Benchmark – Cathodes
Kachi Lithium Project & Direct Lithium Extraction

CLEANER LITHIUM FOR AN ELECTRIC WORLD

Steve Promnitz - Managing Director, Lake Resources
Disclaimer

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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 Australasian 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 N.L. 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.
Cathode Lithium Supply Issues

- **NEW LITHIUM SUPPLY**: 10x more supply needed in 10 years. Need new entrants.
- **SCALE OF NEW SUPPLY**: New supply needs to scale up to be significant.
- **HIGH BATTERY QUALITY - QUALIFIED**: End users prefer high quality inputs – rigorous qualification process.
- **CLEANER SUSTAINABLE SUPPLY**: ESG becoming a key driver of consumers – legislated in the EU.
- **INDEPENDENT DIVERSIFIED SUPPLY**: End users prefer diversified supply. Independence valued.
Lake Resources - Clean Lithium Solution for Cathodes.

99.97%

High Purity lithium carbonate. Confirmed in 622 batteries.

+ Significant ESG benefits.

- **CLEANER LITHIUM** – Lake’s 99.97% purity product – high battery quality lithium carbonate= higher battery performance.

- **CLEANER TECHNOLOGY**: Lilac direct lithium extraction – superior to traditional process. Supported by tech sector and battery/EV makers.

- **CLEANER ENVIRONMENT**: Lithium with ESG benefits. Small environmental footprint - low CO₂, less water, low land use.

- **CLEARER PATHWAY**: Path to production; Successful pilot plant module; Large, scalable project, high margin. Indicative debt funding for 70% of Kachi project

- **INDEPENDENT PRODUCER AT SCALE**: New clean lithium from a scalable independent producer
Direct Lithium Extraction
Lilac Solutions - Cleaner technology

Lilac direct extraction displaces evaporation process

Brine in – Lithium chloride out

• High purity
• Faster process
• High recovery
• Sustainable – No brine heating
• Cost competitive – Durable beads
• Scalable
• Proven in pilot plant – Extensive test work

21st Century technology
Delivers a Cleaner Environment
Smaller environment footprint – Low Land use - Lower water use – No brine depletion

Atacama Projects – Brine evaporation (170km²)

Kachi Project – Lake/Lilac DLE (1km²)

All Brine Evaporated

Brine Returned to Source

Source: SQM / ALB presentations 2020; 170km² for c.80,000 tpa LCE. Lake/Lilac/Hatch estimates in PFS (excluding solar hybrid power)
Sustainable lithium

Lake / Lilac DLE method

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

Note: Hard Rock = Spodumene converted to Lithium Hydroxide as LCE in China using coal for energy; Brine evaporation in Sth America

ESG Sustainable Development Goals

Lake/Lilac estimates based on PFS with solar hybrid power power – prelim study being undertaken
Partnership - Lilac Solutions + Kachi Project
Aligns Climate Tech with Upstream Lithium Supply

- Lilac to Earn in to Kachi Project up to max 25% stake – via performance based milestones
  - Initial 10% - Lilac funds completion of testing of its technology for the Kachi Project
  - Further 10% - Lilac funds on-site demonstration plant at Kachi and satisfies all agreed testing criteria
  - Final 5% - Kachi lithium product achieves highest agreed qualification standards with certain offtakers

- Lilac to Contribute c.US$50 million to Kachi Project, once earn in complete (pro-rata development funding)

- Lilac has major tech sector supporters – aligns breakthrough climate tech with upstream ESG lithium
  Aligns breakthrough Climate Tech investment with upstream environmentally friendly battery materials supply.
  Lilac completed US$150m Series B funding round from successful tech investors and battery/EV makers

- Lake with Lilac – New independent clean lithium producer with scale
Clearer pathway
Simple production scale-up - Modular

Lilac Pilot / Demo Plant
(1-2 Modules)

~10tpa LCE
1000 hours

Lithium carbonate production

Production Scale (PFS)
(50+ Modules)

25,500tpa LCE

Expansion Study*
(to Double Production to 51,000tpa)

51,000tpa LCE

Option for lithium hydroxide production

* Note: Expansion Study requires drilling (underway) to upgrade more Inferred Resources to Measured and Indicated Resources.
Kachi project
Proposed plant design

- Direct Extraction (Lilac IX Plant)
- Eluate Concentration
- Impurity Removal
- Lithium Production
- Bagging Plant and storage
- Chlor Alkali Plant
- Warehouse, reagents and water treatment

One building with Ion Exchange Modules
Replaces 20-30km² of Evaporation Ponds
Kachi PFS metrics

Compelling economics

Pre-Feasibility Study results

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Mineral Resource* (Indicated)</td>
<td>1.01 Mt</td>
</tr>
<tr>
<td>Annual production Li₂CO₃</td>
<td>25,500 tpa</td>
</tr>
<tr>
<td>Annual EBITDA</td>
<td>US$260 m</td>
</tr>
<tr>
<td>Project life</td>
<td>25+ years</td>
</tr>
<tr>
<td>Expansion Study Underway</td>
<td>51,000 tpa#</td>
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<tr>
<td>CAPEX</td>
<td>US$544 m</td>
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<tr>
<td>Cash cost</td>
<td>US$4,178/t</td>
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<tr>
<td>Annual operating costs</td>
<td>US$107 m</td>
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<td>Project Finance</td>
<td>70% debt##</td>
</tr>
<tr>
<td>Post-tax NPV</td>
<td>US$1,580 m**</td>
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<tr>
<td>IRR post-tax</td>
<td>35%</td>
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</tbody>
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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)
# Expansion study to double production, but not confirmed
## Discussions with Export Credit Agencies Underway; Indications of c. 70% debt over 8-10 years
Kachi Project Finance Support
UK Export Finance & Canada EDC – Export Credit Agencies Support

Expression of Interest - Funding to ~70% of Total Required – including Expansion

Project Finance
~70% debt##

CAPEX
US$544m

Debt Duration
10-11 years*

Annual production Li₂CO₃
25,500tpa

Project life
25+ years

Expansion Study Support
51,000tpa#

Note: Expression of Interest subject to standard project finance terms (refer ASX release 11 Aug 2021)
* 8.5 years Post Construction
# Expansion study to double production, but not completed
## Indicative level of support c. 70% debt over 8.5 years post construction

UK Export Finance provided Expression of Interest to support
~70% of the total finance required
Incl. Canada EDC up to US$100m.

- Subject to standard project finance terms, including DFS, ESIA and offtake
- Support for expansion to 51,000 tpa
- 8.5 year debt funding post construction
- Significantly lower cost of capital than traditional debt financing and Reflects ESG benefits of project
Project Production Timeline

2021 – Q2, 2022
DFS
Definitive Feasibility Study
ESIA
2022 Expansion Study

2021 – Q2, 2022
Demonstration Plant
Q1, 2022 Demo Plant Onsite
2021-22 Samples in Batteries
2021-22 Samples to Offtakers

2021 – Q2, 2022
Financing
Project Finance
Export Credit Agencies
Indicative 70% debt 10 years
Triggered by DFS, ESIA

Q3, Q4 2022
Construction / Production
Mid-Late 2022 Approvals/
Construction starts
2024 Production
25,500tpa LCE
World’s cleanest lithium.

Four lithium projects in heart of the Lithium Triangle.

Large leaseholding 2,200km² (550,000 acres)

World’s five largest producers all have equity in operations in the Lithium Triangle.
Cauchari project / Olaroz Project

Next lithium projects through development

Cauchari - Identical lithium brines as adjoining Ganfeng/Lithium Americas development
Lake’s brines being tested for direct lithium extraction
Cauchari and Olaroz - Scoping study and resource drilling planned for 2021/22

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)

Source: LKE; Orocobre (AAL) announcements 5/3/2018, 10/01/2019, 7/03/19, 24/04/19.
Corporate snapshot
Funded to FID

Share price
A$0.84  US$0.74
7 Dec 2021 (10 day VWAP)
52 week high $1.18c, low $0.05c

Cash
A$63m
US$48m
30 Sept 2021

Debt
Zero

Unlisted Options
26m
30c options, March 2023 expiry
85m
75c options, 15 June 2022 expiry
37m
55c options, Dec 2024 expiry
5.7m
49c options, Aug 2024 expiry

Share price
30 Sept 2021

Shares on issue
1.216bn

Market capitalisation
A$1020m
US$720m

Institutional Investors
Ausbil, Acorn
+ Institutional investors USA, EU

Half year share price chart

Funded to FID
US$720m
Lake Resources - Clean Lithium Solution for Cathodes.

- World’s highest purity lithium
- Technology-led direct extraction
- Major ESG benefits
- New independent clean producer – at scale, with de-risked finance

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