

16 July 2021

ASX:LKE | FRA:LK1 | OTC:LLKKF

# **CLEANER LITHIUM FOR AN ELECTRIC WORLD**

**Steve Promnitz** - Managing Director

Noosa Investor Conference

Red Cloud Green Energy Conference

**LAKE**  
RESOURCES



# Disclaimer

## General Statement and Cautionary Statement

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## Forward Looking Statements

Certain statements contained in this presentation, including information as to the future financial performance of the projects, are forward-looking statements. Such forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Lake Resources N.L. are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies; involve known and unknown risks and uncertainties and other factors that could cause actual events or results to differ materially from estimated or anticipated events or results, expressed or implied, reflected in such forward-looking statements; and may include, among other things, statements regarding targets, estimates and assumptions in respect of production and prices, operating costs and results, capital expenditures, reserves and resources and anticipated flow rates, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions and affected by the risk of further changes in government regulations, policies or legislation and that further funding may be required, but unavailable, for the ongoing development of Lake's projects. Lake Resources N.L. disclaims any intent or obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise. The words "believe", "expect", "anticipate", "indicate", "contemplate", "target", "plan", "intends", "continue", "budget", "estimate", "may", "will", "schedule" and similar expressions identify forward-looking statements. All forward-looking statements made in this presentation are qualified by the foregoing cautionary statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein. Lake does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

## Competent Person Statement

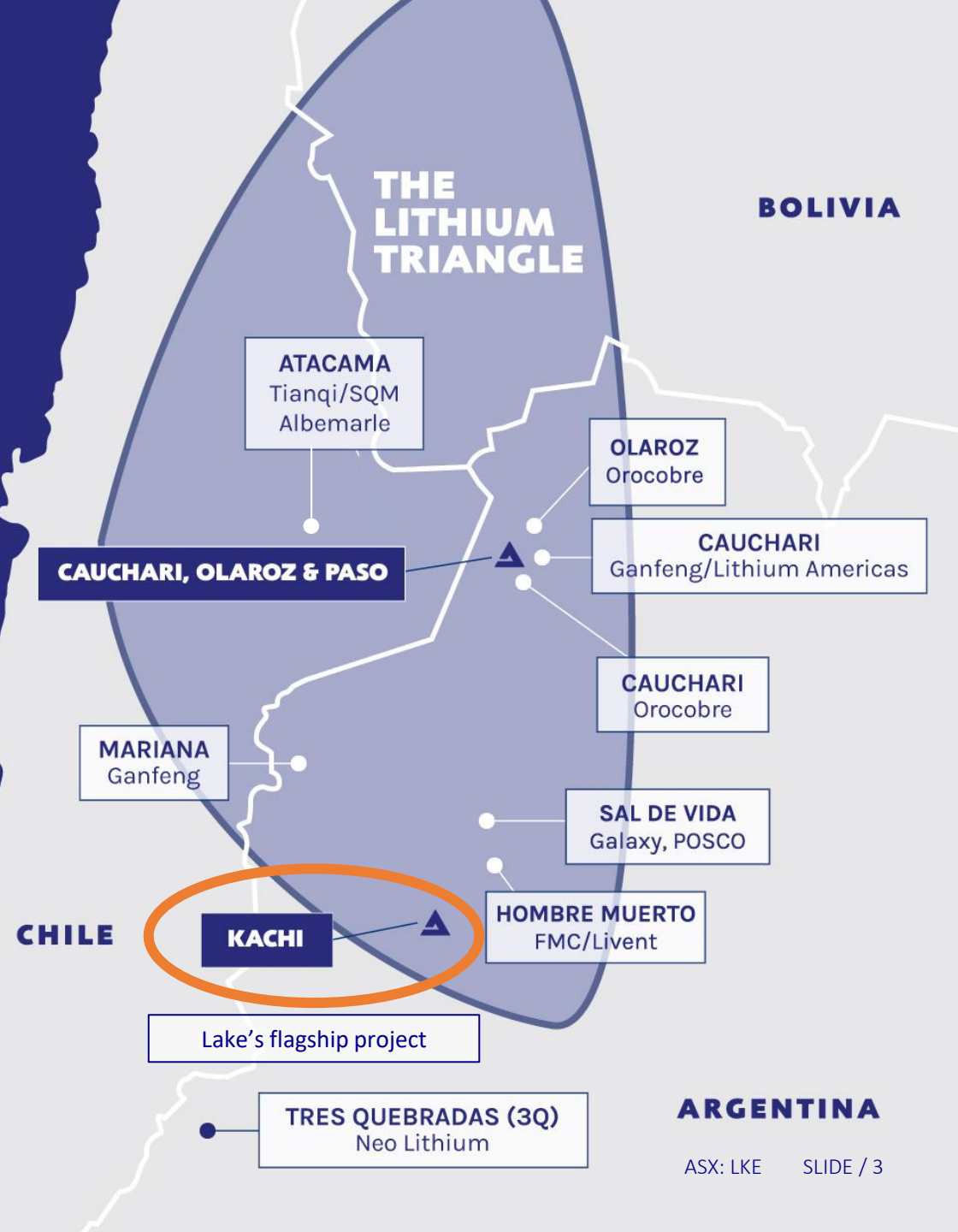
The information contained in this presentation relating to Exploration Results has been compiled by Mr Andrew Fulton. Mr Fulton is a Hydrogeologist and a Member of the Australian Institute of Geoscientists and the Association of Hydrogeologists. Mr Fulton has sufficient experience that is relevant to 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 presentation of this information in the form and context in which it appears. The information in this presentation is an accurate representation of the available data to date from initial exploration at the Kachi project and initial exploration at the Cauchari project.

# World's cleanest lithium.

Four lithium projects in heart of the Lithium Triangle. Produces 40% of the world's lithium at lowest cost.

Large leaseholding 2,200km<sup>2</sup> (550,000 acres)

World's five largest producers all have equity in operations in the Lithium Triangle.



World's cleanest lithium.

99.97%

High Purity lithium carbonate.  
Confirmed in batteries.

+ Significant ESG benefits.

- **CLEANER LITHIUM** – Lake's 99.97% purity product - far lower impurities vs 99.5% battery grade lithium carbonate. Higher purity lithium = higher battery performance.
- **CLEANER TECHNOLOGY:** Lilac direct lithium extraction – method common in water treatment, superior to traditional process. Supported by Bill Gates-led Breakthrough Energy Fund.
- **CLEANER ENVIRONMENT:** Lithium with ESG benefits. Smaller environmental footprint - low CO<sub>2</sub>, less water and low land use.
- **CLEARER PATHWAY:** Kachi has a demonstrated path to production; Successful pilot plant module. Large, scalable project, high margin.

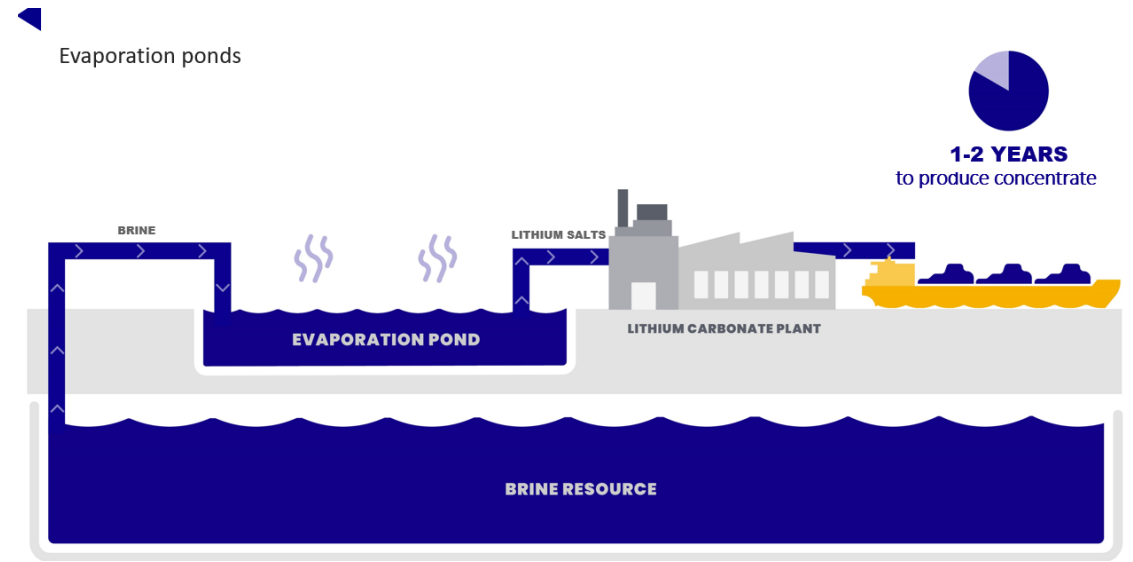
# Cleaner technology

Direct extraction - Lilac Solutions Process

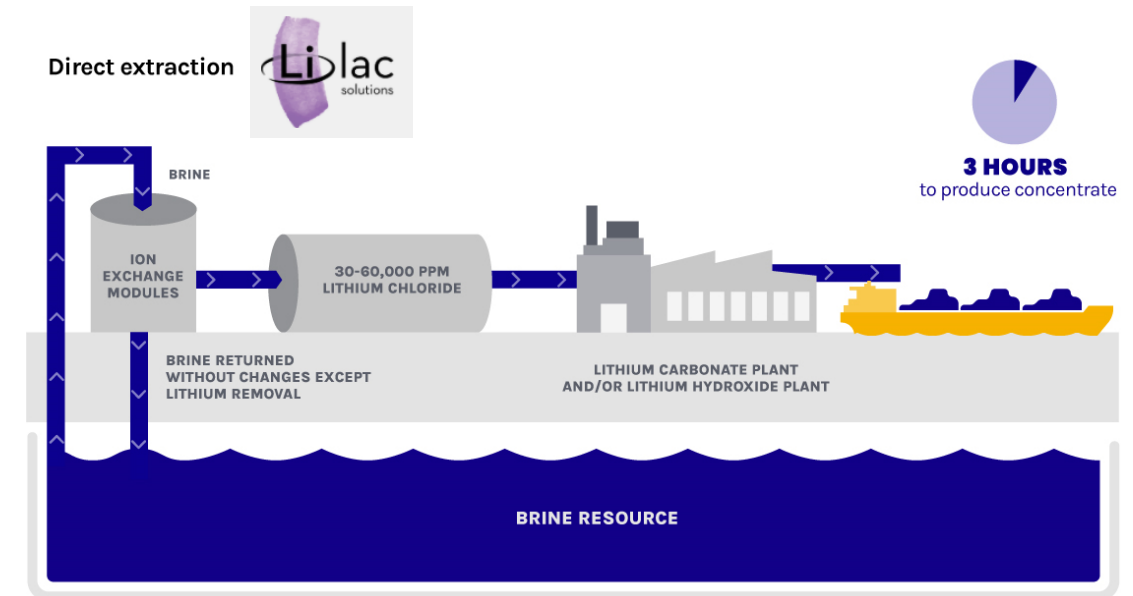
Lilac direct extraction displaces evaporation process

- High purity
- Faster process
- Higher recoveries
- Sustainable
- Cost competitive
- Scalable
- Proven in pilot plant

1<sup>st</sup> Century technology



21<sup>st</sup> Century technology

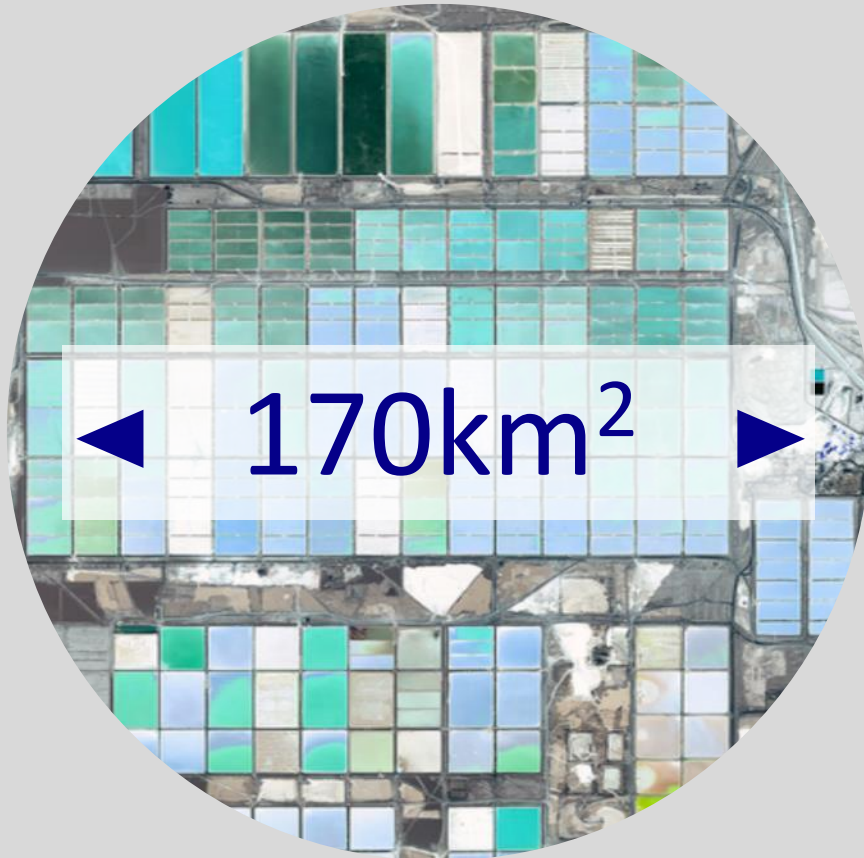




# Cleaner environment

Smaller environment footprint – Lower land use

Atacama Projects – Brine evaporation (170km<sup>2</sup>)



Kachi Project – Lake/Lilac DLE (<1km<sup>2</sup>)

<1km<sup>2</sup> wide



*Source: SQM / ALB presentations 2020; 170km<sup>2</sup> for c.80,000 tpa LCE. Lake/Lilac/Hatch estimates in PFS (excluding solar hybrid power)*

# Cleaner environment

Smaller environment footprint – Lower water use

Atacama Projects – Brine evaporation



Kachi Project – Lake/Lilac DLE

Brine Returned to  
Source



*Source: SQM / ALB presentations 2020; 170km<sup>2</sup> for c.80,000 tpa LCE. Lake/Lilac/Hatch estimates in PFS (excluding solar hybrid power)*

# Cleaner environment

Smaller carbon footprint

Kg CO<sub>2</sub>e/kg product

Li Hydroxide LCE  
from Hard Rock Spodumene

14 - 18.2

Li Carbonate LCE  
from Brine

4-5



Li Carbonate LCE  
from Lake/Lilac DLE  
Also expected to be low

*Note: Hard Rock = Spodumene converted to Lithium Hydroxide as LCE in China using coal for energy; Brine evaporation in Sth America  
Source: SQM presentation June 2020; Roskill Nov 2020; Lake/Lilac estimates with solar hybrid power – prelim study being undertaken*



# Clearer pathway

Simple production scale-up - Modular

Lilac Pilot /  
Demo Plant  
(1-2 Modules)

~10tpa LCE  
1000 hours

Production  
Scale (PFS)  
(50+ Modules)

25,500tpa  
LCE

Expansion Study\*

(to Double Production to 51,000tpa)

51,000tpa LCE

\* Note: Expansion Study requires drilling (underway) to upgrade more Inferred Resources to Measured and Indicated Resources.

# Clearer pathway

Lake's high purity lithium tested  
and proven in batteries

Lake's lithium carbonate demonstrated in batteries

- Lake's product - premium battery quality
- Performs like Tier 1 products in NMC622 batteries
- Only 50-60% of lithium production is battery quality
- Strengthens Lake's quality benefits and assists offtake discussions

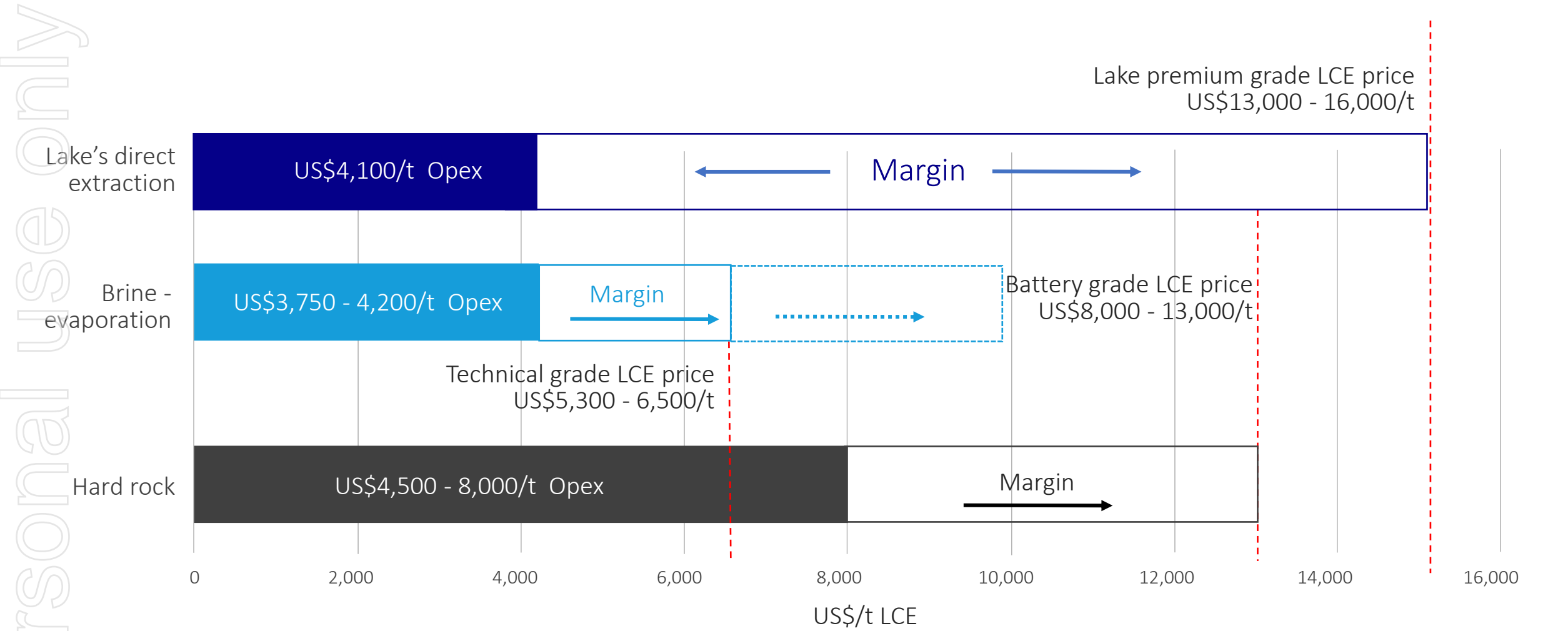


Battery technology leader (ASX:NVX; OTCQX:NVN XF)

- Clients include Panasonic, CATL, Samsung, SK, LG Chem, Bosch, Honda & Dyson
- Developing latest cathode and anode technology

# Direct extraction

Premium price – very high margin



Source: Street research and LAC presentations 2020 – including Cauchari DFS numbers, Olaroz results, Thacker Pass results; Lake/Lilac/Hatch estimates in PFS (excluding solar hybrid power), with indicative premium pricing

# Kachi project.

Large, scalable resource

25 years production uses 20% of resource.

- Drilling to upgrade resource for expansion; resource open laterally and at depth
- Kachi lease – 740 sq km (185,000 acres)
- One of 10 largest brine resources globally – total JORC resource 4.4Mt LCE
- Production 25,500tpa – H1, 2024
- Export Credit Agencies – indicative 10 year 70% debt funding of Kachi development



# Kachi PFS metrics

Compelling economics

Pre-Feasibility Study results

Mineral Resource\* (Indicated)

1.01Mt

Annual production  $\text{Li}_2\text{CO}_3$

25,500tpa

Annual EBITDA

US\$260m

Project life

25+ years

Expansion Study Underway

51,000tpa<sup>#</sup>

CAPEX

US\$544m

Cash cost

US\$4,178/t

Annual operating costs

US\$107m

Project Finance

70% debt<sup>##</sup>

Post-tax NPV<sub>8</sub>

US\$1,580m<sup>\*\*</sup>

IRR post-tax

35%

Note: Results based on PFS Study Assumptions (refer ASX releases 30 Apr 2020, 17 March 2021)

\*Based on Indicated Resource 1.0Mt @290mg/L lithium

\*\*Assuming US\$15,500/t lithium carbonate price (CIF Asia) (refer ASX release 17 March 2021)

<sup>#</sup> Expansion study to double production, but not confirmed

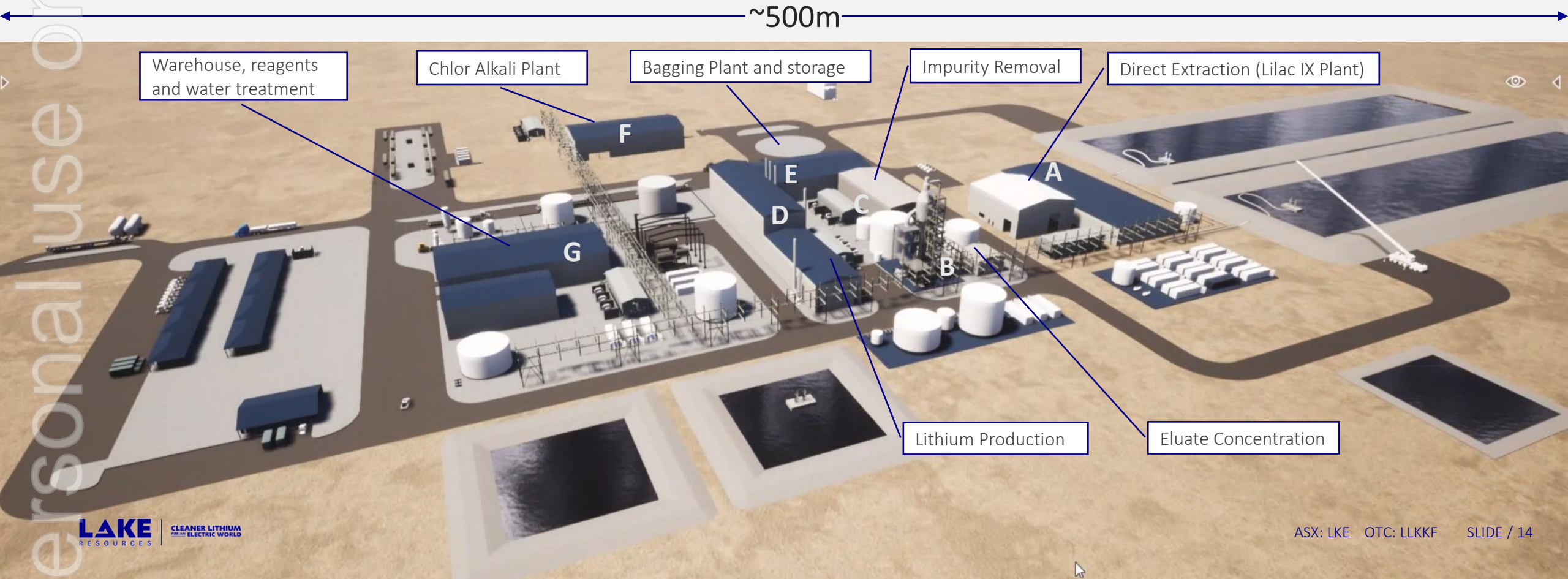
<sup>##</sup> Discussions with Export Credit Agencies Underway; Indications of c. 70% debt over 8-10 years



# Kachi project

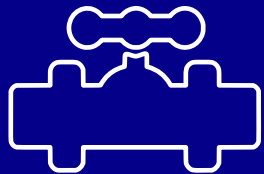
Proposed plant design

ersonal use only



# Project Production Timeline

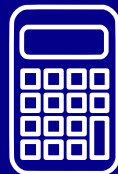
2021 – Q1 2022



## DFS ESIA

Definitive Feasibility  
Study  
2022 Expansion Study

Q3,Q4 2021



## Demonstration Plant

Q4,2021 Demo Plant Onsite  
2021 Samples in Batteries  
2021 Samples to Offtakers

2021 – Q2, 2022



## Financing

Project Finance  
Export Credit Agencies  
Indicative 70% debt 10 years

Q3,Q4 2022



## Construction / Production

Mid-Late 2022 Approvals/  
Construction starts

2024 Production  
25,500tpa LCE

# Cauchari project

Identical lithium brines as adjoining Ganfeng/ Lithium Americas development

Lake's brines being tested for direct lithium extraction

Scoping study and resource drilling planned for 2021/22

Other Lake projects adjoin Olaroz production area

Ganfeng/LAC Resource – 23Mt LCE @ 581mg/L lithium

Orocobre Resource – 6.3Mt @ 476mg/L Li

**Lake – 506m Brine zone**  
421- 540mg/L lithium (102-608m)

# Corporate snapshot

Funded to FID

Share price

**A\$0.37** US\$0.27

15 July 2021 (10 day VWAP)

52 week high \$0.475c, low \$0.03c

Shares on issue

**1.058bn**

Market capitalisation

**A\$390m**

US\$290m

Institutional Investors

**Ausbil, Acorn**

+ Institutional investors USA, EU

Cash 30 June 2021 (estimate)

**A\$25m**

US\$18.6m

Debt

**Zero**

Unlisted Options

**15.0m**

9c options, 31 July 2021 expiry

**73.7m**

30c options, March 2023 expiry

## Half year share price chart

LKE Chart





# Leadership

Board has extensive background in resources sector, backed by experienced on-site team in Argentina.



**Steve Promnitz**  
CEO & MANAGING DIRECTOR

Extensive project management experience in South America – geologist and finance experience – with major companies (Rio, Citi) and mid-tiers.



**Stu Crow**  
CHAIRMAN NON-EXEC

More than 25 years of experience (numerous public companies) and in financial services.



**Dr Nicholas Lindsay**  
EXEC TECHNICAL DIRECTOR

30 years of experience in Argentina/Chile/Peru (PhD in Metallurgy & Materials Engineering); Major companies (Anglo) and taken companies from inception to development to acquisition in South America.



**Dr Robert Trzebski**  
NON-EXEC DIRECTOR

International mining executive with 30 years experience; operational, commercial and technical experience in global mining incl. Argentina. Extensive global contacts to assist Lake with project development. Chief Operating Officer of Austmine. Director Austral Gold.



# CLEANER LITHIUM FOR AN ELECTRIC WORLD

- World's highest purity lithium
- Technology led direct extraction
- Major ESG benefits

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# Appendices

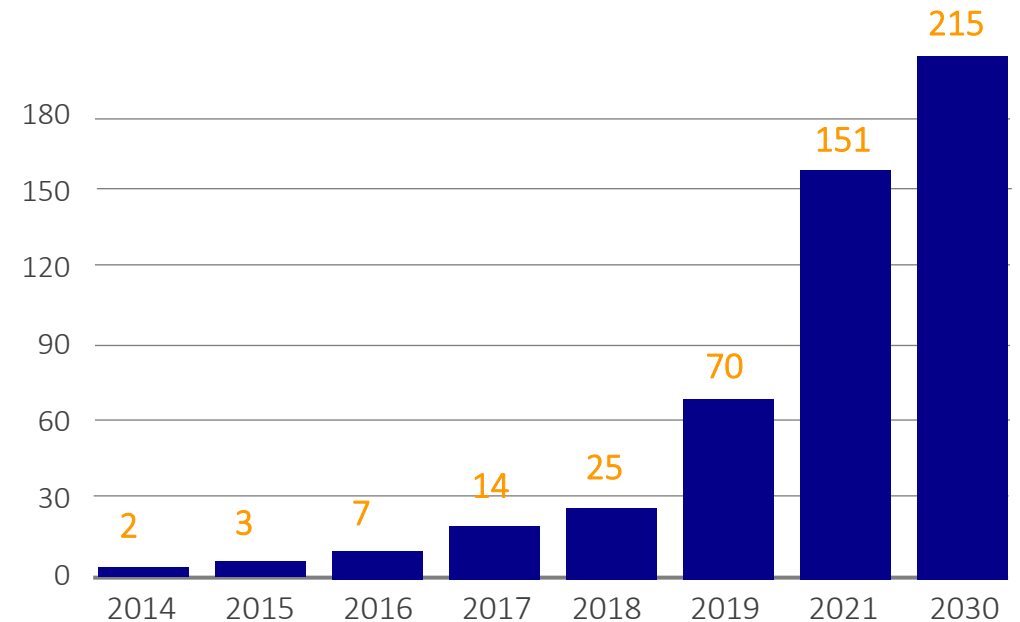
# Market needs 10x to 18x more lithium production by 2030.

- Lithium added to critical raw materials list for the first time in 2020
- Lithium-ion batteries represent one of the 21<sup>st</sup> Century's largest growth areas
- Lake's world's purest lithium is exactly what an electric world wants

## Battery mega-factory growth

215 battery factories planned for 2030

151 operating by end 2021



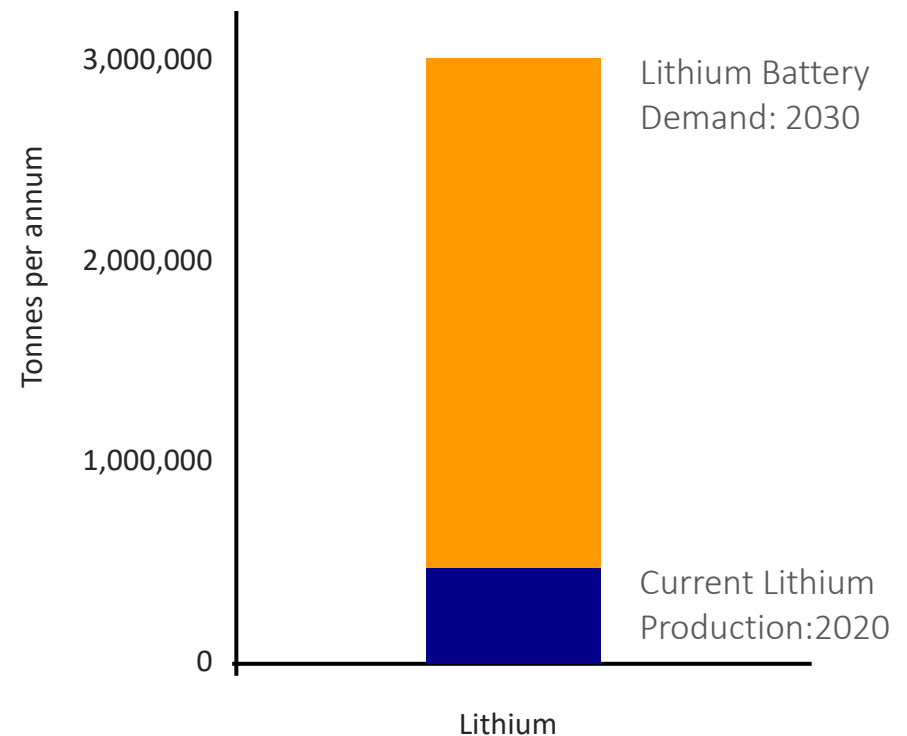
Source: Benchmark Mineral Intelligence

# Underinvestment in new supply. Price moving up.

- Lithium carbonate prices have doubled over past year
- 8 to 18 times more lithium production needed by 2030 to satisfy demand
- Need 7 companies the size of SQM each year for the next 10 years

## Lithium battery demand

215 Megafactories operating at 100% capacity (3.7 TWh)



Source: Benchmark Mineral Intelligence Apr 2021

# Sustainable lithium

## Lake / Lilac DLE method

- Low CO2 footprint
- Low water usage
- Low land use

Bloomberg Green

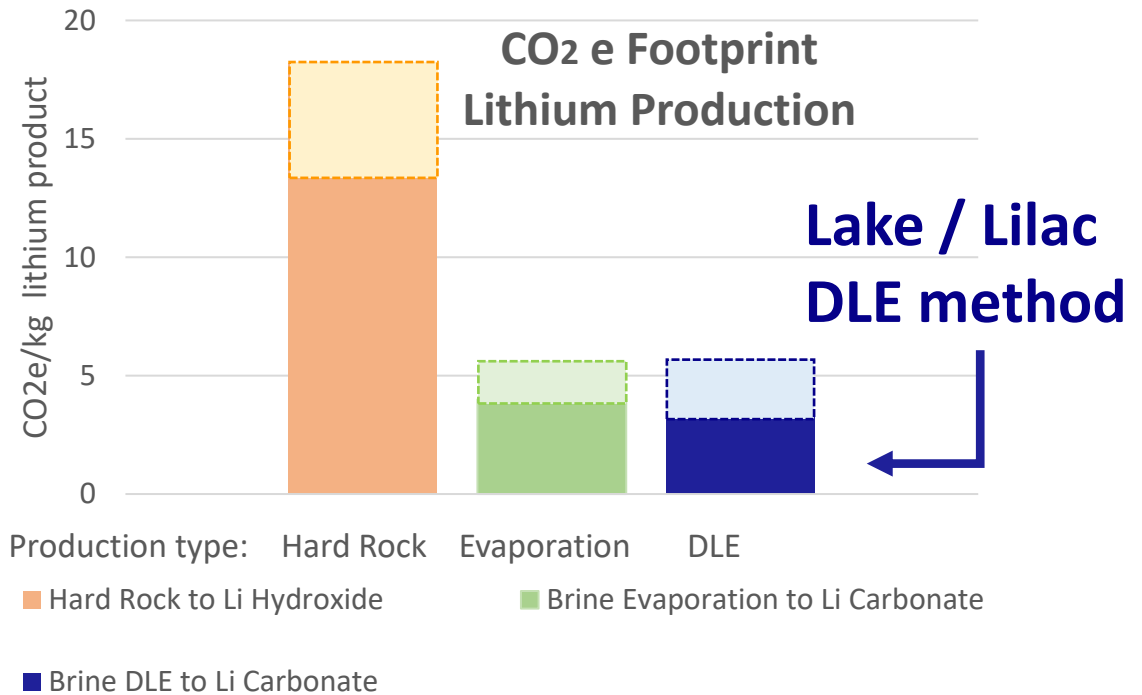
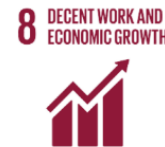
Energy & Science

### Bill Gates-Led Fund Invests in Making Lithium Mining More Sustainable

Lilac Solutions has developed a process for extracting lithium that drastically cuts water use.

By Akshat Rathil  
February 20, 2020, 4:00 PM GMT+11

## ESG Sustainable Development Goals



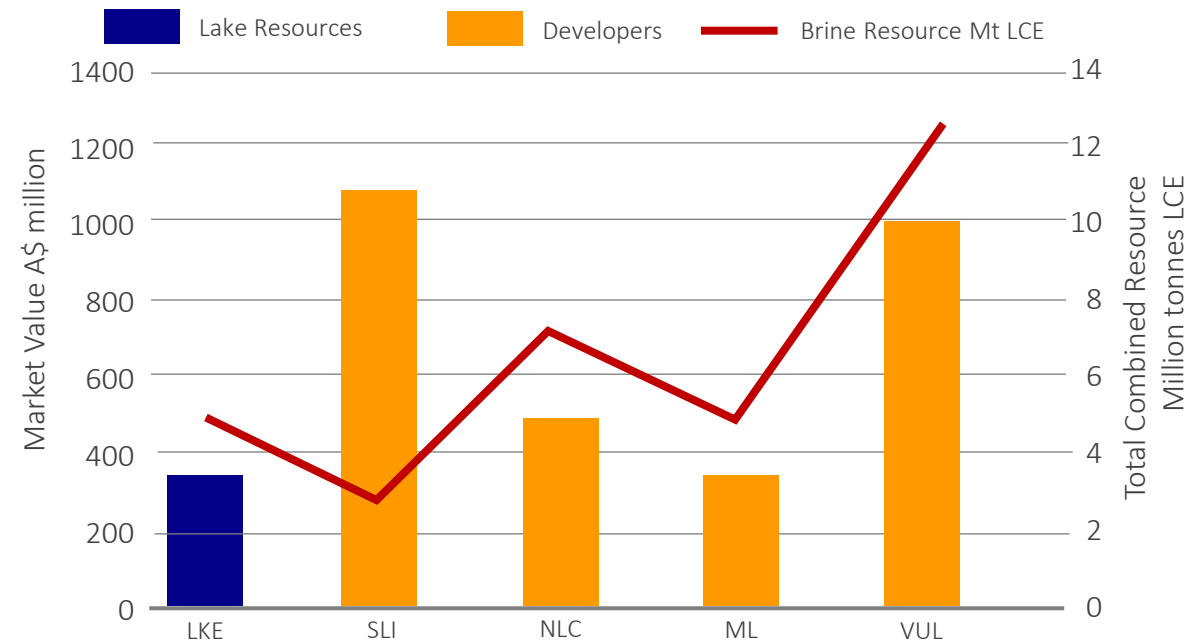


# Significant Upside

- Lake Trading 15% NPV<sub>8</sub> vs Peers 30-80% NPV<sub>8</sub>
- Lake Market Value \$380m vs DLE Peers at \$1050m (SLI.NYSE)
- Research with price targets \$0.79-\$1.89 per share (Roth Capital, Lodge, Orior Capital)

## Lithium Developer Peers

Market Value vs Brine Resource



# Mineral Resource (JORC Code 2012)

## Kachi Project

Lithium carbonate equivalent (LCE)

Indicated

1.0Mt

Inferred

3.4Mt

Total Resource

4.4Mt

KACHI LITHIUM BRINE PROJECT	MINERAL RESOURCE ESTIMATE					
JORC Code 2012 Edition	Indicated		Inferred		Total Resource	
Area, km²	17.1		158.3		175.4	
Aquifer volume, km³	6		41		47	
Brine volume, km³	0.65		3.2		3.8	
Mean drainable porosity %	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	4,380
Resource, tonnes	188,000	3,500,000	638,000	12,500,000	826,000	16,000,000
Lithium Carbonate Equivalent (LCE), tonnes	1,005,000		3,394,000		4,400,000	
Potassium Chloride, tonnes	6,705,000		24,000,000		30,700,000	
Lithium is converted to lithium carbonate (Li2CO3) with a conversion factor of 5.32						
Potassium is converted to potassium chloride (KCl) with a conversion factor of 1.91						

## Lake Lithium Carbonate High Purity

Chemical Component	Actual (wt%)	Target
Lithium (Li)	99.9	99.5 Min
Sodium (Na)	0.024	0.025 Max
Magnesium (Mg)	<0.001	0.008 Max
Calcium (Ca)	0.0046	0.005 Max
Iron (Fe)	<0.001	0.001 Max
Silicon (Si)	<0.001	0.003 Max
Boron (B)	<0.001	0.005 Max

Source: LKE announcement 20/10/2020

# JORC Code 2012

## Appendix 1 - Kachi Project

Criteria	Section 1 - Sampling Techniques and Data
Sampling techniques	<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>
Drilling techniques	<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>
Drill sample recovery	<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>
Logging	<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>
Sub-sampling techniques and sample preparation	<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>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"><li>The Alex Stewart Argentina/Nor lab SA in Palpa, 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 analysed blind control samples and duplicates in the analysis chain.</li><li>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>
Verification of sampling and assaying	<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><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>
Location of data points	<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>
Data spacing and distribution	<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>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"><li>The salt lake (salar) 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>
Sample security	<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>
Review (and Audit)	<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>

Criteria	Section 2 - Mineral Tenement and Land Tenure Status
Mineral tenement and land tenure status	<ul style="list-style-type: none"><li>The Kachi Lithium Brine project is located approximately 100km south-southwest of Liven† (FMC's) Hambre Muerto lithium operation and 43km 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 70,462 Ha in thirty seven mineral leases (minas) of which five leases (9,445 Ha) are granted for drilling, twenty two leases are granted for initial exploration (44,328 Ha) and ten leases (16,689 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>
Exploration by other parties	<ul style="list-style-type: none"><li>Marifil Mines Ltd conducted sparse near-surface pit sampling of groundwater at depths less than 1m during 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 drillholes 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>
Geology	<ul style="list-style-type: none"><li>The known sediments within the salar consist of salt/halite, clay, sand and silt horizons, accumulated in the salar 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>
Drill hole information	<ul style="list-style-type: none"><li>15 drill holes completed, totalling 3150 metres with varying depths up to 403 metres.</li><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><li>Assay averages have been provided where multiple sampling occurs in the same sampling interval.</li></ul>
Data methods aggregation	<ul style="list-style-type: none"><li>Mineralisation interpreted to be horizontally lying and drilling perpendicular to this.</li></ul>
Relationship between mineralisation widths and intercept lengths	<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>
Balanced reporting	<ul style="list-style-type: none"><li>Brine assay results are available from 15 drill holes from the drilling to date, reported here.</li></ul>
Other substantive exploration data	<ul style="list-style-type: none"><li>There is no other substantive exploration data available regarding the project.</li></ul>
Further work	<ul style="list-style-type: none"><li>Further water well drilling is planned to expand the resource and test pumping rates.</li></ul>
Criteria	Section 3 – Estimation and Reporting of Mineral Resources
Database integrity	<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></ul>
Site visits	<ul style="list-style-type: none"><li>Comparison of original and current datasets were made to ensure no lack of integrity.</li><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>
Geological interpretation	<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 the exploration results 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 conceptualise 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>
Dimensions	<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 subsequently covers 175 km².</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 intercepted in drilling.</li><li>The resource is defined to a depth of 400 m below surface, with the exploration target immediately extending beyond the lateral extent of the resource.</li></ul>
Estimation and modelling techniques	<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><li>The geological interpretation was used to define each geological unit and the property limit was used to enclose the reported resources.</li></ul>
Moisture	<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 elemental lithium and potassium dissolved in brine.</li></ul>
Cut-off parameters	<ul style="list-style-type: none"><li>No cut-off grade has been applied.</li></ul>

Mining factors or assumptions	<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. (Recoveries of 83% lithium have been used in the PFS for the direct processing method)</li><li>Dilution of brine concentrations may occur over time and typically there are lithium and potassium losses in both the storage ponds and processing plant in brine extraction 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 hydrological studies of the lake are being undertaken (groundwater modelling) to define the extractable resources and potential extraction rates.</li></ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"><li>Lithium carbonate is targeted as the commercial product.</li><li>It would be obtained by the brines being subjected to direct lithium extraction (ionic exchange and reverse osmosis) to produce a high grade LiCl eluate (30,000 to 60,000 mg/L lithium), which is processed in a conventional lithium carbonate plant by reaction with sodium carbonate: <math display="block">\text{LiCl} + \text{Na}_2\text{CO}_3 \rightarrow \text{Li}_2\text{CO}_3 + \text{NaCl}</math></li><li>Process work has been undertaken by Lilac Solutions, which is an expert laboratory in the treatment of brines by ion exchange.</li><li>Bench tests include short and long-term tests using ion exchange media and brine from Kachi to establish recovery, reagent consumption, and engineering parameters used in the PFS</li><li>Analyses of solutions by ICP and includes the use of standards</li><li>The longevity of the ion exchange media has been tested over 1000 cycles, or six months</li><li>Lithium carbonate of high purity and low impurities has been produced which can be considered equivalent to metallurgical test work) is being carried out on the brine following initial test work.</li><li>Pilot plant module test-work has commenced using Kachi brine using Lilac Solutions ion exchange direct extraction method. 20,000 litres of Kachi brine was being processed by Lilac into concentrated lithium chloride (eluate).</li><li>Hazen Research Inc has demonstrated the conversion of lithium chloride from the pilot module into larger volumes of high purity lithium carbonate with purity &gt;99.97% with very low levels of impurities.</li><li>Hazen processed the eluate from Lilac to produce the lithium carbonate sample using reduction of water through evaporation, treatment with sodium hydroxide and soda ash, ion exchange, precipitation, filtering and recrystallization.</li><li>Due to the high purity of the lithium carbonate, the lithium is reported as 100% minus the sum of impurities. ICP-MS and ICP-AES assays from the Hazen Research lab were used to assess impurities. Titration (acidimetric titration with HCl) was performed for total Lithium, run in duplicate and resulted in assays of 100.2 wt% and 100.3 wt%. This is the accepted assay technique for larger lithium carbonate samples.</li><li>To ensure consistency of the processing and analysis with industry standards, Dr Nick Welham was consulted and reviewed the results and calculations of purity.</li><li>This work is yet to be integrated into the resource model.</li></ul>
Environmental factors or assumptions	<ul style="list-style-type: none"><li>Impacts of a lithium operation at the Kachi project would include surface disturbance from the installation of extraction/processing facilities and associated infrastructure, accumulation of various salt tailings impoundments and extraction from brine and fresh water aquifers regionally.</li><li>Environmental management plan for the protection of wetlands, salt lakes, and surrounds.</li><li>Consultation with communities in the area of influence of the project.</li><li>Environmental impact analysis on-going.</li></ul>
Bulk density	<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</li><li>No bulk density was applied to the estimates because resources are defined by volume, rather than by tonnage.</li></ul>
Classification	<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>A Measured resource would reflect higher density drilling, with porosity samples from drill cores and well constrained vertical brine sampling in the holes.</li></ul>
	<ul style="list-style-type: none"><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 and/or Indicated resource reflects the limited drilling to this depth together with 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>
Audits or reviews	<ul style="list-style-type: none"><li>The Mineral Resource was estimated by the Competent Person.</li></ul>
Discussion of relative accuracy/confidence	<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></ul>