

CLEAN HIGH PURITY LITHIUM

Uniquely Meets Demand with Clean Technology

Steve Promnitz - Managing Director

19 January 2020 Update

LAKE
RESOURCES

CLEANER LITHIUM
FOR AN **ELECTRIC WORLD**

ASX:LKE FRA:LK1 OTC:LLKKF



Disclaimer

General Statement and Cautionary Statement

This presentation has been prepared by Lake Resources N.L (Lake) for information purposes and meetings with sophisticated and professional investors, institutional investors and brokers and not any particular party. The information in this presentation is based upon public information and internally developed data and reflects prevailing conditions and views as of this date, all of which are accordingly subject to change. The information contained in this presentation is of general nature and is not intended to address the circumstances of any particular individual or entity. There is no guarantee that the information is accurate as of the date it is received or that it will continue to be accurate in the future. No warranties or representations can be made as to the origin, validity, accuracy, completeness, currency or reliability of the information. No one should act upon such information without appropriate professional advice after a thorough examination of the particular situation. Lake Resources NL accepts no responsibility or liability to any party in connection with this information or views and Lake disclaims and excludes all liability (to the extent permitted by law) for losses, claims, damages, demands, costs and expenses of whatever nature arising in any way out of or in connection with the information, its accuracy, completeness or by reason of reliance by any person on any of it. The information regarding projects described in this presentation are based on exploration targets, apart from Kachi project's resource statement. The potential quantity and grade of an exploration target is conceptual in nature, with insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources or that potentially economic quantities of lithium will be discovered. Some leases are located within and around the Orocobre, Orocobre/Advantage Lithium and Ganfeng/Lithium Americas projects and although data is limited within the properties, the leases may cover potential extensions to the Cauchari/Olaroz projects with potential extensions to aquifers, although this provides no assurance that any resource will be identified on the Lake leases. The lithium pegmatite leases occur adjacent to past producers of spodumene but no potential extension to any mineralisation can be assured.

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, Mineral Resource estimates and the associated Indicated Resource, which underpins the production target in the pre-feasibility study, have 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.

Clean Technology – No Mining – High Purity

- **Clean Technology – Direct Extraction by Partner, Lilac Solutions** – Efficient lithium separation from brine; backed by Bill Gates-led Breakthrough Energy fund
- **High Purity Lithium** - 99.97% purity battery quality lithium carbonate: Kachi Project
- **Responsibly Sourced; Sustainable; ESG** – Returns 99% brine to source
- **Demonstrated Path to Production – Kachi Project**
Successful pilot plant module; Small scale-up to production; Cost-competitive; Large project

Solution to EV & Cathode/Battery Maker Demand

Key Demand – Consistently high purity & more sustainable

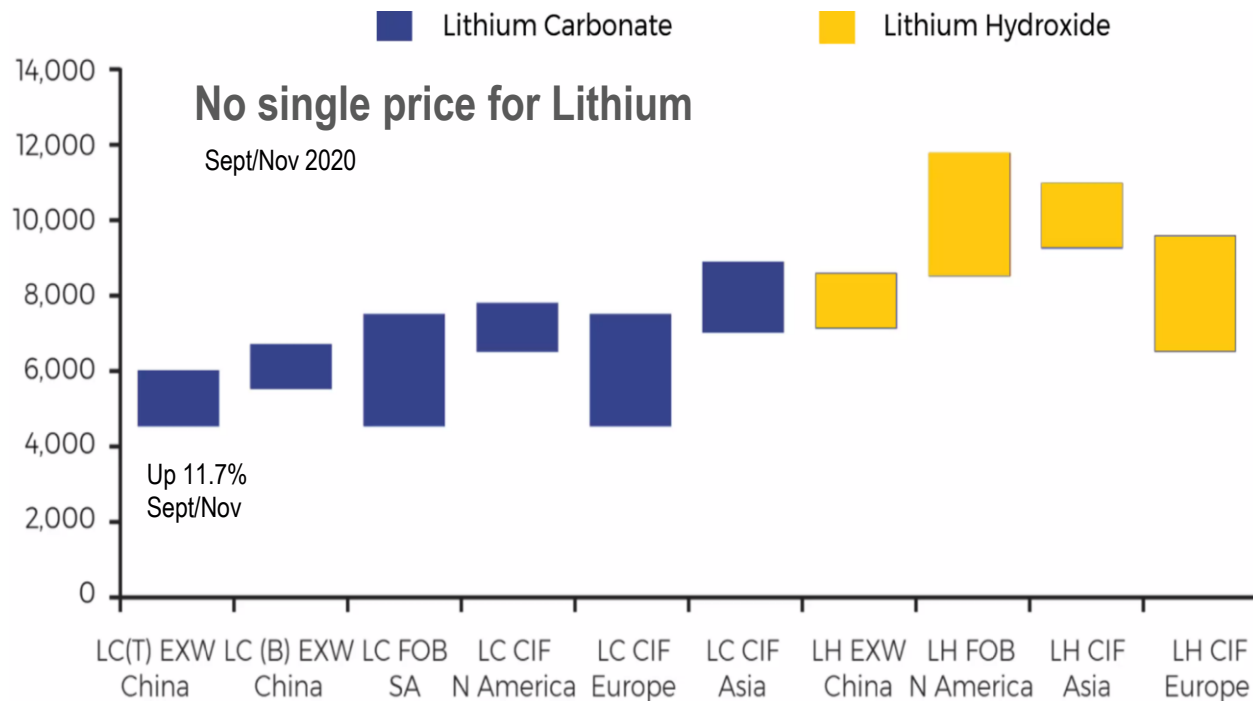
- **#1 High Purity Battery Materials - to avoid performance issues** – Low impurities are being sought in battery materials to ensure reliable battery performance
- **#2 Responsibly Sourced, Traceable, Sustainable Battery Materials** - Transition to electric vehicles increased demand for more sustainable battery materials. Smaller CO2, water, physical, energy footprint. EU market set July 2024 for CO2 footprint.
- **#3 Low Cost Structure** - To deliver affordable batteries for electric vehicles
- **Lake/Lilac Solution** – High purity/low impurity consistently; Cost Competitive; Scalable; Small environmental footprint; Returns 99% brine to source; Low water usage

Demand Growth for Sustainable Lithium Supply

18 times more Lithium Production by 2030; Underinvestment in new supply; Price moving up

Lithium Carbonate Price Increasing

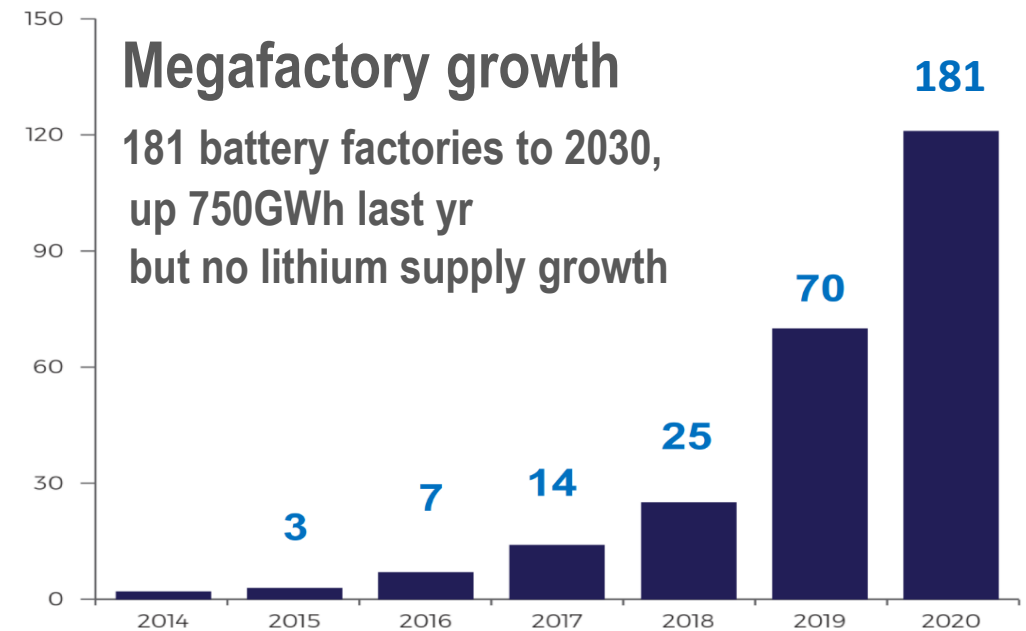
Recent spot China price increase US\$8,500-10,000/t



Need 18x more Lithium Production by 2030

1st time lithium added to critical raw materials list

“7 companies SQM size per year for 10 years”



Source: Benchmark Mineral Intelligence

Direct extraction - Clean, Efficient

Re-engineered well-known technology in water treatment

- Efficient – just lithium removed from brine
- Faster – days not months or years
- Higher recoveries than evaporation
- High purity – because only lithium removed
- Cost competitive with traditional method
- Scalable, flexible to meet demand quickly
- Environmentally friendly - small footprint
- Returns brine to source; no change to chemistry; no heating of brine

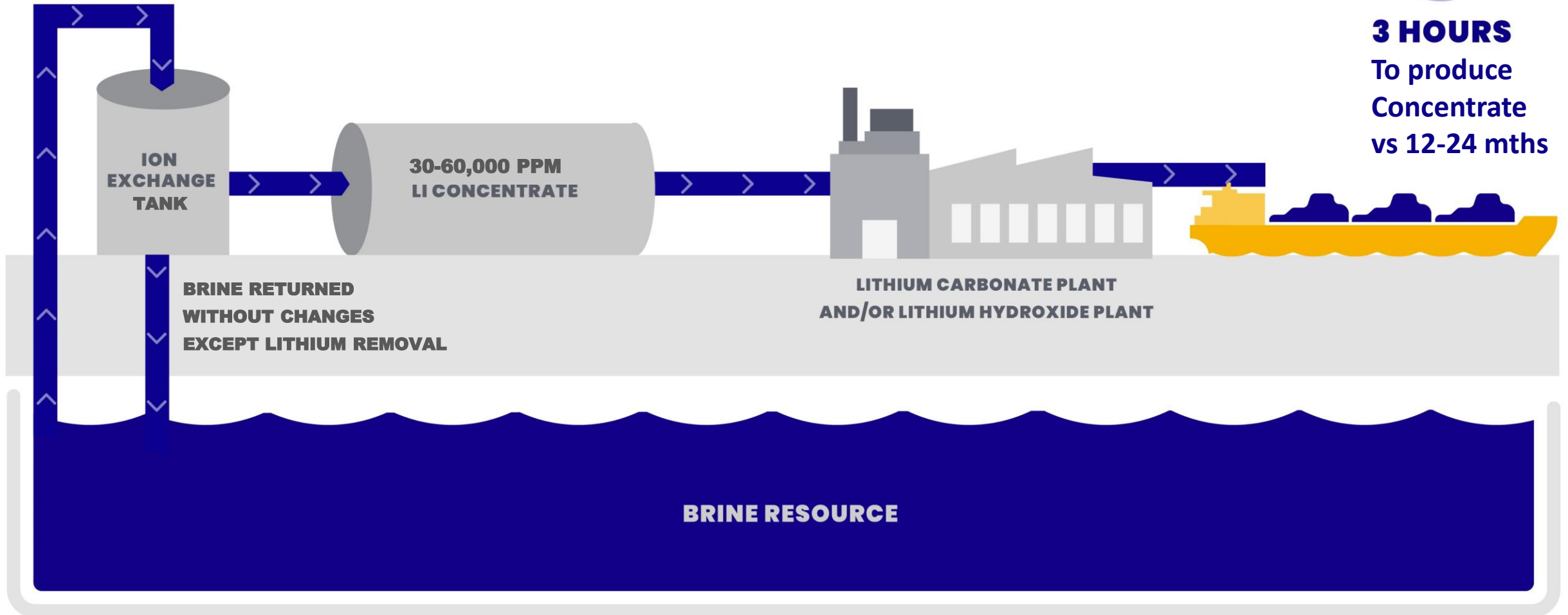


Direct extraction. Ion Exchange Process Lilac Solutions

Replaces Evaporation Ponds with Ion Exchange Modules
Simple Process – Repeated every 2.5 hours
Simple Flowsheet to produce lithium carbonate



3 HOURS
To produce
Concentrate
vs 12-24 mths



De-Risked Processing; Simple Production Scale-up

**Direct Extraction Lithium –
Lilac Pilot Plant Module**



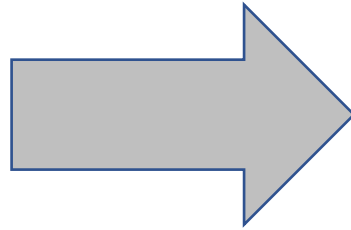
**Pilot
1-2 modules**

ASX:LKE
OTC:LLKKF

SLIDE / 8



**Pilot to
Production**



**Direct Extraction Lithium –
Lilac Production Scale**

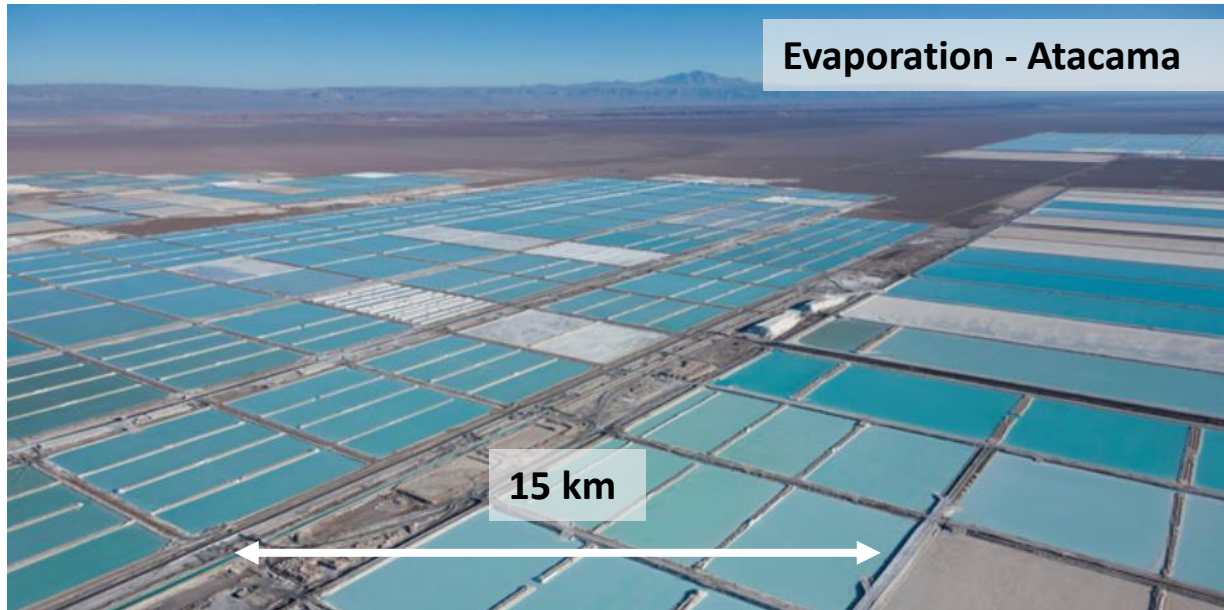


**Production Scale
50+ modules**

Modules here are not an example of the actual modules

Direct extraction - Small Environmental Footprint - 90% less

Lilac Direct Extraction Footprint vs Brine Evaporation Ponds (Atacama) and Hard Rock Mining (Greenbushes)



Direct Extraction:
Returns
brine to source

ASX:LKE
OTC:LLKKF

High Purity

99.97% Purity Lithium Carbonate

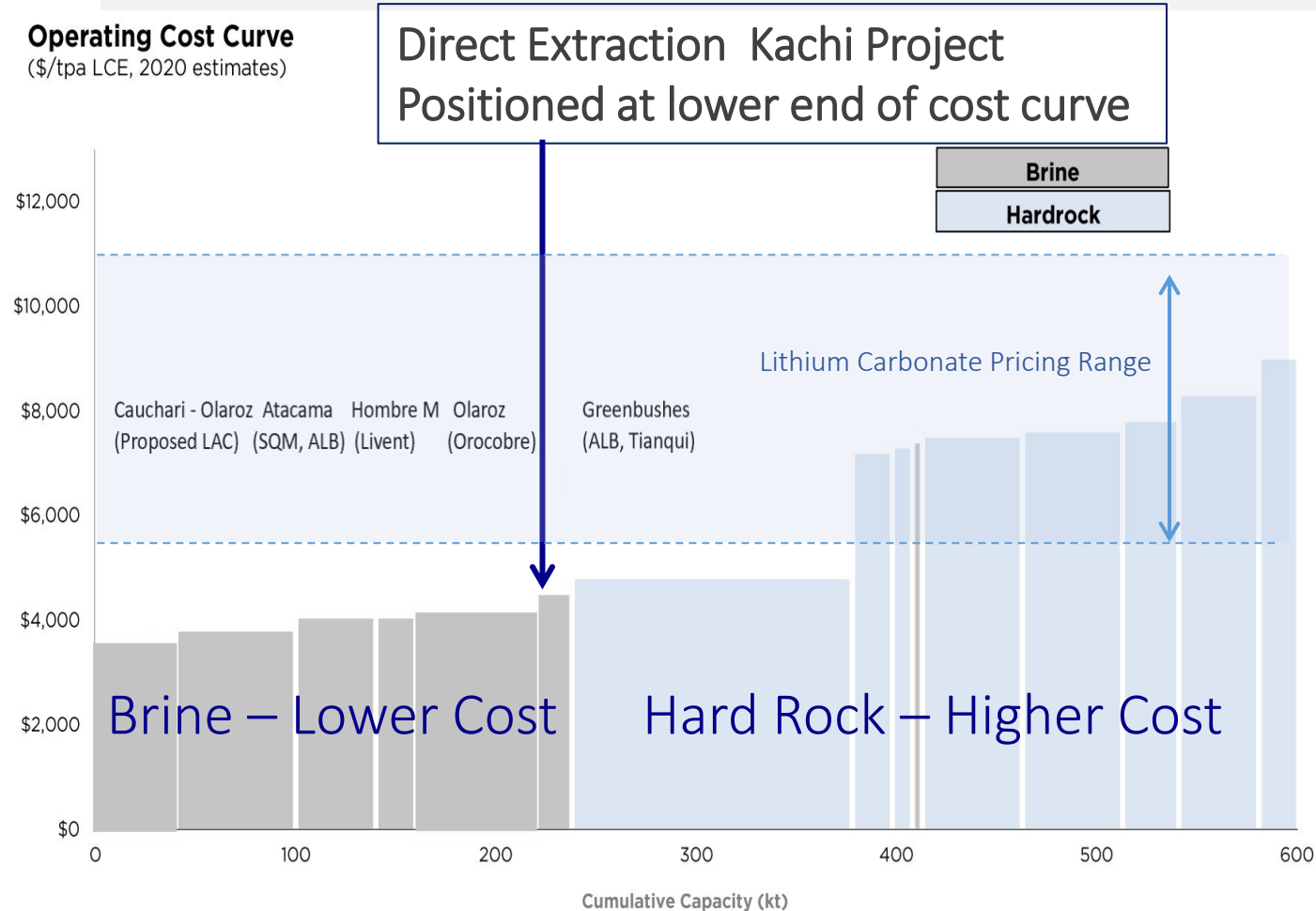
Produced from Kachi project brines

After processing in Lilac direct extraction pilot module

- Battery Grade considered to be 99.5%
- Kachi samples have very low impurities (60x less than 99.5% battery grade)
- Simple flowsheet; cost – competitive

Low Impurities - Premium Pricing - Cost Competitive

Operating Cost Curve
(\$/tpa LCE, 2020 estimates)



Chemical Component	Actual (wt%)	Target
Lithium (Li)	99.97	99.5 Min
Sodium (Na)	0.0011	0.025 Max
Magnesium (Mg)	<0.001	0.008 Max
Calcium (Ca)	<0.001	0.005 Max
Potassium (K)	0.0049	0.005 Max
Sulphur (S)	<0.01	0.01 SO4 Max
Aluminum (Al)	<0.001	0.001 Max
Iron (Fe)	<0.001	0.001 Max
Silicon (Si)	<0.001 *	0.005 Max
Boron (B)	<0.001	0.005 Max

ASX:LKE
OTC:LLKFF

SLIDE / 11

Source: Street research including Cauchari-Olaroz DFS and Thacker Pass (before by-product credits). Includes CORFO royalty assuming price of \$9,000/t of lithium carbonate

Lithium Americas (LAC:TSX-V)
Information Nov 2019

Source: LKE announcements 20/10/2020, 14/01/2020

Prime Location – Large Producers.

Lithium Triangle: 40% of
world's lithium production
at the lowest cost.

5 largest producers all have operations
ALB, SQM, LTHM + Tianqui, Ganfeng JV

Lake has a large project at Kachi
3 other brine projects

Over 220,000 hectares (550,000 acres)



Kachi Project.

100% Lake owned

Major brine resource - Top10

4.4 Mt LCE Total Resource
(1Mt LCE Indicated Resource; 3.4 Mt Inferred)

25 yrs production uses 20% resource

74,000 hectares of leases
(185,000 acres; size of NYC)

PFS 2020

DFS/ESIA 2021

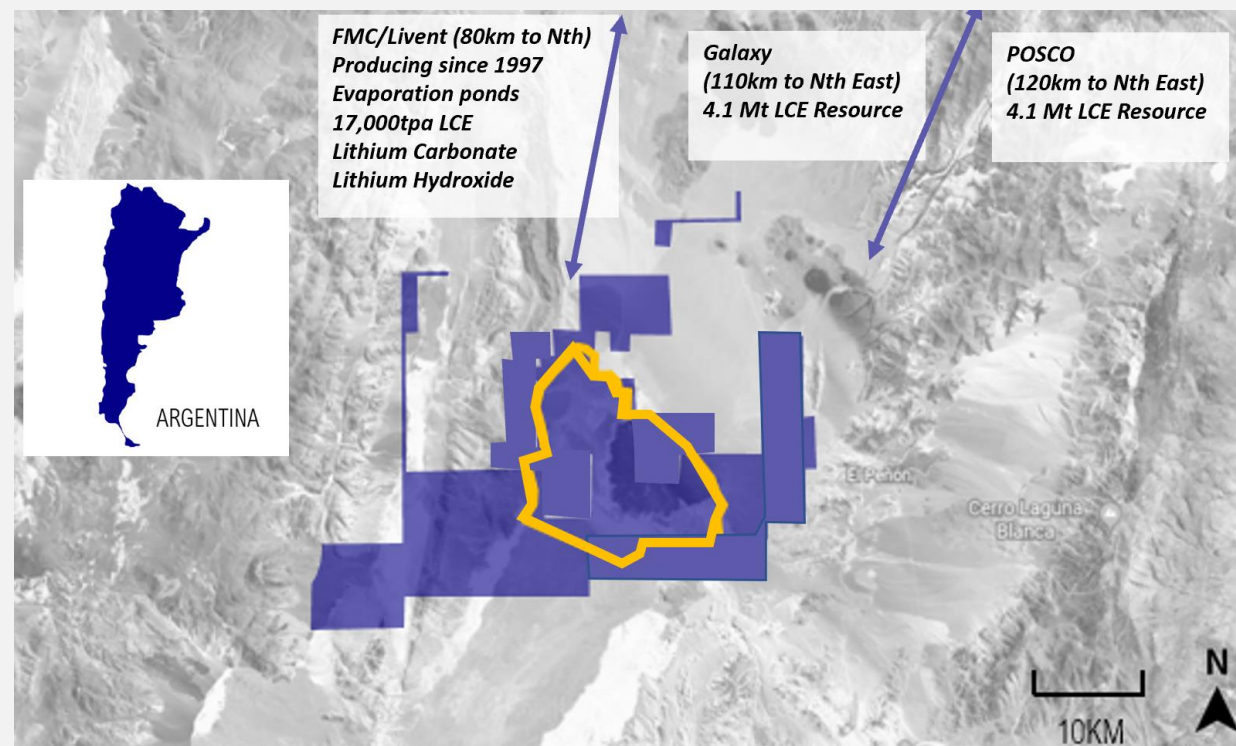
Production 25,500tpa 2024





Kachi - Advantages: Large, Clean, Expandable

- **Large:** 4.4 million tonne LCE.
- **Expandable:** Open laterally;
Open at depth
- **Clean:** Brine low in impurities
- **Long Life, High Value:**
25 year production 25,500 tpa LCE;
US\$1050 million project value
- **Cost Competitive:**
Operating costs similar to
evaporation ~US\$4100/t
- **Scalable:** Modular processing
allows easy scaling to +50,000tpa



Kachi - High Margin Pre-Feasibility Results

- **Long Life, High Value Project** - 25 year production 25,500 tpa LCE**;
US\$1050 million project value* (NPV @ 8% discount rate, Pre-tax)
- **High Margin Lithium Production** –
 - 55% Operating Margin; US\$465 million EBITDA in 1st 3 years*
- **High Purity** - 99.9% purity battery grade Li₂CO₃
- **Cost Competitive among Brine Producers** –
Operating cost US\$4170/t Li₂CO₃
- **Project Value could more than Double** – with premium pricing

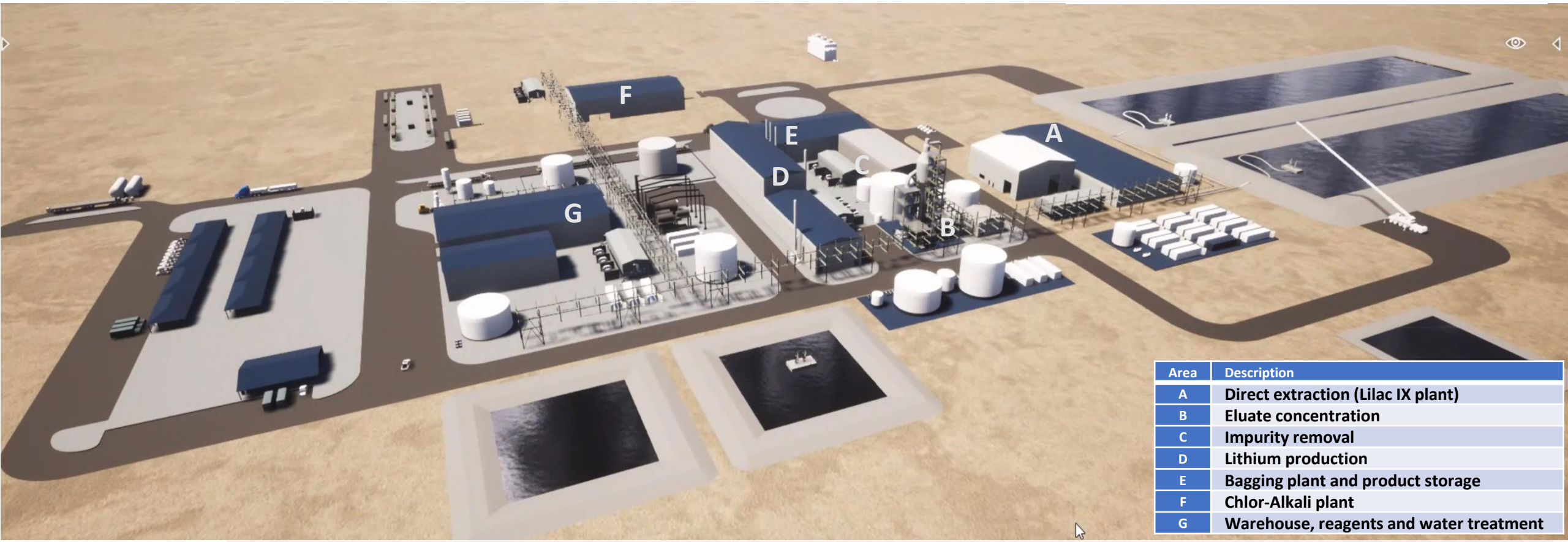
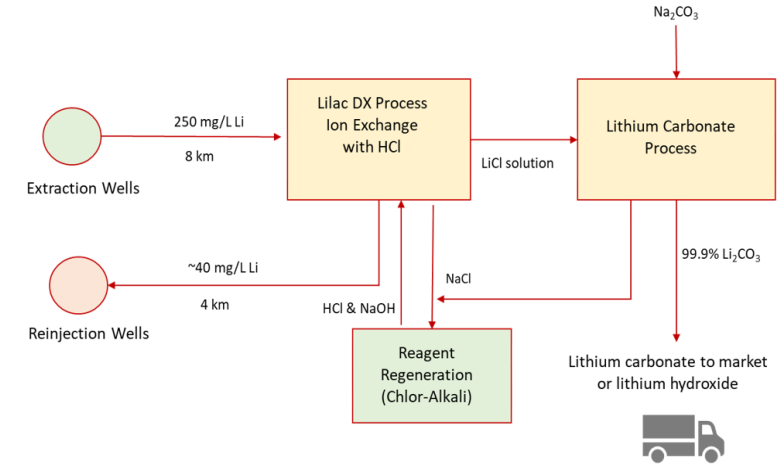


DFS Commenced - Direct extraction

Production Plant Design with Lilac Solutions Direct Extraction Technology

Definitive Feasibility Study Commenced – Using Solar Hybrid power

Kachi Lithium Brine Project – chloride stream to lithium carbonate



Area	Description
A	Direct extraction (Lilac IX plant)
B	Eluate concentration
C	Impurity removal
D	Lithium production
E	Bagging plant and product storage
F	Chlor-Alkali plant
G	Warehouse, reagents and water treatment

Lake's Clean Lithium into Batteries Novonix - Process underway

Novonix - battery technology leader (ASX:NVX; OTCQX:NVNXF)

Tier 1 firms

- Panasonic, CATL, Samsung, SK, LG Chem, Bosch, Honda, Dyson

Work with Dr Jeff Dahn at Dalhousie Uni

- a ground breaking "name" in the battery tech space

Developed latest cathode & anode technology

Lake's lithium carbonate tested quickly, transparently

Demonstrate that Lake's product is truly battery quality

Accelerates discussions downstream

Only ~35% of lithium production Tier-1 qualified as battery quality

Only 50-60% of lithium production is battery quality

Strengthens Lake's quality and ESG benefits



Production Timeline.



Exploration / Lab Testing

2016 Area pegged
2018 Major Resource
Kachi
2019 Discovery Cauchari



PFS / Pilot Plant High Purity Lithium

2019/20 PFS – High
Margin Project
2020 Pilot Plant Module
2020 High Purity Lithium



DFS / Demonstration Plant

2021 DFS / ESIA
2021 Demo Plant Onsite
2021 Samples in Batteries
2021 Samples to Offtake



Construction / Production

2022 Finalise Financing
2022 Approvals/
Construction starts
2024 Production
25,500 tpa LCE

LAKE RESOURCES (ASX:LKE , OTC:LLKKF)

Total Current Shares on Issue **835,428,624**

Listed Options (10c)	Jun 2021 Expiry	52,512,693
Unlisted Options (8c)	Feb 2022 Expiry	5,555,000
Unlisted Options (9c)	Jul 2021 Expiry	15,000,000

Market Data

Market Cap (\$A) @ \$0.09/ sh (10 day VWAP, 15 Jan) **A \$75 million**
US\$58 million

Cash (\$A) 30 Sept 2020 **A\$3 million**

Secured debt **\$ 0**

Share Price 52 week range **\$0.022 – 0.155/sh**

Share Register 40% Top 30, High Net Worth Investors

Lake Resources N.L. Chart



Lake Resources N.L. Chart



Lithium Producers Recently Uplifted

Developers rising

Lake \$75m vs Peers \$200-450m market cap

Trading at 7%NPV₈ vs Peers 20-70% NPV₈

Research: LKE website

LKE:AU ASE
Lake Resources NL

0.10 AUD

1Y

● LKE:AU 88.24% ● LAC:CN 356.15%< ● SLL:CN 309.09% ● NLC:CN 290.16%<

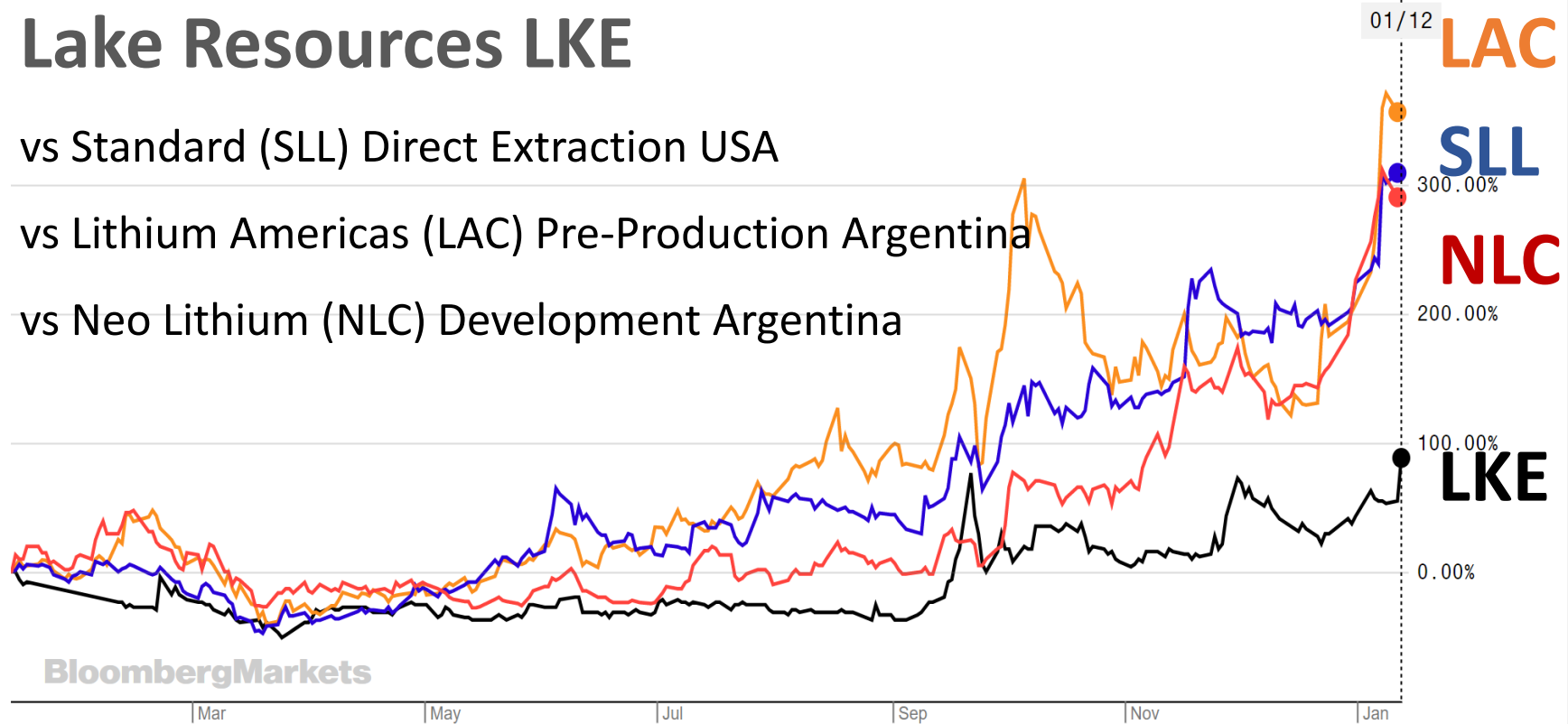
01/12/2021 EDT

Lake Resources LKE

vs Standard (SLL) Direct Extraction USA

vs Lithium Americas (LAC) Pre-Production Argentina

vs Neo Lithium (NLC) Development Argentina



BloombergMarkets

Note: Any perceived relationship between market value of explorers/developers versus producers should not be made.

Source: ASX / TSX / NYSE company disclosures; SEDAR; Bloomberg; Company sources: 12 January 2021

Clean High Purity Lithium - Unique Proposition.

- **New Clean Technology for High Purity Lithium** – Growing need
- **Responsibly Sourced & Sustainable** - Lake uniquely positioned to satisfy demand for high quality battery material more responsibly sourced without mining. Enables a clean future
- **21st Century Solution to Batteries for EV's** – Lake's clean lithium being tested in latest batteries

Contact: lakeresources.com.au

Steve Promnitz - Managing Director

steve@lakeresources.com.au +61 2 9299 9690



Appendix

Clean High Purity Lithium

www.lakeresources.com.au



Kachi Project – Size Matters.



PFS - Kachi

**Compelling Economics; High EBITDA Margin
Cost Competitive; High Value Product**

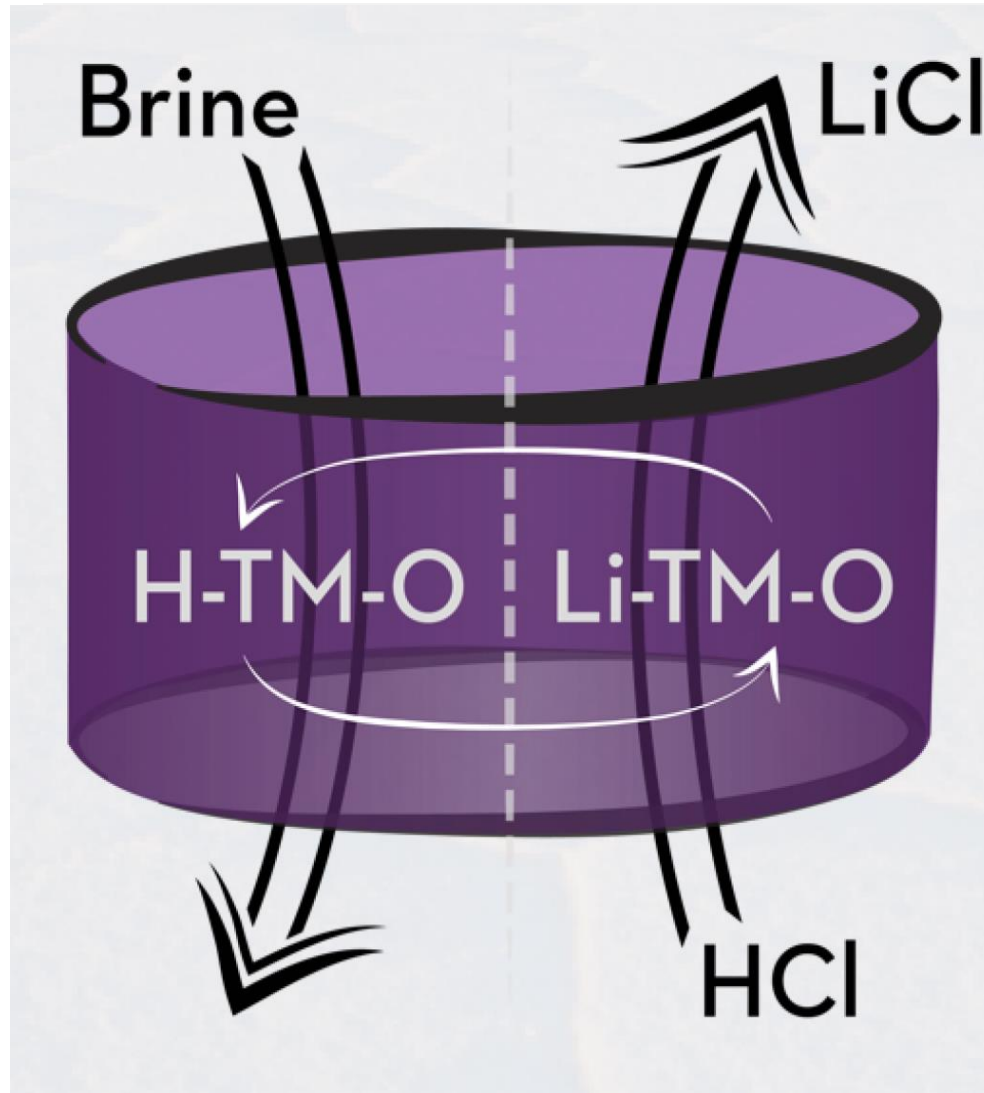
Key Financial Parameters	Values
NPV ₈ (NPV @ 8% discount rate) Pre-tax	US\$1,052 million (A\$1,660 million)*
NPV ₈ (NPV @ 8% discount rate) Post-tax	US\$748 million (A\$1,180 million)*
IRR pre-tax	25%
IRR post-tax	22%
EBITDA, annual	US\$155 million (A\$245 million)*
EBITDA margin	55%

Parameters	Values
Project Life	25 years
Production Rate – Lithium Carbonate	25,500 tonnes LCE per year**
Mineral Resource (Indicated)	1.01 Million tonne LCE
Recovery	83 %
Capital Investment (at start-up)	US\$544 million
Operating Cost (annual)	US\$107 million
Cash Cost (Opex, C1)	US\$4178/tonne LCE

ASX:LKE
OTC:LLKKF

Direct extraction.

Ion Exchange Process - Lilac Solutions



Durable Performance

- High lithium recovery (80%-98%)
- Tolerates impurities
- Bead durability

Low Cost and Scalable

- Modules for rapid installation
- No brine heating
- Low capital and operating costs

High Purity Lithium – From Pilot to Production

Pilot Stage

Pilot Stage
Direct Extraction
Lithium Chloride

Underway in 2020
Continues 2021

Lilac Pilot Plant Module



Lithium Carbonate - Hazen



Cathode/ Battery - Novonix



Demonstration Plant Stage

On Site
H2 2021

Production Plant Stage

On Site
H2 2023
H1 2024

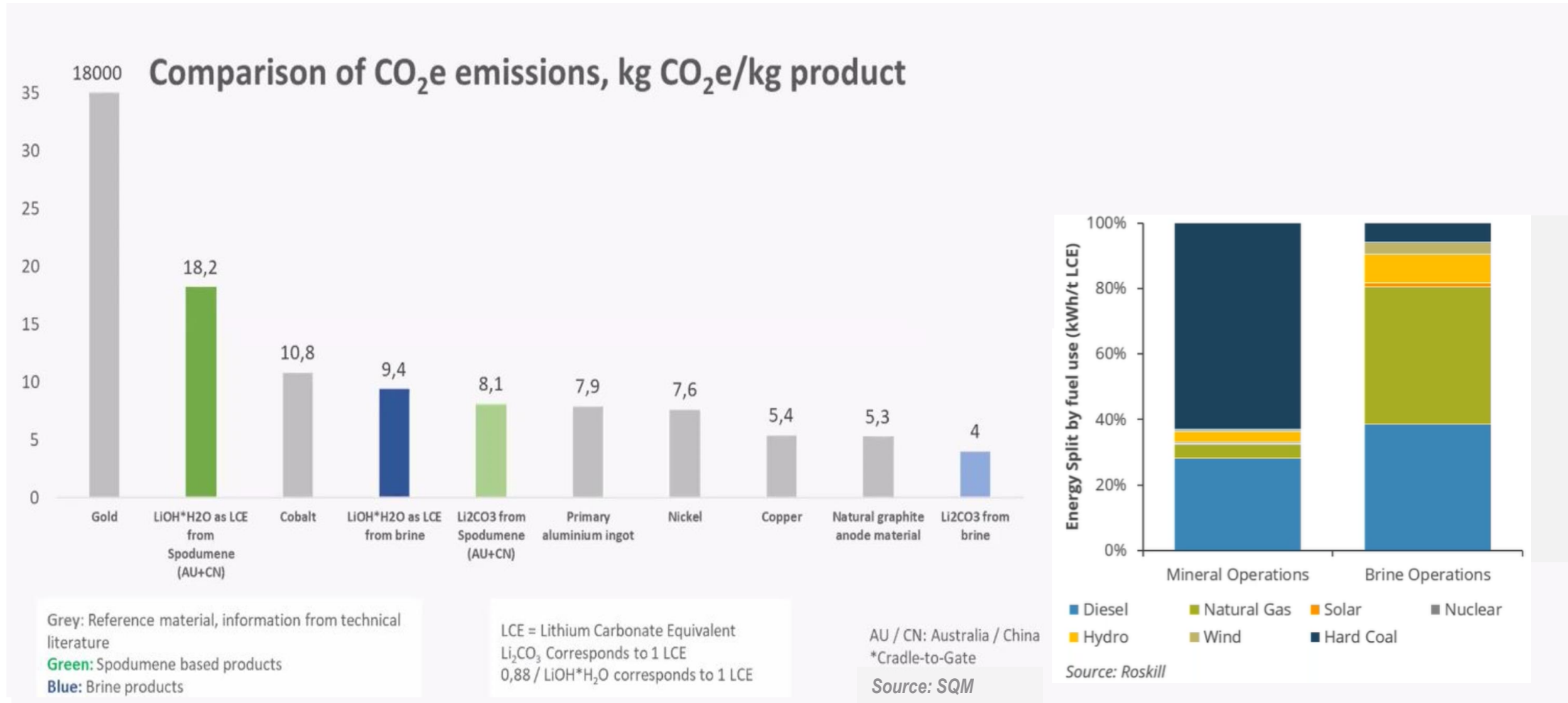
Sustainable Lithium - In demand

Electric Vehicle Makers want more sustainable battery materials in EV's

- **Electric Vehicle Makers, EU Seek More Sustainable Lithium –**
Volkswagen, Daimler, BMW, EU want more responsible sourcing of battery materials; ESG (environmental, social, governance) central to European Union's lithium-ion battery strategy.
- **Direct extraction is not mining and avoids water politics**
- **Lilac backed by high profile successful investors –**
Lilac supported by Bill Gates-led Breakthrough fund, MIT's The Engine Fund
- **Entire Life Cycle Important – Process reduces environmental cost**

Direct extraction - Small Environmental Footprint

Brine Evaporation smaller CO2 footprint than hard rock; Lilac Direct Extraction reduces water impact



ASX:LKE
OTC:LLKCF

Sustainable Lithium.




ESG Targets for the Future – EU, UN



EU

<p>1</p>  <p>CLIMATE CHANGE MITIGATION</p>	<p>2</p>  <p>CLIMATE CHANGE ADAPTATION</p>	<p>3</p>  <p>SUSTAINABLE AND PROTECTION OF WATER AND MARINE RESOURCES</p>
---	--	--

UN

<p>5</p> <p>GENDER EQUALITY</p> 	<p>8</p> <p>DECENT WORK AND ECONOMIC GROWTH</p> 	<p>9</p> <p>INDUSTRY INNOVATION AND INFRASTRUCTURE</p> 
--	---	---

<p>7</p> <p>AFFORDABLE AND CLEAN ENERGY</p> 	<p>12</p> <p>RESPONSIBLE CONSUMPTION AND PRODUCTION</p> 	<p>13</p> <p>CLIMATE ACTION</p> 
---	--	---



UNGP
United Nations Guiding Principles
on Business and Human Rights

SDGs
Sustainable Development Goals

Cauchari Project.

Lake project adjoins
Orocobre and Ganfeng/
Lithium Americas

Lake results show:

- Similar brines & similar high grades
- Alongside Ganfeng/ Lithium Americas
40,000tpa LCE in construction

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)

LAC Production Plant
in Construction



Leadership.

Lake has extensive development experience.
Full team in country for 5 years.



Steve Promnitz
MANAGING DIRECTOR

Extensive project management experience in South America – geologist, chemist and finance – with major companies (Rio Tinto, Citi) and mid-tiers. Developed projects previously in Argentina.



Stu Crow
CHAIRMAN NON-EXEC

More than 25 years of experience (numerous public companies) and in financial services; Keen interest in energy transition



Nick Lindsay
TECHNICAL DIRECTOR
LEADING DFS STUDY

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 Chile, across border from Kachi



Robert Trzebski
NON-EXEC DIRECTOR

International mining executive; 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 Ltd. Director Austral Gold.

Appendix – Mineral Resource – JORC Code 2012 Kachi Lithium brine Project.

KACHI LITHIUM BRINE PROJECT	MINERAL RESOURCE ESTIMATE					
JORC Code 2012 Edition	Indicated		Inferred		Total Resource	
Area, km ²	17.1		158.3		175.4	
Aquifer volume, km ³	6		41		47	
Brine volume, km ³	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 (Li ₂ CO ₃) with a conversion factor of 5.32 Potassium is converted to potassium chloride (KCl) with a conversion factor of 1.91						

Appendix – Table 1 Report – JORC Code 2012.

Criteria	Section 1 - Sampling Techniques and Data
Sampling techniques	<ul style="list-style-type: none"> 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. 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. Drill core in the hole was recovered in 1.5 m length core runs in core split tubes to minimize sample disturbance. Drill core was undertaken to obtain representative samples of the sediments that host brine.
Drilling techniques	<ul style="list-style-type: none"> 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. Rotary drilling has used 8.5" or 10" tricone bits and has produced drill chips. Brine has been used as drilling fluid for lubrication during drilling. 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. 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). 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.
Logging	<ul style="list-style-type: none"> 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. 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. 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.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 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.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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. 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. 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 specialising in analysis of brines and inorganic salts.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. Duplicate samples in the analysis chain were submitted to Alex Stewart/Norlab SA or SGS laboratories as unique samples (blind duplicates) during the process. Stable blank samples (distilled water) were used to evaluate potential sample contamination and will be inserted in future to measure any potential cross contamination Samples were analysed for conductivity using a hand-held Hanna pH/EC multiprobe. Regular calibration using standard buffers is being undertaken.
Location of data points	<ul style="list-style-type: none"> The diamond drill hole sample sites and rotary drill hole sites were located with a hand-held GPS. 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. Brine samples were collected over 1m intervals every 6 m intervals within brine producing aquifers, where this was possible.
Data spacing and distribution	<ul style="list-style-type: none"> 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
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 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.
Sample security	<ul style="list-style-type: none"> 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 methods and data management. The practices being undertaken were ascertained to be appropriate.
Review (and Audit)	

Criteria	Section 2 - Mineral Tenement and Land Tenure Status
Mineral tenement and land tenure status	<ul style="list-style-type: none"> The Kachi Lithium Brine project is located approximately 100km south-southwest of Livent' (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 a.s.l. 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. The tenements are believed to be in good standing, with statutory payments completed to relevant government departments.
Exploration by other parties	<ul style="list-style-type: none"> Marifli Mines Ltd conducted sparse near-surface pit sampling of groundwater at depths less than 1m during 2009. Samples were taken from each hole and analysed at Alex Stewart laboratories in Mendoza Argentina. Results were returned in an NI 43-101 report by J. Eblich in December 2009 for Marifli Mines Ltd. 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. An NI 43-101 report was released in February 2017. No other exploration results were able to be located
Geology	<ul style="list-style-type: none"> The known sediments within the solar consist of salt/halite, clay, sand and silt horizons, accumulated in the solar from terrestrial sedimentation and evaporation of brines. Brines within the Salt Lake are formed by solar concentration, interpreted to be combined with warm geothermal fluids, with brines hosted within sedimentary units. Geology was recorded during the diamond drilling and from chip samples in rotary drill holes.
Drill hole information	<ul style="list-style-type: none"> 15 drill holes completed, totalling 3150 metres with varying depths up to 403 metres. 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. All drill holes are vertical, (dip <math>\leq 90^{\circ}</math> azimuth <math>0</math> degrees). Assay averages have been provided where multiple sampling occurs in the same sampling interval. Mineralisation interpreted to be horizontally lying and drilling perpendicular to this.
Data aggregation methods	
Relationship between mineralisation widths and intercept lengths	
Diagrams	<ul style="list-style-type: none"> A drill hole location plan is provided showing the locations of the drill platforms. Individual drill locations are provided in Table 1.
Balanced reporting	<ul style="list-style-type: none"> Brine assay results are available from 15 drill holes from the drilling to date, reported here. There is no other substantive exploration data available regarding the project.
Other substantive exploration data	
Further work	<ul style="list-style-type: none"> Further water well drilling is planned to expand the resource and test pumping rates.
Criteria	Section 3 – Estimation and Reporting of Mineral Resources
Database integrity	<ul style="list-style-type: none"> Data was transferred directly from laboratory spreadsheets to the database. Data was checked for transcription errors once in the database to ensure coordinates, assay values, and lithological codes were correct. Data was plotted to check the spatial location and relationship to adjoining sample points. Duplicates and standards have been used in the assay process. Brine assays and porosity test work have been analysed and compared with other publicly available information for reasonableness. Comparison of original and current datasets were made to ensure no lack of integrity.
Site visits	<ul style="list-style-type: none"> The Competent Person visited the site multiple times during the drilling and sampling program Some improvements to procedures were made during visits by the Competent Person
Geological interpretation	<ul style="list-style-type: none"> 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 Any alternative interpretations are restricted to smaller scale variations in sedimentology, related to changes in grain size and fine material in units Data used in the interpretation includes rotary and diamond drilling methods Drilling depths and geology encountered has been used to conceptualise hydro-stratigraphy 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. The lateral extent of the resource has been defined by the boundary of the Company's properties. The brine mineralisation subsequently covers 175 km². 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. The resource is defined to a depth of 400 m below surface, with the exploration target immediately extending beyond the aerial extent of the resource.
Estimation and modelling techniques	<ul style="list-style-type: none"> No grade cutting or capping was applied to the model. No assumptions were made about correlation between variables. Lithium and potassium were estimated independently. The geological interpretation was used to define each geological unit and the property limit was used to enclose the reported resources.
Measure	<ul style="list-style-type: none"> 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. Tonnages are estimated as elemental lithium and potassium dissolved in brine.
Cut-off parameters	<ul style="list-style-type: none"> No cut-off grade has been applied.

Criteria	Section 3 – Estimation and Reporting of Mineral Resources
Mining factors or assumptions	<ul style="list-style-type: none"> 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. 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) 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. 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. Detailed hydrological studies of the lake are being undertaken (groundwater modelling) to define the extractable resources and potential extraction rates.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> Lithium carbonate is targeted as the commercial product. 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: $LiCl + Na_2CO_3 \rightarrow Li_2CO_3 + NaCl$ Process work has been undertaken by Lilac Solutions, which is an expert laboratory in the treatment of brines by ion exchange. 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 Analyses of solutions for ICP and included the use of standards The longevity of the ion exchange media has been tested over 1000 cycles, or six months 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 Pilot plant mobile 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). Hazen Research Inc has demonstrated the conversion of lithium chloride from the pilot module into larger volumes of high purity lithium carbonate with purity >99.97% with very low levels of impurities. Hazen processed the eluate from Lake 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. 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. To ensure consistency of the processing and analysis with Industry standards, Dr Nick Wehman was consulted and reviewed the results and calculations of purity. This work is yet to be integrated into the resource model.
Environmental factors or assumptions	<ul style="list-style-type: none"> 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. Environmental management plan for the protection of wetlands, salt lakes, and surroundings. Consultation with communities in the area of influence of the project Environmental impact analysis on-going.
Bulk density	<ul style="list-style-type: none"> 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 No bulk density was applied to the estimates because resources are defined by volume, rather than by tonnage.
Classification	<ul style="list-style-type: none"> The resource has been classified into the two possible resource categories based on confidence in the estimation. A Measured resource would reflect higher density drilling, with porosity samples from drill cores and well constrained vertical brine sampling in the holes.
Audits or reviews	<ul style="list-style-type: none"> The Indicated resource reflects the higher confidence in the brine sampling in the rotary drilling and lower quality geological control from the drill cuttings. The Inferred resource underlying the Measured and/or Indicated resource reflects the limited drilling to this depth together with the geophysics through the property. 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 The Mineral Resource was estimated by the Competent Person.
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> 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. 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.