site and then convert to lithium carbonate at a location with more established infrastructure and workforce. Most reagents are easily sourced locally, except for proprietary Materials.

Lilac's extraction technology also offers the potential for reduced environmental impact compared to traditional evaporative processes used in Argentina and Chile, due to the removal of evaporation ponds and associated water losses. In addition, the processed brine would be reinjected into the aquifer from which it is sourced without significantly affecting the water quality, thereby preserving an aqueous resource in an arid environment.



**Figure 6. Conventional process for lithium extraction of brines from evaporation ponds (left) versus Lilac's innovative Ion Exchange method (right), which promises high recoveries in a few hours versus 9-24 months using the traditional method of evaporation to concentrate the lithium. Lilac's method allows for the reinjection of brines into the aquifer from where it is sourced, without significantly adjusting the water quality.**



**Figure 7. Global Lithium Cost Curve Estimate - Kachi Lithium Project using Lilac method would place operating costs in lowest quartile. Graph showing SQM and ALB from the Salar de Atacama does not include CORFO royalty structure increasing costs to ~US\$6,000-10,000/tonne. Source: Roskill, Global Lithium LLC, Neo-Lithium Corp.**

### Olaroz - Cauchari & Paso Lithium Brine Projects - Jujuy Province, Argentina

Lake holds mining leases over ~45,000 hectares in two areas in Jujuy Province in NW Argentina, known as the Olaroz – Cauchari Lithium Brine Project and the Paso Lithium Brine Project, both 100% owned by Lake. Tenure was confirmed with a landmark agreement entered into with the Jujuy provincial government on 28 Feb 2018.

Drilling is ongoing at Cauchari, which will be followed by Olaroz. High fluid pressures experienced downhole are most encouraging geologically but have made drilling progress challenging and have prevented reaching the targeted horizons to date and sampling representative brines.

Drilling in brine conditions found in Lake’s holes demonstrates that the adjacent brine producing basin extends into the Company’s surrounding leases as evidenced in the geophysics.

Drill hole #3 is now underway and is currently at 140 metres depth (Figure 10,11) using an adjusted drilling method. The initial rotary and diamond drill holes were not able to reach the target horizon and the diamond drill rig has been removed. Adjusted drilling methods are being reviewed. Four holes, totalling 1,500 metres, are planned.

Drilling is anticipated to show a likely extension to the high grade lithium brines of Ganfeng Lithium/Lithium Americas and Orocobre/Advantage Lithium in adjacent properties (Figures 10,11) to Lake’s tenements. Third party drill results nearby include 600-705mg/L lithium with high flow rates close to the lease boundary. This includes recently reported 611mg/L lithium with high flow rates from a deeper sand unit (\*1) (Figures 10,11). Based on recent seismic lines, Lake expects these high-grade lithium brines to extend into its leases and brine bearing sediments are estimated to extend to 300-400 metres deep.

Lake’s leases at Cauchari extend 11 km north-south of the adjoining development project owned by Ganfeng Lithium (previously SQM)/Lithium Americas and being in the same basin, show strong potential to display lithium in the same aquifers. Advantage Lithium/Orocobre have recently reported a 6-fold increase in resources to 3 million tonnes LCE.

At Olaroz, which is north of Cauchari, Lake’s leases extend over 30 kilometres east and north of the adjoining Orocobre’s Olaroz lithium production leases. Approvals for drilling are in the final phase of permitting (Figures 12,13).

## Catamarca Lithium Pegmatite Project - Catamarca Province, Argentina

The Company exercised an option agreement in September 2018 with Petra Energy SA and has since expanded the lease holdings and applications to over 80,000 hectares of outcropping pegmatites with lithium potential within Catamarca Province in NW Argentina (Figure 14).

Field programmes have reinforced the view that the 150 kilometre-long belt favourably hosts significant lithium mineralisation as spodumene in large pegmatite swarms. At Ancasti, which is the initial focus of Lake's exploration, pegmatites crop out at relatively low altitudes (300-1500m) and there is good year-round access. The pegmatite targets were recognised following a study of past lithium (spodumene) producing mines, satellite image interpretation and field visits by Lake's geologists. This has resulted in new exploration models being developed which clearly show potential for the belt to host large-scale deposits. Previously, coarse spodumene crystals 30-70cm long had been identified in a number of locations. Further exploration activities will be conducted including field based XRF analysis to vector in on potential new targets, followed by trenching and auger sampling. Drill locations will then be defined by these results.

## CORPORATE

### Cash Position

Lake held cash of \$0.5 million as at 31 December 2018, (in AUD, USD and Argentine Pesos).

9,900,000 Unsecured convertible notes were issued in December 2018 for a value of \$990,000 with an expiry date of 25 June 2020. A short term debt facility of \$500,000 was repaid and converted into Notes including the interest payments prior to the end of December 2018.

5,420,085 options were converted at an exercise price of \$0.05 by the end of November 2018 for \$271,000. An equity swap facility with Long State will expire in February 2019.

The Company is in advanced discussions to issue further convertible notes. An unused \$4.5 million line of credit is available with Acuity Capital, currently unused, on hold and available at the Company's sole discretion for a 24 month period.

### Capital Structure

Lake has 366,141,783 shares on issue as at 31 December 2018.

Unlisted options include 5,052,083 options with an exercise price of \$0.05 (expiry 21 October 2019), and 9,500,000 unlisted options with an exercise price of \$0.28 (expiry 31 December 2020). Listed options (42,816,667 options LKEOA) with an exercise price of \$0.20 expired on 15 December 2018. 5,420,085 options were converted at an exercise price of \$0.05 by the end of November 2018 for \$271,000.

9,900,000 Unsecured convertible notes were issued in December 2018 for a value of \$990,000 with an expiry date of 25 June 2020. Subject to the receipt of shareholder approval for the issue of options, it is anticipated to issue 4,950,000 unlisted options if the Note Holders elect to apply for one (1) option for every two (2) Notes with an exercise price of \$0.20 (expiry 25 June 2018) within the 10-day election period following such approval. The Notes may be converted into fully paid ordinary shares (Shares) within 5 Business Days of receipt of a conversion notice from the Holder or automatically on the Maturity Date (25 June 2020).

The Notes will be Converted in accordance with the following formula:

$$S = OA / CP$$

Where:

S = the number of Shares to be issued on Conversion

OA = the outstanding amount (being the face value and any outstanding interest) of the relevant Notes

CP = the Conversion Price, being 80% of the VWAP of the Shares for the 10 Trading Day period ending on the date of the Conversion Notice or Maturity Date (as applicable).

Notes cannot be Converted:

(a) during the 6 months after the Issue Date (prior to 25 June 2018); and

(b) where the Conversion Price is less than \$0.10 and greater than \$0.30 (Conversion Threshold) (subject to the Company's discretion to allow Conversion outside of the Conversion Threshold).

(The terms of issue are detailed in the ASX announcement made on 21 December 2018).

The use of funds is planned for 1. Accelerating the PFS at Kachi, including resource expansion, and potentially a pilot plant; 2. Drilling at the Cauchari/Olaroz projects and further exploration at its Paso and Catamarca Pegmatite Projects; 3. Repaying a portion of the Company's outstanding short-term debt; and 4. Working capital.

### **Engagement of US-Based Consulting Firm RB Milestone Group**

Lake has also engaged US based consultants, RB Milestone Group LLC ("RBMG"), in North America to broaden access to a wider investor audience. This initialises an enhanced program for Lake whereby RBMG will provide strategic planning, market intelligence and research initiatives, as well as business referrals related to business development and general corporate opportunities. The program allows Lake to reach a wider audience of financial and strategic professionals across the United States. These services will help Lake communicate its corporate characteristics to applicable investment and media outlets.

Corporate activity continues unabated in the lithium brine sector in Argentina with a C\$111 million cash offer for LSC Lithium (LSC:TSX-V) from an oil and gas operator, PlusPetrol.

### **Research Reports**

Independent research is provided by three firms – Fundamental (Nth America), VSA Capital (UK/China) and Hunter Capital (Australia). All firms update their analysis of Lake Resources once the resource statement was released over the Kachi Project in late November 2018.

A copy of the reports can be found on the Company's website under the investors research tab, as per the link: <http://www.lakeresources.com.au/investors/?page=research>

Fundamental Research, in Vancouver, updated coverage of Lake Resources with an positive price target of the company's near term upside of \$0.73 per share based on the maiden resource at Kachi and comparisons with other companies.

VSA Capital updated coverage with a price target for the first time of \$0.36 per share based on the resource and company comparisons. Hunter Capital updated coverage with a price target of \$0.40 per share

### **Outlook**

The focus in the coming quarter will be:

#### **Kachi Lithium Brine Project - Catamarca Province**

- Initiation of the Pre-Feasibility Study and development options
- An update on a potential pilot plant

#### **Olaroz-Cauchari & Paso Lithium Brine Projects - Jujuy Province**

- Results from initial drilling of the Cauchari area.
- Further drilling results at Cauchari and the initiation of drilling at Olaroz.
- Results from geophysics at Cauchari, Olaroz and Paso project areas.

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## 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 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) within a 8-17 Mt LCE exploration target (refer ASX announcement 27 November 2018).

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 15000 mg/L lithium. Phase 1 Engineering Study results have shown operating costs forecast at US\$2600/t LCE in the lowest cost quartile. This process is planned to be trialled on site in tandem with conventional methods as part of a PFS to follow the resource statement. Scope exists to unlock considerable value through partnerships and corporate deals in the near term.

The Olaroz-Cauchari and Paso brine projects are located adjacent to major 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.

Two drill rigs are currently drilling at Cauchari with results anticipated to extend the proven resources in adjoining properties into LKE's area with results anticipated from November into December 2018. 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. 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 2018. LSC Lithium is under offer for C\$111 million 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.

The demand for lithium continues to be strong for lithium ion batteries in electric vehicles, according to recent data from the leading independent battery minerals consultant, Benchmark Mineral Intelligence. Supply continues to be constrained suggesting good opportunities for upstream lithium companies.

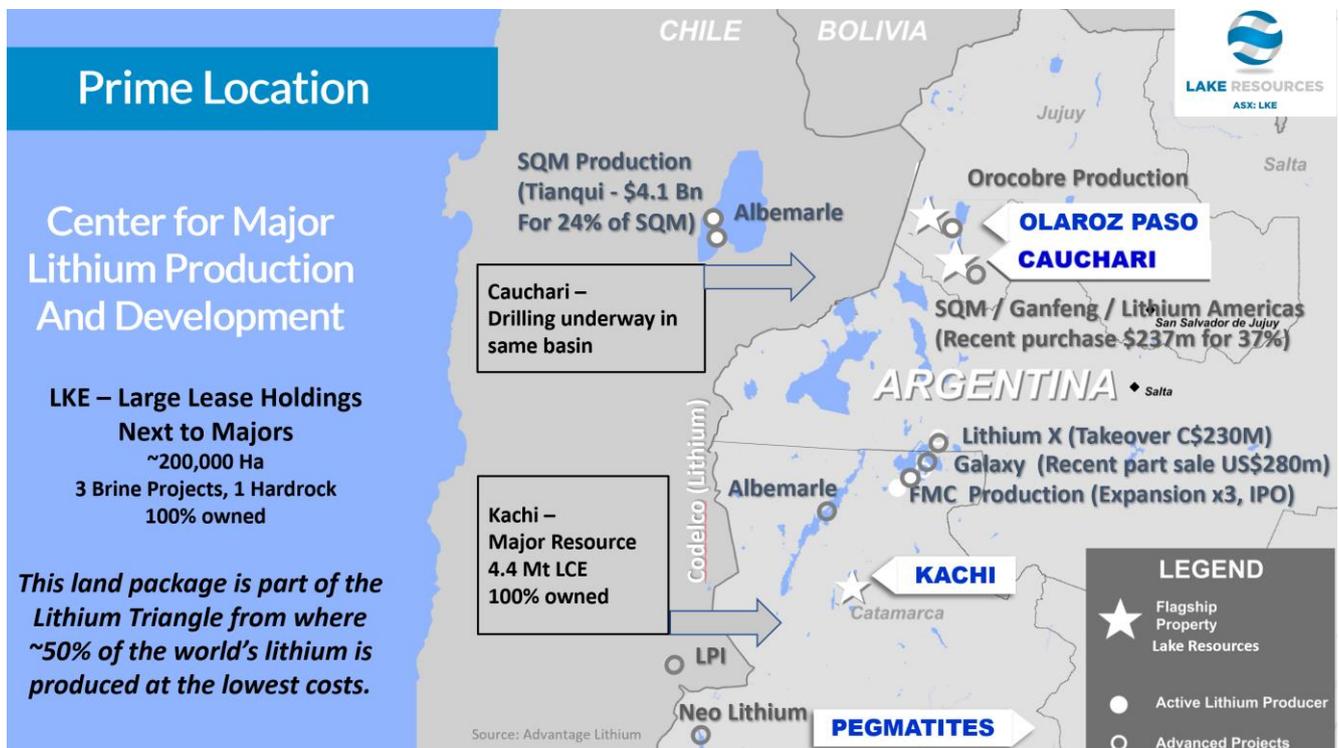
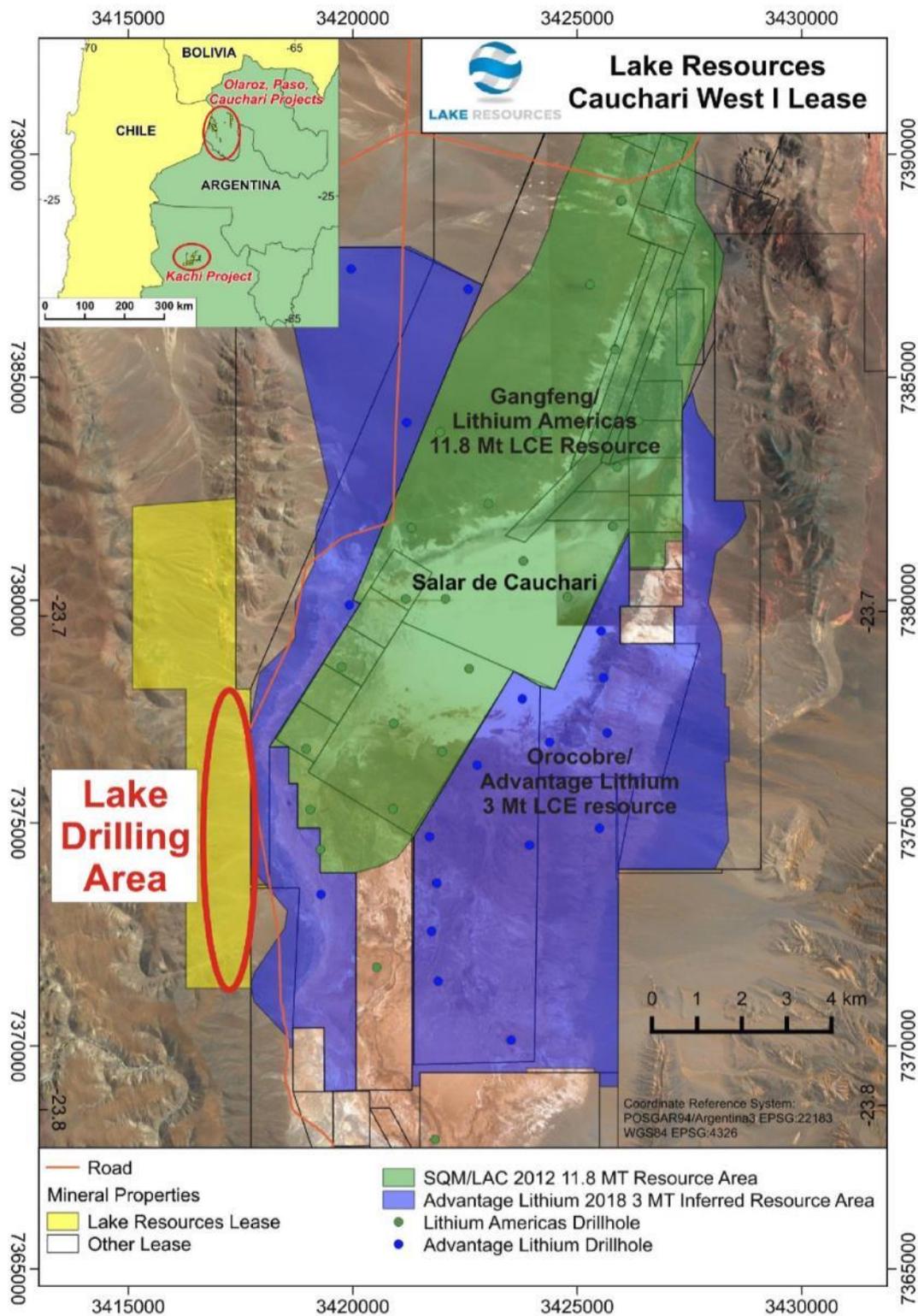


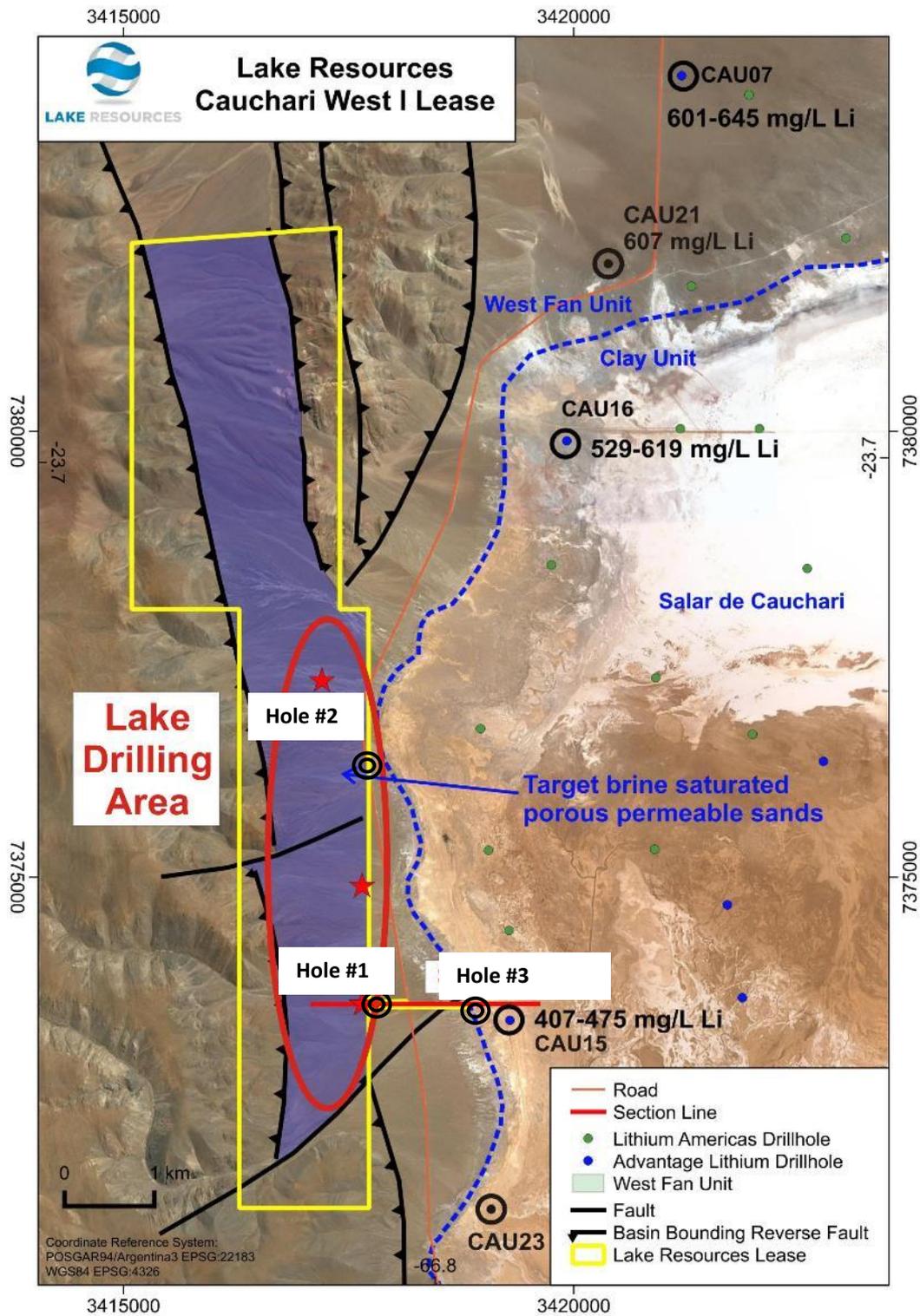
Figure 8: Location map of Lake Resources lithium brine and hard rock (pegmatite) projects in NW Argentina



Figure 9 a,b,c,: Lake's Cauchari Lithium Project – View looking north west across the Cauchari salt lake towards adjoining Ganfeng Lithium / Lithium Americas resource and Orocobre / Advantage Lithium resource. Rotary drill rig looking east and setup at Hole #3. (Third Party Resource details summarised in LKE's ASX announcement dated 6 Sept 2018)



**Figure 10. Cauchari Lithium Project, with adjoining SQM / Lithium Americas resource and Orocobre / Advantage Lithium resource with summary drill results (Orocobre announcements 7/11/2017, 4, /12/2017, 18/01/2018, Advantage Lithium announcement 5/3/2018, 10/01/2019). (Third Party Resource details summarised in LKE's ASX announcement dated 6 Sept 2018)**



**Figure 11. Lake’s Cauchari Lithium Project, showing drill hole locations to intersect the extension of the sand unit inferred to extend into Lake’s leases from adjoining Orocobre / Advantage Lithium resource (Source: Advantage Lithium NI 43-101 (\*1))**

Footnotes:

(\*1): Drill results released by Orocobre (ASX:ORE) from their market releases on the ASX on 18 April 2018, 29 June 2018, 19 Sept 2018 and 10 Jan 2019.

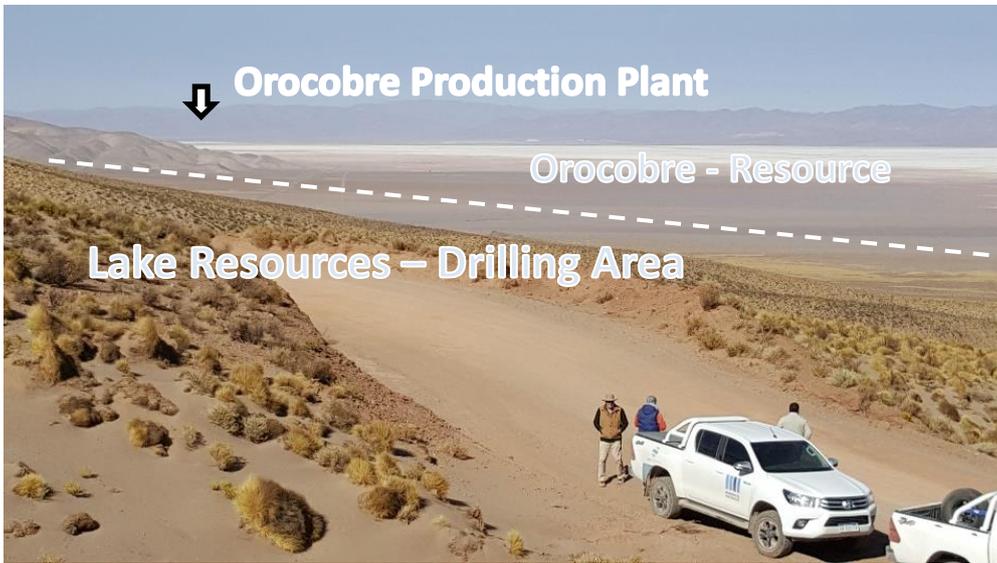


Figure 12. Olaroz Project Area – Looking west over Olaroz salt lake. Lake leases are in foreground stretching left to right for 30 kilometres

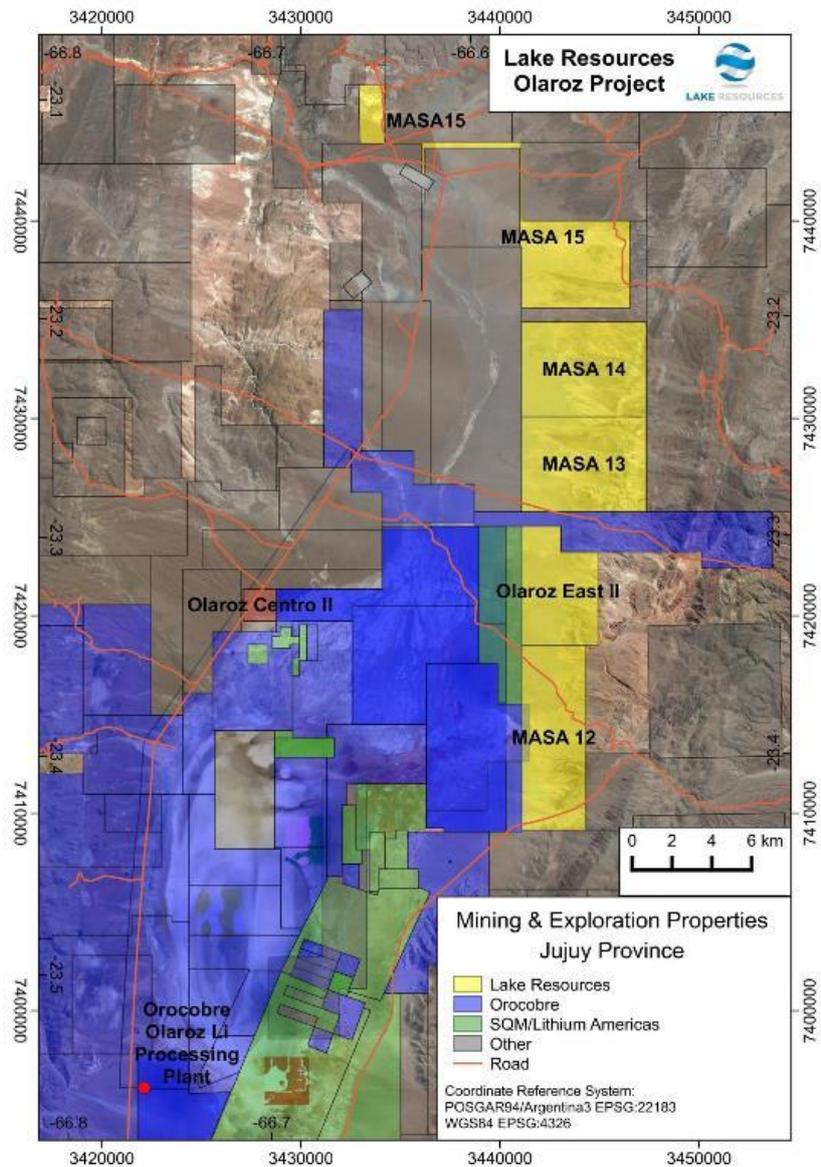


Figure 13: Lake's Olaroz Lithium Brine Project leases (yellow) in relation to Orocobre leases (blue). Lake leases stretch north-south for 30 kilometres

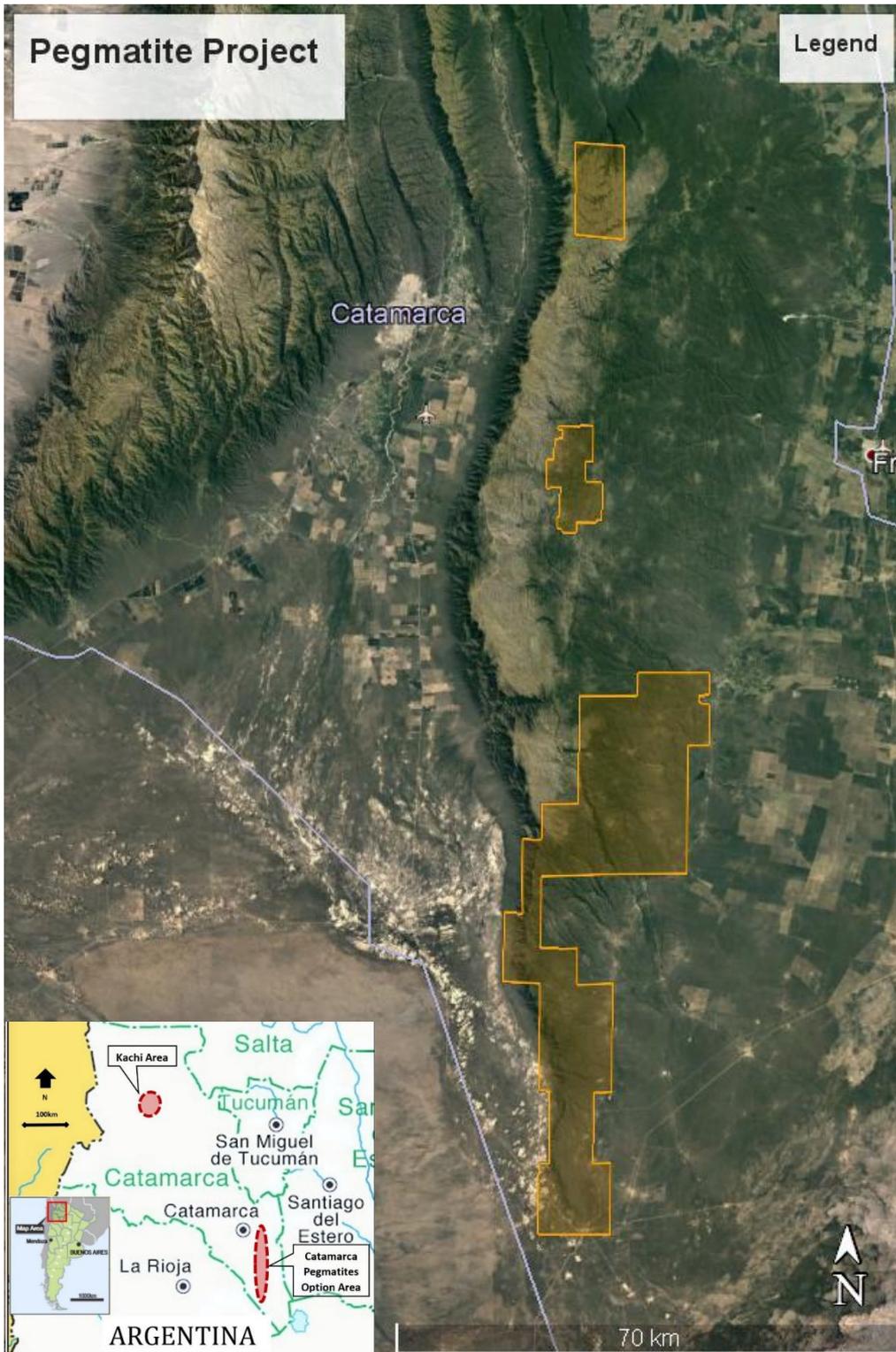


Figure 14. Catamarca Pegmatite Project Area – Extensive leases over 150 kilometres

**Table 3: Kachi Lithium Project – details of drill-hole locations**

Exploration Hole	Drilling Method	Easting	Northing	Total Depth (m)	Assay Interval (m)	Lithium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)
Northern Area								
K07D01	Diamond	643829	7073100	76.25	10 - 34	157		3330
K03D02	Diamond	644880	7073149	150.5	74 - 92	180	1740	4435
<b>K03R03</b>	<b>Rotary</b>	<b>644898</b>	<b>7073147</b>	<b>242</b>	<b>213 - 237</b>	<b>306*</b>	<b>1307*</b>	<b>5998*</b>
<b>K03R12</b>	<b>Rotary</b>	<b>644885</b>	<b>7073132</b>	<b>400</b>	<b>358 - 400</b>	<b>267*</b>	<b>1180*</b>	<b>5180*</b>
<b>K02D13</b>	Diamond	646432	7074897		60	217	3557	4438
					64 - 108	182	2884	3620
					269 - 298	204	2163	4100
					<b>313 - 343</b>	<b>252</b>	<b>1411</b>	<b>4987</b>
Southern Area								
K06D04	Diamond	655320	7065352	167.5	95 - 113	203	766	3321
K06R05	Rotary	655273	7065354	87	68 - 85	167	1000	3160
K06R06	Rotary	655307	7065374	180	Not Sampled			
K06R07	Rotary	655326	7065362	189	159 – 179	191	1009	961
K06D08	Diamond	655326	7065362	405	69 -70	194	958	3171
					120 - 121	191	873	3199
					165-166	170	880	3650
					205-206	164	894	3590
					258-259	164	888	3560
K05D09	Diamond	648899	7067469	139	62	83	1229	965
					108	222	1325	4360
K05D11	Diamond	648902	7067491	391	157	95	1460	1926
					188	215	919	3596
					224 - 248	175	876	3065
					289	143	1088	2251
					300.5	116	1035	1782
					291 - 334	234	3199	4980
<b>K08R14</b>	<b>Rotary</b>	<b>644218</b>	<b>7070750</b>	<b>364</b>	<b>301 - 361</b>	<b>326*</b>	<b>1232*</b>	<b>6038*</b>
<b>K04R15</b>	<b>Rotary</b>	<b>646454</b>	<b>7070594</b>	<b>350</b>	<b>290 - 350</b>	<b>265*</b>	<b>1154*</b>	<b>4993</b>

Coordinates are WGS84 Z19 South

No samples collected from drillhole R10

\* Average for multiple samples during extended air lift

**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. The information in this announcement is an accurate representation of the available data from initial exploration at the Kachi project.*

JORC Table 1 Report: Kachi Lithium Brine Project

Criteria	Section 1 - Sampling Techniques and Data
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <li>• Brine samples were taken from the diamond drill hole with a bottom of hole spear point during advance and using a straddle packer device to obtain representative samples of the formation fluid by purging a volume of fluid from the isolated interval, to minimize the possibility of contamination by drilling fluid then taking the sample. Low pressure airlift tests are used as well. The fluid used for drilling is brine sourced from the drill hole and the return from drillhole passes back into the excavator dug pit lined to avoid leakage.</li> <li>• The brine sample was collected in a clean plastic bottle (1 litre) and filled to the top to minimize air space within the bottle. A duplicate was collected at the same time for storage and submission of duplicates to the laboratory. Each bottle was taped and marked with the sample number.</li> <li>• Drill core in the hole was recovered in 1.5 m length core runs in core split tubes to minimize sample disturbance.</li> <li>• Drill core was undertaken to obtain representative samples of the sediments that host brine.</li> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>• Diamond drilling with an internal (triple) tube was used for drilling. The drilling produced cores with variable core recovery, associated with unconsolidated material, in particularly sandy intervals. Recovery of these more friable sediments is more difficult with diamond drilling, as this material can be washed from the core barrel during drilling.</li> <li>• Rotary drilling has used 8.5” or 10” tricone bits and has produced drill chips.</li> <li>• Brine has been used as drilling fluid for lubrication during drilling.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>• Diamond drill core was recovered in 1.5m length intervals in the drilling triple (split) tubes. Appropriate additives were used for hole stability to maximize core recovery. The core recoveries were measured from the cores and compared to the length of each run to calculate the recovery. Chip samples are collected for each metre drilled and stored in segmented plastic boxes for rotary drill holes.</li> <li>• Brine samples were collected at discrete depths during the drilling using a double packer over a 1 m interval (to isolate intervals of the sediments and obtain samples from airlifting brine from the sediments within the packer).</li> <li>• As the brine (mineralisation) samples are taken from inflows of the brine into the hole (and not from the drill core – which has variable recovery) they are largely independent of the quality (recovery) of the core samples. However, the permeability of the lithologies where samples are taken is related to the rate and potentially lithium grade of brine inflows.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>• Sand, clay, silt, salt and cemented rock types was recovered in a triple tube diamond core drill tube, or as chip samples from rotary drill holes, and examined for geologic logging by a geologist and a photo taken for reference.</li> <li>• Diamond holes are logged by a senior geologist who also supervised taking of samples for laboratory porosity analysis as well as additional physical property testing.</li> <li>• Logging is both qualitative and quantitative in nature. The relative proportions of different lithologies which have a direct bearing on the overall porosity, contained and potentially extractable brine are noted, as are more qualitative characteristics such as the sedimentary facies and their relationships. When cores are split for sampling they are photographed.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>• Brine samples were collected by packer and spear sampling methods, over a metre. Low pressure airlift tests are used as well to purge test interval and gauge potential yields.</li> <li>• The brine sample was collected in one-litre sample bottles, rinsed and filled with brine. Each bottle was taped and marked with the sample number.</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>• The Alex Stewart Argentina/Norlab SA in Palpala, Jujuy, Argentina, is used as the primary laboratory to conduct the assaying of the brine samples collected as part of the sampling program. The SGS laboratory in Buenos Aires has also been used for both primary and check samples. They also analyzed blind control samples and duplicates in the analysis chain. The Alex Stewart/Norlab SA laboratory and the SGS laboratory are ISO 9001 and ISO 14001 certified, and are specialized in the chemical analysis of brines and inorganic salts, with experience in this field. This includes the oversight of the experienced Alex Stewart Argentina S.A. laboratory in Mendoza, Argentina, which has been operating for a considerable period.</li> <li>• The quality control and analytical procedures used at the Alex Stewart/Norlab SA laboratory or SGS laboratory are considered to be of high quality and comparable to those employed by ISO certified laboratories specializing in analysis of brines and inorganic salts.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>• Field duplicates, standards and blanks will be used to monitor potential contamination of samples and the repeatability of analyses. Accuracy, the closeness of measurements to the “true” or accepted value, will be monitored by the insertion of standards, or reference samples, and by check analysis at an independent (or umpire) laboratory.</li> <li>• Duplicate samples in the analysis chain were submitted to Alex Stewart/Norlab SA or SGS laboratories as unique samples (blind duplicates) during the process</li> </ul>

	<ul style="list-style-type: none"> <li>Stable blank samples (distilled water) were used to evaluate potential sample contamination and will be inserted in future to measure any potential cross contamination</li> <li>Samples were analysed for conductivity using a hand-held Hanna pH/EC multiprobe.</li> <li>Regular calibration using standard buffers is being undertaken.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>The diamond drill hole sample sites and rotary drill hole sites were located with a hand-held GPS.</li> <li>The properties are located at the junction of the Argentine POSGAR grid system Zone 2 and Zone 3 (UTM 19) and in WGS84 Zone 19 south.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>Brine samples were collected over 1m intervals every 6 m intervals within brine producing aquifers, where this was possible.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>The salt lake (<i>salar</i>) deposits that contain lithium-bearing brines generally have sub-horizontal beds and lenses that contain sand, gravel, salt, silt and clay. The vertical diamond drill holes will provide a better understanding of the stratigraphy and the nature of the sub-surface brine bearing aquifers</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>Samples were transported to the Alex Stewart/Norlab SA laboratory or SGS laboratory for chemical analysis in sealed 1-litre rigid plastic bottles with sample numbers clearly identified. Samples were transported by a trusted member of the team.</li> <li>The samples were moved from the drillhole sample site to secure storage at the camp on a daily basis. All brine sample bottles sent to the laboratory are marked with a unique label not related to the location.</li> </ul>
<i>Review (and Audit)</i>	<ul style="list-style-type: none"> <li>No audit of data has been conducted to date. However, the CP has been onsite periodically during the programme. The review included drilling practice, geological logging, sampling methodologies for water quality analysis and, physical property testing from drill core, QA/QC control measures and data management. The practices being undertaken were ascertained to be appropriate.</li> </ul>
<b>Criteria</b>	<b>Section 2 - Mineral Tenement and Land Tenure Status</b>
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>The Kachi Lithium Brine project is located approximately 100km south-southwest of FMC's Hombre Muerto lithium operation and 45km south of Antofagasta de la Sierra in Catamarca province of north western Argentina at an elevation of approximately 3,000m asl.</li> <li>The project comprises approximately 69,047 Ha in thirty six mineral leases (minas) of which five leases (9,445 Ha) are granted for drilling, twenty two leases are granted for initial exploration (51,560 Ha) and nine leases (8042 Ha) are applications pending granting.</li> <li>The tenements are believed to be in good standing, with statutory payments completed to relevant government departments.</li> </ul>
<i>Exploration by other parties</i>	<ul style="list-style-type: none"> <li>Marifil Mines Ltd conducted sparse surface pit sampling of groundwater at depths less than 1m in 2009.</li> <li>Samples were taken from each hole and analysed at Alex Stewart laboratories in Mendoza Argentina.</li> <li>Results were reported in an NI 43-101 report by J. Ebisch in December 2009 for Marifil Mines Ltd.</li> <li>NRG Metals Inc commenced exploration in adjacent leases under option. Two diamond drill holes intersected lithium bearing brines. The initial drillhole intersected brines from 172-198m and below with best results to date of 15m at 229 mg/L Lithium, reported in December 2017. The second hole, drilled to 400 metres in mid-2018, became blocked at 100 metres and could not be sampled. A VES ground geophysical survey was completed prior to drilling. A NI 43-101 report was released in February 2017.</li> <li>No other exploration results were able to be located</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>The known sediments within the <i>salar</i> consist of salt/halite, clay, sand and silt horizons, accumulated in the <i>salar</i> from terrestrial sedimentation and evaporation of brines.</li> <li>Brines within the Salt Lake are formed by solar concentration, interpreted to be combined with warm geothermal fluids, with brines hosted within sedimentary units.</li> <li>Geology was recorded during the diamond drilling and from chip samples in rotary drill holes.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>Lithological data was collected from the holes as they were drilled and drill cores or chip samples were retrieved. Detailed geological logging of cores is ongoing.</li> <li>All drill holes are vertical, (dip -90, azimuth 0 degrees).</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>Assay averages have been provided where multiple sampling occurs in the same sampling interval.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>Mineralisation interpreted to be horizontally lying and drilling perpendicular to this.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>A drill hole location plan is provided showing the locations of the drill platforms. Individual drill locations are provided in Table 1.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>Brine assay results are available from 13 drill holes from the drilling to date, reported here. Information will be provided as it becomes available.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>There is no other substantive exploration data available regarding the project.</li> </ul>

<i>Further work</i>	<ul style="list-style-type: none"> <li>The company has undertaken a 1000m maiden diamond drilling programme and 2000m maiden rotary water well drilling programme which is being expanded based on results.</li> </ul>
<b>Criteria</b>	<b>Section 3 Estimation and Reporting of Mineral Resources</b>
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>Data was transferred directly from laboratory spreadsheets to the database.</li> <li>Data was checked for transcription errors once in the database, to ensure coordinates, assay values and lithological codes were correct</li> <li>Data was plotted to check the spatial location and relationship to adjoining sample points</li> <li>Duplicates and Standards have been used in the assay process.</li> <li>Brine assays and porosity test work have been analysed and compared with other publicly available information for reasonableness.</li> <li>Comparisons of original and current datasets were made to ensure no lack of integrity.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>The Competent Person visited the site multiple times during the drilling and sampling program.</li> <li>Some improvements to procedures were made during visits by the Competent Person</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>The geological model is continuing to develop. There is a high level of confidence in the interpretation of for the Project to date. There are relatively consistent geological units with relatively uniform, clastic sediments.</li> <li>Any alternative interpretations are restricted to smaller scale variations in sedimentology, related to changes in grain size and fine material in units.</li> <li>Data used in the interpretation includes rotary and diamond drilling methods.</li> <li>Drilling depths and geology encountered has been used to conceptualize hydro-stratigraphy.</li> <li>Sedimentary processes affect the continuity of geology, whereas the concentration of lithium and potassium and other elements in the brine is related to water inflows, evaporation and brine evolution in the salt lake.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>The lateral extent of the resource has been defined by the boundary of the Company's properties. The brine mineralisation consequently covers 142 km<sup>2</sup>.</li> <li>The top of the model coincides with the topography obtained from the Shuttle Radar Topography Mission (SRTM). The original elevations were locally adjusted for each borehole collar with the most accurate coordinates available. The base of the resource is limited to a 400 m depth. The basement rocks underlying the salt lake sediments have been intersected in drilling.</li> <li>The resource is defined to a depth of 400 m below surface, with the exploration target immediately extending beyond the areal extend of the resource.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li>No grade cutting or capping was applied to the model.</li> <li>No assumptions were made about correlation between variables. Lithium and potassium were estimated independently.</li> </ul>
<i>Moisture</i>	<ul style="list-style-type: none"> <li>Moisture content of the cores was not Measured (porosity and density measurements were made), but as brine will be extracted by pumping not mining this is not relevant for the resource estimation.</li> <li>Tonnages are estimated as metallic lithium and potassium dissolved in brine.</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li>No cut-off grade has been applied.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>The resource has been quoted in terms of brine volume, concentration of dissolved elements, contained lithium and potassium and their products lithium carbonate and potassium chloride.</li> <li>No mining or recovery factors have been applied (although the use of the specific yield = drainable porosity is used to reflect the reasonable prospects for economic extraction with the proposed mining methodology).</li> <li>Dilution of brine concentrations may occur over time and typically there are lithium and potassium losses in both the ponds and processing plant in brine mining operations. However, potential dilution will be estimated in the groundwater model simulating brine extraction.</li> <li>The conceptual mining method is recovering brine from the salt lake via a network of wells, the established practice on existing lithium and potash brine projects.</li> <li>Detailed hydrologic studies of the lake are being undertaken (groundwater modelling) to define the extractable resources and potential extraction rates</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>Lithium and potassium would be produced via conventional brine processing techniques and evaporation ponds to concentrate the brine prior to processing</li> <li>Process test – work (which can be considered equivalent to metallurgical test work) is being carried out on the brine following initial test work.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>Impacts of a lithium and potash operation at the Kachi project would include; surface disturbance from the creation of extraction/processing facilities and associated infrastructure, accumulation of various salt tailings impoundments and extraction from brine and fresh water aquifers regionally.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>Density measurements were taken as part of the drill core assessment. This included determining dry density and particle density as well as field measurements of brine density. Note that no mining is to be carried out as brine is to be extracted by pumping and consequently sediments are not mined but the lithium and potassium is extracted by pumping.</li> </ul>

	<ul style="list-style-type: none"> <li>• However, no bulk density was applied to the estimates because resources are defined by volume, rather than by tonnage.</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>• The resource has been classified into the two possible resource categories based on confidence in the estimation.</li> <li>• The Measured resource reflects the predominance of sonic drilling, with porosity samples from drill cores and well constrained vertical brine sampling in the holes</li> <li>• The Indicated resource reflects the higher confidence in the brine sampling in the rotary drilling and lower quality geological control from the drill cuttings</li> <li>• The Inferred resource underlying the Measured resource in the Lito properties reflects the limited drilling to this depth together with the likely geological continuity suggested by drilling on the adjacent Cocina property and the geophysics through the property</li> <li>• In the view of the Competent Person the resource classification is believed to adequately reflect the available data and is consistent with the suggestions of Houston et. al., 2011</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• This Mineral Resource was estimated by the Competent Person.</li> </ul>
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> <li>• An independent estimate of the resource was completed using a nearest neighbour estimate and the comparison of the results with the ordinary kriging estimate is below 0.3% for measured resources and below 3% for indicated resources which is considered to be acceptable.</li> <li>• Univariate statistics for global estimation bias, visual inspection against samples on plans and sections, swath plots in the north, south and vertical directions to detect any spatial bias shows a good agreement between the samples and the ordinary kriging estimates.</li> <li>• References: <ul style="list-style-type: none"> <li>• Houston, J., Butcher, A., Ehren, P., Evans, K., and Godfrey, L. The Evaluation of Brine Prospects and the Requirement for Modifications to Filing Standards. Economic Geology. V 106, p 12251239.</li> <li>• CIM Best Practice Guidelines for Resource and Reserve Estimation for Lithium Brines.</li> </ul> </li> </ul>

## References

Houston, J., Butcher, A., Ehren, P., Evans, K., and Godfrey, L. The Evaluation of Brine Prospects and the Requirement for Modifications to Filing Standards. Economic Geology. V 106, p 12251239.

## SCHEDULE OF TENEMENTS (Appendix 5B)

TOTAL NUMBER TENEMENTS:		TOTAL AREA TENEMENTS:				
76		212,012 Ha				
REF	TENEMENT NAME	NUMBER	AREA H	INTEREST	PROVINCE	STATUS
<b>OLAROSZ - CAUCHARI AREA</b>						
	Cauchari Bajo I	2156-D-2016	354	100	Jujuy	Granted
	Cauchari Bajo II	2157-D-2016	354	100	Jujuy	Granted
	Cauchari Bajo III	2158-D-2016	122	100	Jujuy	Granted
	Cauchari Bajo V	2154-D-2016	946	100	Jujuy	Granted
	Cauchari West I	2160-D-2016	1936	100	Jujuy	Granted
	Olaroz Centro II	2164-D-2016	268	100	Jujuy	Application
	Olaroz East II	2168-D-2016	2072	100	Jujuy	Granted
	MASA 12	2234-M-2016	2901	100	Jujuy	Granted
	MASA 13	2235-M-2016	3000	100	Jujuy	Granted
	MASA 14	2236-M-2016	3000	100	Jujuy	Granted
	MASA 15	2237-M-2016	3000	100	Jujuy	Granted
<b>PASO AREA</b>						
	Paso III	2137-P-2016	2787	100	Jujuy	Granted
	Paso VI	2140-P-2016	2208	100	Jujuy	Granted
	Paso X	2144-P-2016	1833	100	Jujuy	Granted
	MASA 9	2231-M-2016	2978	100	Jujuy	Granted
	MASA 16	2238-M-2016	2114	100	Jujuy	Granted
	MASA 17	2239-M-2016	2891	100	Jujuy	Granted
	MASA 18	2240-M-2016	3000	100	Jujuy	Granted
	MASA 19	2241-M-2016	3000	100	Jujuy	Granted
	MASA 20	2242-M-2016	3000	100	Jujuy	Granted
	MASA 21	2243-M-2016	2815	100	Jujuy	Granted
	MASA 22	2244-M-2016	1460	100	Jujuy	Application
	MASA 23	2245-M-2016	1540	100	Jujuy	Application
	23 Mining leases		47579 Ha			
<b>KACHI AREA</b>						
	Kachi Inca	13-M-2016	858	100	Catamarca	Granted
	Kachi Inca I	16-M-2016	2881	100	Catamarca	Granted
	Kachi Inca II	17-M-2016	2823	100	Catamarca	Granted
	Kachi Inca III	47-M-2016	3354	100	Catamarca	Granted
	Kachi Inca 4	107-M-2017	2723	100	Catamarca	In Process
	Kachi Inca V	45-M-2016	305	100	Catamarca	Granted
	Kachi Inca VI	44-M-2016	110	100	Catamarca	Granted
	Dona Amparo I	22-M-2016	3000	100	Catamarca	Granted
	Dona Carmen	24-M-2016	874	100	Catamarca	Granted
	Debbie I	21-M-2016	1501	100	Catamarca	Granted
	Divina Victoria I	25-M-2016	1266	100	Catamarca	Granted
	Daniel Armando	23-M-2016	2116	100	Catamarca	Granted
	Daniel Armando II	97-M-2016	1388	100	Catamarca	Granted
	Escondidita	131-M-2018	373	100	Catamarca	In Process
	Irene	28-M-2018	2250	100	Catamarca	In Process
	Maria Luz	34-M-2017	2425	100	Catamarca	Granted
	Maria I	140-M-2018	889	100	Catamarca	In Process
	Maria II	14-M-2016	888	100	Catamarca	Granted
	Maria III	15-M-2016	1396	100	Catamarca	Granted
	Morena 1	72-M-2016	3025	100	Catamarca	Granted
	Morena 2	73-M-2016	2989	100	Catamarca	Granted
	Morena 3	74-M-2016	3007	100	Catamarca	Granted
	Morena 6	75-M-2016	1606	100	Catamarca	Granted
	Morena 7	76-M-2016	2805	100	Catamarca	Granted
	Morena 8	77-M-2016	2961	100	Catamarca	Granted
	Morena 12	78-M-2016	2704	100	Catamarca	Granted
	Morena 13	79-M-2016	3024	100	Catamarca	Granted
	Morena 15	162-M-2017	2559	100	Catamarca	Granted
	Pampa I	129-S-2013	2312	100	Catamarca	Granted
	Pampa II	128-M-2013	1119	100	Catamarca	Granted
	Pampa III	130-M-2013	477	100	Catamarca	Granted
	Pampa IV	78-M-2017	2569	100	Catamarca	In Process
	Morena 11	138-M-2018	815	100	Catamarca	In Process
	Parapeto 1	133-M-2018	2504	100	Catamarca	In Process
	Parapeto 2	134-M-2018	1259	100	Catamarca	In Process
	Parapeto 3	132-M-2018	1892	100	Catamarca	In Process
	36 Mining leases		69047Ha			
	59		116626			

CATAMARCA PEGMATITES						
Petra I	Cateo 52/16	9838	100	Catamarca	In Process	
Petra II	Cateo 51/16	9500	100	Catamarca	In Process	
Petra III	Cateo 49/16	9528	100	Catamarca	In Process	
Petra IV	Cateo 50/16	8939	100	Catamarca	In Process	
CAT 1 (Petra VIII)	Cateo 93/16	9502	100	Catamarca	In Process	
CAT 2 (Petra VII)	Cateo 94/16	7699	100	Catamarca	In Process	
CAT 3 (Petra VI)	Cateo 95/16	9074	100	Catamarca	In Process	
CAT 4 (Petra V)	Cateo 98/16	9850	100	Catamarca	In Process	
La Aguada 1	Mina 116/16	2499	100	Catamarca	Granted	
La Aguada 2	Mina 117/16	2950	100	Catamarca	Granted	
La Aguada 3	Mina 99/16	100	100	Catamarca	In Process	
La Aguada 4	Mina 173/16	2929	100	Catamarca	Granted	
La Aguada 5	Mina 172/16	2866	100	Catamarca	Granted	
La Aguada 6	Mina 174/16	2999	100	Catamarca	Granted	
La Aguada 7	Mina 137/16	2919	100	Catamarca	Granted	
La Aguada 8	Mina 139/16	1587	100	Catamarca	Granted	
La Aguada 9	Mina	2607	100	Catamarca	Granted	
9 Mining leases 8 exploration leases		95,386 Ha				
17						
76		212012				

## Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

**Name of entity**

LAKE RESOURCES N.L.

**ABN**

49 079 471 980

**Quarter ended ("current quarter")**

31 DECEMBER 2018

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation	(1,279)	(2,940)
(b) development		
(c) production		
(d) staff costs	(126)	(272)
(e) administration and corporate costs	(308)	(758)
1.3 Dividends received (see note 3)		
1.4 Interest received		
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Research and development refunds		
1.8 Other (provide details if material)		
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(1,713)</b>	<b>(3,970)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment		
(b) tenements (see item 10)		
(c) investments		
(d) other non-current assets		

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
2.2 Proceeds from the disposal of: (a) property, plant and equipment (b) tenements (see item 10) (c) investments (d) other non-current assets		
2.3 Cash flows from loans to other entities		
2.4 Dividends received (see note 3)		
2.5 Other (provide details if material)		
<b>2.6 Net cash from / (used in) investing activities</b>		

<b>3. Cash flows from financing activities</b>		
3.1 Proceeds from issues of shares		
3.2 Proceeds from issue of convertible notes	940	940
3.3 Proceeds from exercise of share options	752	1,556
3.4 Transaction costs related to issues of shares, convertible notes or options	(30)	(35)
3.5 Proceeds from borrowings	280	280
3.6 Repayment of borrowings		
3.7 Transaction costs related to loans and borrowings		
3.8 Dividends paid		
3.9 Other (provide details if material)		
<b>3.10 Net cash from / (used in) financing activities</b>	<b>1,942</b>	<b>2,741</b>

<b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1 Cash and cash equivalents at beginning of period	291	1,744
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(1,713)	(3,965)
4.3 Net cash from / (used in) investing activities (item 2.6 above)		
4.4 Net cash from / (used in) financing activities (item 3.10 above)	1,942	2,741
4.5 Effect of movement in exchange rates on cash held		
<b>4.6 Cash and cash equivalents at end of period</b>	<b>520</b>	<b>520</b>

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
<b>5. Reconciliation of cash and cash equivalents</b>		<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
	at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts		
5.1	Bank balances	520	291
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>520</b>	<b>291</b>

**6. Payments to directors of the entity and their associates**

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

**Current quarter  
\$A'000**

119

Remuneration and fees paid to Directors

**7. Payments to related entities of the entity and their associates**

- 7.1 Aggregate amount of payments to these parties included in item 1.2
- 7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

**Current quarter  
\$A'000**

## Mining exploration entity and oil and gas exploration entity quarterly report

<b>8. Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
8.1 Loan facilities		
8.2 Credit standby arrangements		
8.3 Other (please specify)	990	990
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

During the period, the Company secured A\$0.99 million by way of issue of 9,900,000 unsecured convertible notes (Notes) to sophisticated and professional investors. The Notes attract interest at 15% per annum, payable quarterly in arrears in cash or fully paid ordinary shares at 95% of the VWAP of the Issuer's shares for the 10 trading days period ending on the relevant interest payment date. Refer to ASX announcement dated 21 December 2018 for further details.

<b>9. Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1 Exploration and evaluation	(950)
9.2 Development	
9.3 Production	
9.4 Staff costs	(165)
9.5 Administration and corporate costs	(95)
9.6 Other (provide details if material)	
<b>9.7 Total estimated cash outflows</b>	<b>(1,210)</b>

\* depending on funds availability, the Company can control its spending on exploration and evaluation activities as these activities are non-contractual and discretionary in nature.

<b>10. Changes in tenements (items 2.1(b) and 2.2(b) above)</b>	<b>Tenement reference and location</b>	<b>Nature of interest</b>	<b>Interest at beginning of quarter</b>	<b>Interest at end of quarter</b>
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced		No changes during the quarter.		
10.2 Interests in mining tenements and petroleum tenements acquired or increased		Tenements increased to 210,000 ha (100% ownership)	180000 Ha (100%)	210000Ha

### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

### **Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.