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**ASX ANNOUNCEMENT**

4 August 2025

# Kachi Project Definitive Feasibility Study Addendum

## *Updated DFS results in material capital and operating cost estimate reductions*

Lake Resources N.L. (ASX: LKE; OTC: LLKKF) ("Lake" or the "Company"), announces the results of its updated Kachi Project Definitive Feasibility Study ("DFS Addendum") for Phase One of the globally significant 25ktpa Kachi lithium brine project in Argentina ("Kachi", "Kachi Project" or "Project").

The DFS Addendum supplements the previously released Phase One DFS from December 2023[1] ("Original DFS"). This DFS Addendum confirms that Kachi is a tier one project, backed by a significant resource with strong economics, positioning it competitively within the growing lithium market. The DFS Addendum builds on the Original DFS and incorporates independently reviewed and verified value engineering outcomes completed since the Original DFS was issued in December 2023.

## DFS Addendum Highlights

- **Reduced CAPEX** to US$1,157M – a ~US$220M (16%) improvement over the Original DFS
- **Reduced OPEX** to $5,895/t LCE – a 3% improvement over the Original DFS – and still one of the lowest on the industry cost curve
- **Further reductions in CAPEX and OPEX achievable** if the plant design basis is upgraded to reflect 268 mg/L as shown in the Ore Reserve Update[2], as compared with the DFS Addendum design basis of 249 mg/L
- Estimated $NPV_{10}$ of **US$1,469M** pre-tax and **US$1,011M** post-tax based on average price of **~$20,500/t**[3] for battery grade lithium carbonate
- Estimated IRR at 22.5% pre-tax and 19.7% post-tax
- **Robust financials** with high resilience to CAPEX and OPEX sensitivities
- **Reduced execution risk** including design optimizations, critical de-risking of power supply, and final Exploitation Environmental Impact Assessment ("EIA") approval expected this year

[1] Refer to ASX Announcement dated 19 December 2023 - "Kachi Phase One Definitive Feasibility Study"
[2] Refer to ASX Announcement dated 4 August 2025 - "Kachi Updated Ore Reserve"
[3] Based on BMI Q2 2025 Lithium Price Forecast available via annual paid subscription.

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## Updated Cost Estimate Drivers

- **Significantly improved brine grade** compared with the Original DFS
- Implementation of Lilac Solutions' **Generation 4 Ion Exchange technology improvements** and accompanying improved lithium recovery rates
- Updated **2025 inflation-adjusted unit cost values**
- **Refreshed** high-quality **resource[4] and reserve[5] data**
- **Efficiencies** in well development, construction and execution methodology
- **Rationalized** construction and operating manpower plan
- **Reduced power demand** and updated power supply cost estimates

"The long-term outlook for lithium demand remains strong, with a supply deficit expected to emerge later this decade. As one of the largest independent lithium development projects in Argentina, Kachi will be an important asset in addressing this deficit," said David Dickson, Lake's CEO. "Kachi is a significantly more attractive investment, confirmed by the results of the DFS Addendum, which further capitalizes on opportunities for efficiencies identified in the Original DFS."

## Next Steps for the Kachi Project

- Continue to advance the EIA approval process with the Catamarca Mining Authority, with approval anticipated in the second half of 2025
- Continue to progress the strategic alternatives process[6] to consider and assess multiple strategic alternative options, including the sale of all or a part of Lake's interest in Kachi, a potential sale or merger of the Company, restructuring initiatives, or partnership or joint venture structures
- Remain focused on preserving Lake's financial flexibility by continuing to right-size its cost structure and maintaining appropriate levels of liquidity

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**About Lake Resources:**

Lake Resources N.L. (ASX:LKE; OTC: LLKKF) is a responsible lithium developer utilising state-of-the-art ion exchange extraction technology for production of sustainable, high purity lithium from its flagship Kachi Project in Catamarca Province within the Lithium Triangle in Argentina.

This ion exchange extraction technology delivers a solution for two rising demands – high purity battery materials to avoid performance issues, and more sustainable, responsibly sourced materials with low carbon footprint and significant ESG benefits.

**Forward Looking Statements:**

Certain statements contained in this announcement, including information as to the future financial performance of the projects, are forward-looking statements. Such forward-looking statements are

[4] Refer to ASX Announcement dated 3 June 2025
[5] Refer to ASX Announcement dated 4 August 2025 - "Kachi Updated Ore Reserve"
[6] Refer to ASX Announcement dated 7 May 2025

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 announcement 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.

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# DFS Addendum Summary Report

The ASX Listing Rules contain a number of reporting obligations on mining production and exploration activities, including, without limitation, requirements applicable to reports of mineral resources for material mining projects (ASX Listing Rule 5.8), reports of ore reserves for material mining projects (ASX Listing Rule 5.9), reports of production targets (ASX Listing Rule 5.16) and reports containing forecast financial information derived from a production target (ASX Listing Rule 5.17).

This DFS Addendum Summary Report ("DFS Addendum" or "Report") includes all required information to comply with these rules. This information may be referred to and explained in a number of the sections of this report; however, for ease of reference, the Company has listed in the tables below the information required by these rules, and provided cross-references to the key sections of this report which contain this information.

As this is a Report of changes and modifications to the Original DFS, certain of the information contained in the Original DFS has not changed. This will be noted in this Report and the reader will be referred to the information in the Original DFS.

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## Listing Rule 5.8

| Item | DFS Addendum Report Section(s) |
|---|---|
| Geological interpretation | Section 3 |
| Sampling and sub-sampling techniques | Appendix 1 |
| Drilling techniques | Appendix 1 |
| The criteria used for classification, including drill and data spacing and distribution. This includes separately identifying the drill spacing used to classify each category of mineral resources (inferred, indicated and measured) where estimates for more than one category of mineral resources are reported | Section 4 & Appendix 1 |
| Sample analysis method | Appendix 1 |
| Estimation methodology | Section 4 & Appendix 1 |
| Cut-off grade(s) indicating the basis for the selected cut-off grade(s) | Section 4 & Appendix 1 |
| Mining and metallurgical methods and parameters, and other material modifying factors considered to date | Sections 5, 6, 7, 8 & Appendix 1 |

## Listing Rule 5.9

| Item | DFS Addendum Report Section(s) |
|---|---|
| Material assumptions and the outcomes from the preliminary feasibility study or feasibility study (as the case may be). If the economic assumptions are commercially sensitive to the mining entity, an explanation of the methodology used to determine the assumptions rather than the actual figure can be reported | Section 14 |
| The criteria used for classification, including the classification of the mineral resources on which the ore reserves are based and the confidence in the modifying factors applied | Section 4 & Appendix 1 |
| The processing method selected and other processing assumptions, including the recovery factors applied and the allowances made for deleterious elements | Section 8 & Appendix 1 |
| The basis of the cut-off grade(s) or quality parameters applied | Section 4 & Appendix 1 |
| Estimation methodology | Section 4 & Appendix 1 |
| Material modifying factors, including the status of environmental approvals, mining tenements and approvals, other governmental factors and infrastructure requirements for selected mining methods and for transportation to market | Section 4 & Appendix 1 |

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## Listing Rule 5.16

| Item | DFS Addendum Report Section(s) |
|---|---|
| All material assumptions on which the production target is based. If the economic assumptions are commercially sensitive to the mining entity, an explanation of the methodology used to determine the assumptions rather than the actual figure can be reported | Section 14 |
| A statement that the estimated ore reserves and/or mineral resources underpinning the production target has been prepared by a competent person or persons in accordance with the requirements of the JORC Code. | CP Statement & Appendix 1 |
| The relevant proportions of:<br>• Probable ore reserves and proved ore reserves;<br>• Inferred mineral resources, indicated mineral resources and measured mineral resources;<br>• An exploration target; and<br>• Qualifying foreign estimates,<br>Underpinning the production target. | Section 4 & Appendix 1 |
| The appropriate disclaimers if a proportion of the production target is based on inferred mineral resources or an exploration targe, or if the production target is based solely on inferred mineral resources. | Not Applicable |

## Listing Rule 5.17

| Item | DFS Addendum Report Section(s) |
|---|---|
| All material assumptions on which the forecast financial information is based. If the economic assumptions are commercially sensitive to the mining entity, an explanation of the methodology used to determine the assumptions rather than the actual figure can be reported | Section 14 |
| The production target from which the forecast financial information is derived (including all the information contained in rule 5.16) | Section 14 |
| If a significant proportion of the production target is based on an exploration target, the implications for the forecast financial information of not including the exploration target in the production target | Not Applicable |

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# 0. Glossary of Terms

| Term | Definition |
|---|---|
| amsl | Above mean sea level |
| bgs | Below ground surface |
| BOP | Balance of Plant |
| CAGR | Compound Annual Growth Rate |
| C-A | Chlor-alkili |
| CLN | Connected linear network |
| CRP | Communities Relation Plan |
| DFS | Definitive Feasibility Study |
| DIA | Declaración de Impacto Ambiental (Environmental Impact Declaration) |
| DLE | Direct Lithium Extraction |
| DMS | Data Management System |
| EBITDA | Earnings Before Interest, Tax, Depreciation and Amortization |
| EMS | Environmental Management System |
| EPCM | Engineering Procurement Construction Management |
| ESIA | Environmental and Social Impact Assessment |
| FEED | Front End Engineering Design |
| FID | Final Investment Decision |
| GWMP | Groundwater and Surface Monitoring Plan |
| HCL | Hydrochloric Acid |
| InSAR | Interferometric Synthetic Aperture Radar |
| IPP | Independent Power Provider |
| IRR | Internal Rate of Return |
| KLP | Kachi Lithium Pty Ltd |
| KPI | Key Performance Indicator |
| ktpa | Kilo (1000) tonnes per annum |
| Lake | Lake Resources N.L. |
| LCE | Lithium Carbonate Equivalent |
| LoM | Life of Mine |
| lps | Litres per second |
| Mt | Million tonnes |
| MVM | Morena del Valle SA |
| NaOH | Sodium Hydroxide |
| NPV | Net Present Value |
| O&M | Operations and Maintenance |
| PPA | Power Purchase Agreement |
| TARP | Trigger Action Response Plan |
| WACC | Weighted Average Cost of Capital |
| WFDP | Well Field Development Plan |
| ZLD | Zero Liquids Discharge |

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# 1. Introduction

This Report presents an update to the Original DFS, incorporating outcomes from a value engineering study conducted to identify potential opportunities for capital and operating cost reductions. It should be read as an addendum or update to the Original DFS.

## 1.1 DFS Addendum Objectives

Following the completion of the Original DFS, Lake undertook a value engineering review to assess potential design optimisations. This DFS Addendum updates the capital and operating costs estimates by integrating those design changes, while also accounting for equipment cost escalation, updated unit rates and revised scaling assumptions. The Original DFS provided an AACE class 3 estimate for CAPEX and OPEX, this Addendum builds on that foundation with refined inputs and improved design data.

The following major design changes have been incorporated into the DFS Addendum (all more fully described in the body of the document):

### *1.1.1 Revised Lithium (Brine) Concentration*

The plant design in the Original DFS used an average brine lithium concentration of 205 mg/L despite model-predicted brine concentrations of over 255 mg/L in the first 7 years of mining and averaging 245 mg/L in years 8 to 25. Based on these earlier studies, the design basis for the DFS Addendum was set to 249 mg/L. The higher lithium concentration in combination with higher DLE recovery rates leads to:

- Additional savings in CAPEX with potential elimination of five wells and related infrastructure.
- OPEX reduction (lower extraction and injection pumping costs).
- Reduced flowrates and plant size in the brine pre-treatment and spent brine handling sections.

The Ore Reserve update[7], which was further optimized to eliminate additional low lithium concentration production wells, modelled an average lithium grade of 268 mg/L. The higher reserve lithium concentration stems from the fact that the DFS Addendum work and the Ore Reserve ran in parallel, with a conservative value being selected as the DFS Addendum design basis. This highlights potential opportunity for additional cost optimisations not fully considered in the DFS Addendum.

### *1.1.2 Switching Brine Gathering Pipeline to High-Density Polyethylene (HDPE)*

Initially, the pipeline systems (freshwater, production, and reinjection) were designed with cross-linked polyethylene (PE-X) pipe (a type of cross-linked HDPE sold by Pexgol). However, following engineering analysis, it was decided to switch PE-X with HDPE. The justifications for replacing PE-X with HDPE were:

- HDPE pipes are less expensive than PE-X pipes, while remaining durable and meeting the design requirements for the Project.
- Due to its longer length and availability on reels, HDPE pipe requires fewer joints or connections, reducing points of failure and making installation and repair easier.

[7] Refer to ASX Announcement dated 4 August 2025 – “Kachi Updated Ore Reserve”

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### *1.1.3 Direct Lithium Extraction Technology (Generation 4) Improvements*

In June 2024[8], Lilac Solutions ("Lilac") introduced its Generation 4 ("Gen 4") lithium extraction technology building on the prior Generation 3 ("Gen 3") design. Gen 4 delivers substantial performance and cost benefits for the Project, including:

- Improved durability of Lilac's proprietary ion exchange ("IX") media, with the functional lifespan increasing from 2,200 cycles (Gen 3) to over 4,300 cycles (Gen 4).
- Higher lithium recovery, with lifetime average recovery increased to 90%, compared with 80% under Gen 3 for the Kachi brine.
- Approximately 39% reduction in capital cost for IX package, driven by increased performance and fewer IX modules.
- More than 30% reduction in water consumption and over 55% reduction in wash water generation. Supporting the Project's environmental objectives while lowering utility-related capital and operating costs.
- Up to 70% reduction in consumption of certain reagents, further improving operational efficiency.

### *1.1.4 Revised Overall Power Needs*

The cumulative impact of the above-mentioned design changes has led to a significant reduction in overall power requirements, lowering operational energy demand and distribution infrastructure costs.

### *1.1.5 Elimination of Ultrafiltration System*

Improvements in Lilac's Gen 4 technology have also relaxed brine pre-treatment requirements. As confirmed in the DFS Addendum, this has enabled the replacement of the previously required ultrafiltration system with a pressure filtration system. The change reduces capital expenditure and streamlines process design, while maintaining compatibility with enhanced IX performance.

### *1.1.6 Modularization (Reducing Onsite Construction Workforce)*

Initial projections in the Original DFS anticipated a peak construction workforce of approximately 1,400 personnel. With improved understanding of site conditions, including high altitude, severe weather, sandstorms, the benefits of minimizing onsite workforce have become clear. Increased offsite modularization will reduce workforce and camp size requirements onsite, improving safety and lowering costs.

### *1.1.7 Update to the Brine Gathering Network*

Since the Original DFS, the field development plan was optimized, which resulted in a reduction of the number of wells and their locations. Analysing the proximity of the wells to the facility and the elevation profiles allowed the identification of any pressure gains and losses in the line, which were minimal in comparison to the system that was previously in place.

Leveraging updated hydrogeological data, the gathering pipeline layout will be redesigned and is characterized by reduced piping distances and the removal of the centroid ponds. These design changes will result in capital and operating cost savings.

### *1.1.8 Construction Schedule Optimization*

The phased construction strategy outlined in the Original DFS (Phase A delivering 12.5 ktpa capacity, followed by Phase B to achieve 25 ktpa) has been replaced by a single-phase approach delivering full 25 ktpa nameplate capacity from initial commissioning. This revision eliminates Phase 1 specific infrastructure and equipment, reduces total CAPEX and removes the need for interim reagent purchase. The integrated execution strategy also compresses the overall project delivery timeline significantly.

[8] See https://lilacsolutions.com/news/lilac-unveils-latest-generation-technology

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## 1.2 Competent Person Statement

The information contained in this DFS Addendum relating to Exploration Results, Production Targets, Mineral Resources and Ore Reserve is based on, and fairly represents, information and supporting documentation that 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 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. Mr. Fulton consents to the inclusion in this Report of this information in the form and context in which it appears. The information in this Report is an accurate representation of the available data from initial exploration at the Kachi Project as prepared by Mr. Fulton.

## 1.3 Legal Disclaimers

**Non-Reliance Statement:**

The DFS Addendum was prepared by Hatch Ltd. ("Hatch"), together with certain other consultants (the "Other Consultants"), for the sole and exclusive benefit of Lake Resources N.L. (the "Principal") for the purpose of undertaking a study for the Project, and may not be provided to, relied upon or used by any other party. This DFS Addendum summary report was created by the Principal to summarize material and key matters from the DFS addendum. The use of the DFS addendum by the Principal is subject to the terms of the relevant services agreement between Hatch and the Principal. This DFS addendum summary report is meant to be read as a whole, and sections should not be read or relied upon out of context. The DFS addendum summary report includes information provided by the Principal, the Other Consultants and by certain other parties on behalf of the Principal. Unless specifically stated otherwise, Hatch has not verified such information and does not accept any responsibility or liability in connection with such information. In particular, Hatch does not accept any responsibility or liability in connection with the sections of this DFS addendum summary report that have been prepared by the Principal or by the Other Consultants. This DFS addendum summary report contains the opinion of Hatch using its professional judgment and reasonable care, based upon information available at the time of preparation. The quality of the information, conclusions and estimates contained in the report are consistent with the intended level of accuracy as set out in this report, as well as the circumstances and constraints under which this DFS addendum summary report was prepared. As the DFS is a feasibility study and the DFS addendum summary report is a summary of a feasibility study updates, all estimates and projections contained in this DFS addendum summary report are based on limited and incomplete data. Accordingly, while the work, results, estimates and projections in this DFS addendum summary report may be considered to be generally indicative of the nature and quality of the Project, they are not definitive. No representation or prediction in this DFS addendum summary report is intended as a guarantee of the results of future work, and Hatch does not promise that the estimates and projections in this DFS addendum summary report will be realized this information in the form and context in which it appears. The information in this announcement is an accurate representation of the available data from initial exploration at the Kachi Project as prepared by Mr. Fulton.

# 2. The Kachi Project DFS Addendum Overview

The following Report summarizes the updates applied to the Original DFS, following a value engineering study to identify potential opportunities for capital and operating cost savings. This Report should be read as an addendum or update to the Original DFS.

The goal of this study is to present an update to the capital and operating costs in the Original DFS by incorporating design changes identified in the value engineering exercise. The Original DFS produced

an AACE Class 3 level estimate for the CAPEX and OPEX. This DFS Addendum updates the previous estimate by accounting for equipment cost escalation, scaling current equipment costs and applying updated unit costs and rates.

### 2.1 Inclusions

The following will be updated as part of this study:

- Mass and energy balance
- Equipment sizing
- Well field piping layout and hydraulic calculations
- Capital and operating costs.

### 2.2 Exclusions

The following deliverables were not updated in this study:

- PFDs
- PIDs
- 3D modelling
- Processing plant layout
- Equipment packages (not sent for rebid).

## 3. Geology & Hydrogeology

### 3.1 Summary

Exploration and hydrogeological characterization since 2017 have yielded a detailed understanding of the Carachi Pampa Basin's geology, hydrogeology, hydrogeochemistry, and lithium resource. Key highlights of the basin include:

- The Carachi Pampa Basin spans 9,494 km² and is an arid, closed basin composed of interbedded lacustrine and alluvial sediments—gravels, sands, silts, and clays—with lithium-enriched brine filling pore spaces to depths exceeding 600 meters below ground surface ("m bgs") in the central resource area.
- Groundwater flows towards the salar, the basin's lowest elevation point, where discharge occurs through evapotranspiration, concentrating mineral-rich brine.
- A freshwater wedge overlies the brine in the north and northeast, where most groundwater enters the basin. Minimal freshwater exists in the central resource area, which hosts the planned extraction wellfield.
- Pumping tests confirm favorable hydrogeological conditions in proposed production zones (200–400 m bgs), with Unit B sands exhibiting hydraulic conductivity of 2–3 m/d. Deeper sands in Unit C average around 0.5 m/d.
- Fine-grained lacustrine deposits, particularly in the upper 200 m, limit vertical hydraulic connectivity between shallow aquifers and deeper production zones.
- Over 300 core samples analyzed by Geosystems Analysis using the Rapid Brine Release (RBR) method. More than 220 drainable porosity tests show averages of 7–8%, with fine sands at ~8%. BMR surveys indicate a 7.5% median value.
- Injection tests (12, 15, and 31 days) validate the feasibility of infield injection for spent brine disposal, supporting pressure maintenance and reducing risks of subsidence or changes to surface water bodies.
- Spent brine injection must balance proximity (for effective pressure support) and distance (to prevent dilution).
- Injection into western alluvial fans may mobilize lithium-rich brine toward downgradient extraction wells. Pressure changes propagate faster than brine movement, which takes years.

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- Brine chemistry is consistent laterally and vertically. In the central salar, two long-term pumping tests recorded average lithium concentrations over 260 mg/L, with a 31-day test averaging over 270 mg/L.

The climate of the Puna Region is cold and arid, defined by intense solar radiation and frequent strong winds that shape the hydrologic conditions of the basin. During the dry winter season, wind speeds can reach up to 80 kilometers per hour, contributing to rapid evaporation. Most precipitation falls during the summer months from December to March, predominantly as rainfall with occasional snowfall. Annual precipitation is limited, averaging around 50 millimeters on the basin floor and increasing to approximately 200 millimeters in the surrounding mountainous areas. These modest rainfall levels are greatly exceeded by potential evaporation rates, which reach approximately 1,500 millimeters per year on the basin floor—highlighting the strongly evaporative nature of the environment.

The Carachi Pampa Basin is a hydrologically closed basin made up of lacustrine and alluvial sediments—gravels, sands, silts, and clays—with episodic volcanic deposits including ignimbrites, tuffs, and basalts. The basin is bounded to the east and west by north-south trending mountain ranges formed by thrust faulting. These ranges expose basement sequences that rise to elevations of about 5,100 meters above mean sea level. The Cerro Blanco pyroclastic complex lies to the south and is the main source of ignimbrites and tuffs. The Antofagasta de la Sierra and Cerro Galán volcanic complexes define the northern and northeastern highlands. Eastern ranges consist of crystalline Precambrian basement rock, sloping gently down to the basin floor.

The hydrostratigraphy is heterogeneous due to varying sediment types, though brine flow trends are relatively consistent at the basin scale. Three primary Environments of Deposition ("EOD") define the modern Carachi Pampa Basin:

- Lacustrine deposits of the salar, including fine sands with minor gravel lenses, silts, clays, and evaporites.
- Clastic alluvial fans with minor fluvial and eolian sediments, consisting of coarse gravels and sands with finer interbeds.
- Volcanic deposits, including basalts, ignimbrites, and tuffs. Pre-basin sediments such as Tertiary clastic deposits and basement metamorphic rocks were not differentiated.

The Quaternary basalt flows and cinder cone of the Carachi Pampa Volcano extend across more than 66 km² on the salar's eastern side (Figure 3-1). The base of the salar is defined by the top of the crystalline metamorphic basement rocks, specifically the Famabalasto and Falda Cienaga Formations. Passive seismic data indicate the deepest basin section in the southwest (>700 m), gradually shallowing to less than 150 m in the east.

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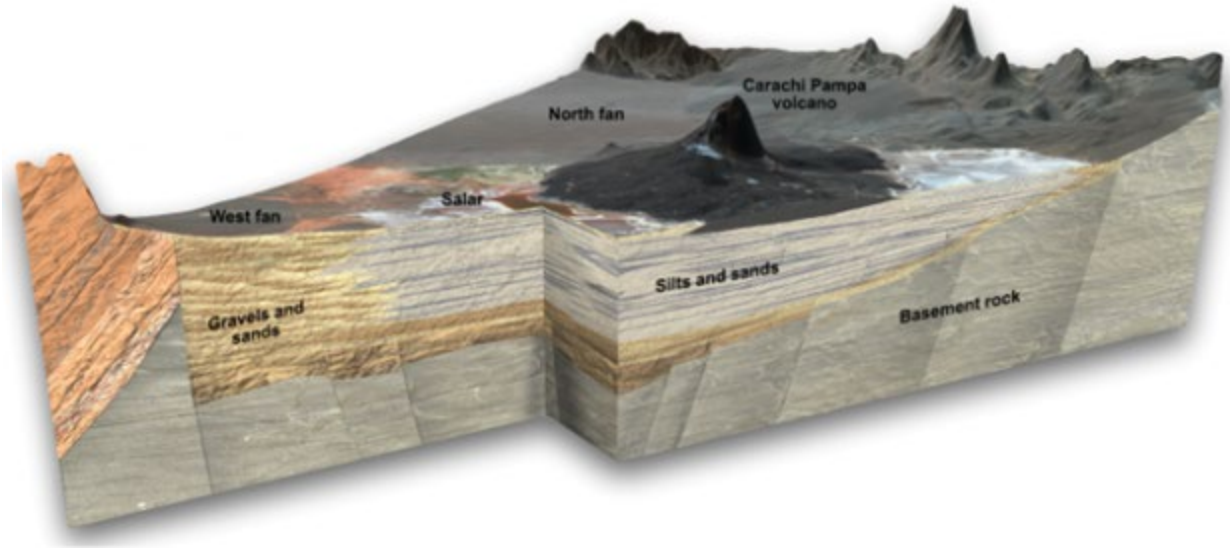



**Figure 3-1: Carachi Pampa Volcano**

The lacustrine sequence hosting lithium-rich brine has been subdivided into three primary flow units:

- Unit A: Medium to fine well-sorted, sub-rounded sands with significant silts and clay interbeds, found in the upper ~200 m bgs.
- Unit B: Medium to fine well-sorted, sub-rounded sands with fewer interbeds, located between 200 and 300 m bgs, below a gamma ray peak.
- Unit C: Medium to fine well-sorted sands with significant silt and clay interbeds, extending from ~300 m to >600 m bgs. Deeper sections may include coarser, weakly consolidated sandy conglomerates.

Groundwater flow is centripetal, converging toward discharge points near Carachi Pampa Laguna. Both shallow and deep flow systems follow this pattern. Recharge is primarily from the north and the El Peñón Basin to the east, with lesser contributions from the west and south. Geochemical and hydraulic head data confirm dominant recharge from the higher-elevation eastern sectors.

A comprehensive hydrogeologic characterization program employed multiple investigative methods:

- Surface geophysics identified conductive brine-saturated sediments and estimated bedrock depth.
- Rotary and core drilling yielded high-quality geologic and brine samples.
- Borehole geophysics aided geologic and reservoir characterization.
- Slug, pumping, and injection tests provided data on hydraulic properties, boundaries, and vertical connectivity.
- Hydrogeochemistry supported interpretations of recharge, flow direction, and lithium distribution.

Passive seismic data revealed basin depths of 700–800 meters in the western resource area. Contrast in velocities reflects the boundary between loosely consolidated basin fill and shallower volcanic facies. It aided to delineate zones of brine, brackish water, freshwater, and dry sediments, and added to the understanding of regional groundwater and salinity distribution.

Since 2017, 31 exploration holes have been drilled on 24 platforms using rotary and diamond methods, reaching depths up to 630 m. Since May 2019, downhole geophysical logs have been run in most holes where stability permitted. Logs include gamma ray, resistivity, acoustic televiewer,

inclination, caliper, temperature, and Borehole Magnetic Resonance ("BMR"). BMR, adapted from the oil industry, measures porosity, mobile water, and in-situ permeability at vertical resolutions of 5–15 cm.

Drainable porosity (or specific yield in unconfined aquifers) is equivalent to mobile free water content from BMR logs and was used as a key input for resource estimation. BMR data were validated against laboratory core sample tests. More than 300 core samples (~30 cm long) were tested by GSA Laboratory for drainable porosity. Selected samples were also analyzed for bulk density, particle size, and specific gravity. BMR-derived porosity tends to be lower than lab measurements due to undisturbed in-situ conditions.

Hydraulic testing was conducted using various methods, the most important being pumping and injection testing. The primary objectives of this testing were to:

- Quantify reservoir hydraulic properties relevant to production and injection rates.
- Assess the viability of injection in the core resource area.
- Generate robust data for use in hydrogeologic modeling and wellfield design.

Unit A was not a focus for testing, as it is not targeted for near-term resource development. Two long-duration tests conducted in early 2023 focused on Unit B, the primary production zone. For Unit C, test data included a 31-day test and shorter tests at K15R36, K14R37, and K03R12. A 30-day test at K15R36 is considered the most reliable (Table 3-1). Some key observations were that no significant hydraulic boundaries were encountered, rapid recovery was observed post-testing, and there were consistent lithium grades across the tests indicating a well-connected brine reservoir.

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**Table 3-1: Unit C Pumping Test Results**

| Pumping Well | Data Analyzed | Transmissivity / Unit Thickness (m2/d) | Hydraulic Conductivity (m/d) | Li Concentration^ (mg/L / no. samples) |
|---|---|---|---|---|
| K14R37 | Recovery | 5.3 (65) | 0.4* | 314 / 2 |
| K15R36 | Pumping /Recovery | 19.7 (100) | 0.4* | 266 / 2 |
| K15R36 | Pumping /Recovery | 29.4 (100) | 0.6 | 274 / 38 |
| K03R12 | Pumping /Recovery | 21.4 (100) | 0.5 | 275.7 / 50 |

Notes: * Considered a lower bound given that calcarb additives used during drilling and screen placement were not acidified that likely resulted in large skin effects.
^Lithium grades between the primary and check laboratories were averaged.
Unit thickness for the test was estimated from logs. Hydraulic conductivity was estimated by factoring in the screen length.

Brine samples were collected using a variety of methods to ensure representative data for geochemical interpretation. Collection methods included packer (single and double) sampling, drive point sampling, bailer collection, HydraSleeve™ samplers, installed piezometers (via airlifting), and from test-well development and long-term pumping tests. In addition, downhole electrical conductivity logging was done to correlate brine chemistry. Samples were collected in triplicate (when feasible) and analyzed by two laboratories: Alex Stewart and SGS. Results are summarized as follows.

- Lithium concentrations consistently exceed 150 mg/L across all methods.
- Reliable multi-day pumping tests indicate concentrations above 200 mg/L.
- Brines are classified as sodium-chloride (Na-Cl) type, dominated by Na+ and Cl- ions.
- Low concentrations of carbonate ($CO_3^{2-}$) and bicarbonate ($HCO_3^-$) were observed.
- Total dissolved solids (TDS) and chloride values show high geochemical consistency.
- Electrical conductivity (EC) results show a high degree of consistency both laterally and vertically across the basin.

## 3.2 Basin Scale Hydrogeologic Conceptual Model

Groundwater at all depths shows radial flow toward the salar discharge zone, including visible spring discharges around lagunas and vegas. A significant freshwater wedge has developed in the northern and eastern portions of the basin. This wedge forms as the less dense freshwater overlies deeper basin brines. Precipitation that falls in the vicinity of the cinder-cone volcano infiltrates the volcanic deposits, providing recharge to shallow groundwater systems that flow toward the salar. Although geochemical signatures suggest past hydrothermal inputs, there is negligible modern hydrothermal activity influencing the basin's groundwater system.

The dynamics associated with the freshwater wedge are critical to maintain during operations, as this density-driven flow is interpreted to support natural spring discharge and the hydrological stability of the vega complex. Springs observed along the western side of the central volcano are believed to originate primarily from older groundwater that infiltrated from the highlands in the north and east. These springs may also include minor contributions from locally recharged shallow groundwater passing through the cinder-cone shield.

For the basin water balance, recharge to the basin is derived almost entirely from precipitation, which is highly seasonal and concentrated during the summer months from December to March. Discharge from the basin occurs solely through evapotranspiration.

Geology and Hydrology Summary;

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- Groundwater flows centripetally toward the salar where it discharges via evapotranspiration, concentrating the lithium brine.
- Lithium-enriched brine fills sediments to depths >600 m in the central resource area.
- Over 220 drainable porosity tests show 7–8% average in salar lithologies; BMR confirms 7.5% median. Alluvial fans have higher porosity (~20%).
- The freshwater wedge is thickest in the north and northeast. Little to no freshwater exists in the central salar which reduces dilution risk.
- Injection tests confirm the viability of spent brine reinjection into production zones.
- Successful injection strategies maintain pressure while minimizing dilution.
- Sustaining pressure helps prevent changes to natural discharge in springs and vegas that are critical for the local ecology.

# 4. Mineral Resource & Reserve

## 4.1 Summary

Estimation of a brine resource and grade is a combination of the aquifer volume, the drainable porosity (portion of the aquifer volume that is filled by brine that can potentially be extracted), and the concentration of lithium in the brine.

Since the Original DFS, the Measured Resource has grown by more than 1.1 Mt of lithium carbonate equivalent (LCE) to 4.2 Mt LCE. The Measured and Indicated Resource has grown by approximately 10% or 0.9 Mt LCE to 8.2 Mt LCE and the updated total resource is 11.1 Mt of LCE over 275 square kilometres (Table 4-1)[9].

**Table 4-1 Kachi Project Mineral Resource Summary**

| Resource Category | Lithium (Tonnes) | LCE (Tonnes) |
|---|---|---|
| **Measured (M)** | 788,000 | 4,191,000 |
| **Indicated (I)** | 751,000 | 3,998,000 |
| **M & I** | 1,539,000 | 8,189,000 |
| **Inferred** | 542,000 | 2,885,000 |
| **Total Resource** | **2,082,000** | **11,074,000** |

Other notable changes since the Original DFS update include an updated cut-off grade which is now defined as 100 mg/l. Upgrades from Lilac's ion exchange adsorption media significantly increases lithium selectivity, lithium recovery rates, and the number of cycles the media can be used, resulting in potential cost reductions which demonstrated cost-effective operation at lower lithium concentrations (e.g., less than 75 mg/L). These improvements will also allow for fewer extraction and injection wellfields in the updated Ore Reserve[10]. An updated approximate 25,000 tpa operational mine plan of 11 production wells and 14 injection wells has an average lithium grade of 268 mg/L over the 25-year Life-of-Mine. However, note that the DFS Addendum work assumed an average lithium grade of 249 mg/L. This discrepancy stems from the fact that the DFS Addendum work and the work to update the Ore Reserve ran in parallel. This highlights potential opportunity for additional cost optimisations not fully considered in the DFS Addendum.

Since 2017, 31 exploration holes have been drilled on 24 platforms using rotary and diamond methods, reaching depths up to 630 m. The initial drill hole pattern was undertaken with a spacing averaging about 1.5 km within the central resource area. Brine samples were nominally spaced at

[9] Refer to ASX announcement dated 3 June 2025
[10] Refer to ASX announcement dated 4 August 2025 - "Kachi Updated Ore Reserve"

planned 28 m intervals, but actual sampling depended on the conditions of the holes, and higher frequency sampling during 2021-2023 resulted in an average vertical spacing of 19 m. The resource estimate was undertaken using Leapfrog software where the geologic block model was constructed with 400 m by 400 m blocks, and 10 m vertical extent.

Based on, and with consideration to drill spacing, overall extent of brine mineralisation, application of the brine guidelines (Houston, et. al., 2011), and understanding of the project area and continuity of mineralisation, the following distances were used for resource classification:

- A domain generated by the sum of 2.5 km radii around drill holes for the Measured and Indicated Resources to the south and north.
- A domain generated with the 5 km radii for the Inferred Resources and for a small section of Indicated Resources.

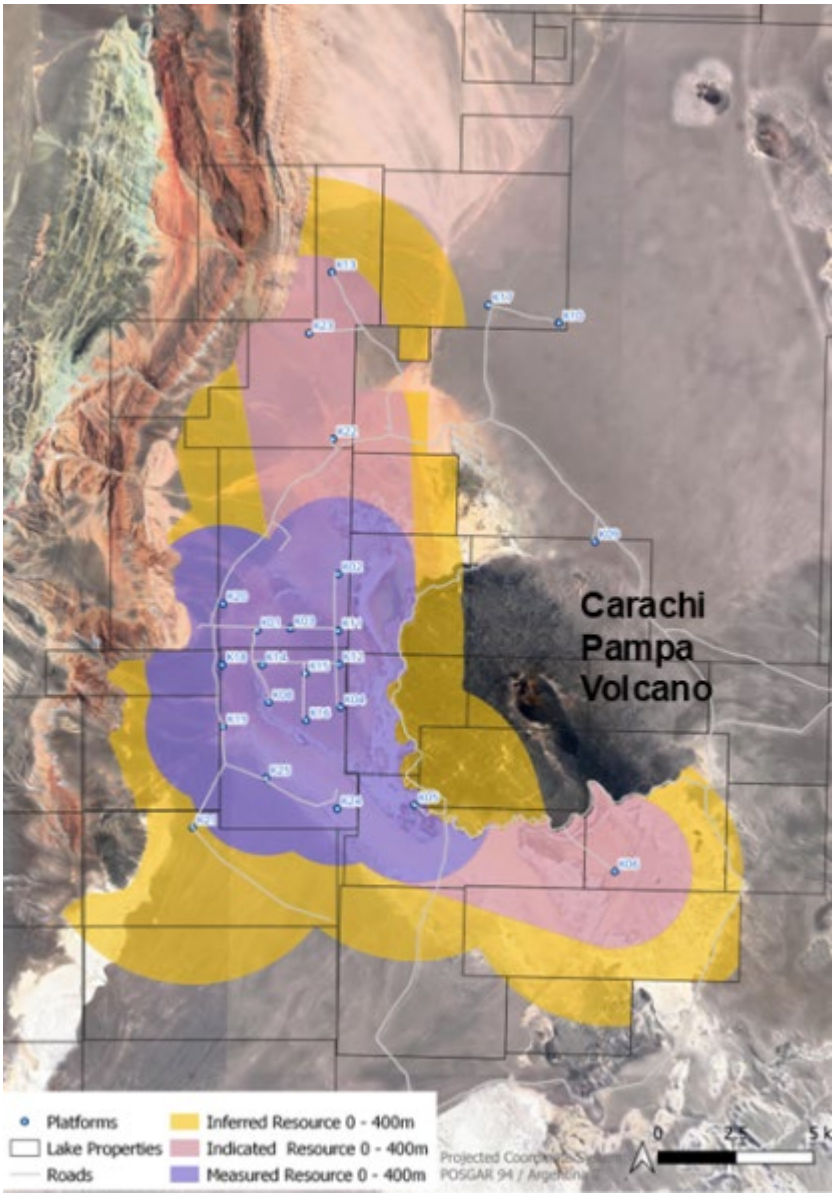
## 4.2 Measured Resource

The Measured Resource contains two components: 1) the salar deposits and 2) a portion of the West Fan Complex. The Measured Resource category only extends to the 400 m depth despite drilling intercepts to the current maximum depth of 630 m bgs. Indicated resources are defined in the southern sector of the deposit between drillholes at sites K05 and K06 and also in the deeper sediments between 400 m below ground surface and 600 m below ground surface in the salar area. The continuity of the Indicated Resource was constrained to a 2.5 km radius (Figure 4-1). Inferred Resources are defined surrounding the Measured and Indicated Resources and beneath the eastern part of the Carachi Pampa volcano flows. 5 km radii around all wells were used as the outer limit of the Inferred Resource, except around K23D40 in the north, where a 7.5 km radius was used. The outer limit is clipped to the property boundaries.

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**Figure 4-1: Diagram showing the Measured (purple) and Indicated Resources (pink), with the surrounding area of Inferred Resource (orange)**




## 4.3 Modeling

The Leapfrog geologic block model considers static conditions when used for estimating the Mineral Resource. However, the block model cannot simulate the lithium brine reserve, as that requires dynamic simulation (pumping and injection) of the lithium brine in the subsurface which is done using a numerical hydrogeological model ("Model"). Abbreviated Model objectives include:

- Evaluation of various extraction and injection wellfield layouts and designs to determine which options are preferred for efficient and effective operations.
- Verify that planned extraction and injection well designs and the mine plan meet production and injection targets.
- Quantify lithium mass through LOM for the proposed wellfield.

The changes to the predictive Model used to calculate the Ore Reserve include the following:

- The initial lithium concentration in the brine was updated to reflect the 3 June 2025 Mineral Resource Estimate update.
- Five production wells with lower lithium concentrations, as well as five injection wells were eliminated from the Model, among other details.

Approximately 98% of the extracted lithium will originate from within the Measured Resource in the production horizon, with small contributions from 400-600 m below ground surface. The Model indicates that lithium grades would decline by approximately 2% over 25 years.

## 4.4 Ore Reserve

The Ore Reserve estimate considers the Modifying Factors of converting Mineral Resources to Ore Reserves, including the production and injection well field designs and efficiency, environmental considerations, lithium recovery rates, and plant capacity which is actually the limiting factor for the Ore Reserve.[11]

The Model was used to estimate drawdown and associated changes in flux and water quality that might be induced as a result of brine extraction and subsequent injection. In the centre of the wellfield, groundwater depressurisation in Unit B is predicted to be approximately 20 m after 25 years and recovery is expected within 5-10 years across most of the wellfield. Maximum drawdown of the phreatic surface is predicted to be approximately 3 m, which is substantially less then the 20 m of depressurisation of Unit B.

The Ore Reserve was classified into Proved and Probable Reserves (Table 4-2). A majority of the extracted mass is sourced from Measured Resources at the salar core with consistently high lithium concentration.

**Table 4-2 Proved and Probable Lithium Reserves**

| Reserve Category | Years | Lithium (Tonnes) | LCE (Tonnes) | Average Lithium (mg/L) |
|---|---|---|---|---|
| Proved | 1 | 4,390 | 23,310 | 270 |
| Proved | 2-7 | 28,360 | 150,850 | 270 |
| Probable | 8-25 | 85,060 | 452,540 | 265 |
| Total | 1-25 | **117,810** | 626,760 | |

The hydrogeological model developed for the Maiden Ore Reserve was updated with the lithium concentrations from the most recent Mineral Resource Estimate announced on 3 June 2025 and the updated wellfield development plan. The Model was used to predict future conditions during mine operations using the wellfield development plan. The average lithium grades during the LOM are consistent with pumping tests which have 262 mg/l and 263 mg/l from test wells in Unit B.

The Model predicts that with the projected LCE production schedule, all of the recovered lithium is sourced from within the Measured and Indicated Resources. Production in Years 1-7 is predicted to be 100% from Measured Resources. Later in the mine life, a small portion of the reserve, about 4%, is sourced from deep Indicated Resources below 400 m. Proved Ore Reserves are capped at 7-years despite the very high production from the Measured Resource.

[11] Refer to ASX Announcement dated 4 August 2025 - "Kachi Updated Ore Reserve"



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# 5. Extraction Methods and Design

## 5.1 Summary

This section presents a detailed update to the extraction methodology and wellfield design for the Project. The revisions incorporate enhanced geological data, elevated lithium concentrations, and a suite of engineering optimizations intended to improve efficiency, reduce capital and operating costs, and increase environmental performance.

The updated extraction plan reflects an evolution in the Original DFS baseline, offering a technically resilient and cost-effective framework for the delivery of LCE production.

## 5.2 Well field Development Plan

The revised Well Field Development Plan ("WFDP") proposes a configuration of thirteen production (extraction) wells located in the central salar, along with sixteen reinjection wells strategically placed to the east and west of the salar margin—near the Carachi Pampa Volcano and along the western alluvial fans, respectively. To accommodate operational variability, the design includes provisions for three additional extraction wells and five contingency reinjection wells. The wellfield has been engineered to support a total brine flow rate of 845 liters per second, based on a conservative lithium concentration of 249 mg/L, and screen intervals generally range between 200 and 400 m bgs, although deeper brine-bearing units extend beyond 600 meters. The reinjection strategy, which is fundamental to the Project's hydrogeologic integrity, is designed to sustain aquifer pressure and reduce the potential for drawdown, land subsidence, or ecological disruption.

## 5.3 Geochemical Analyses

Geochemical analyses conducted on ten subsurface brine samples and eight associated fluid samples demonstrate a high degree of homogeneity across the basin. The brines are classified as sodium-chloride (Na-Cl) dominant, with negligible carbonate content and minimal geochemical variation across depth or location. This consistency supports the hypothesis of a hydrologically well-mixed basin. Compatibility testing confirms that lithium-depleted reinjection fluids remain in equilibrium with halite throughout the extraction and reinjection cycle. While theoretical modeling indicates a risk of halite precipitation during reinjection, long-term field testing—including a 31-day pilot—has shown no operational evidence of well clogging. To manage any potential halite buildup, the operating plan incorporates regular freshwater jetting as a preventative maintenance strategy.

## 5.4 Drilling and Construction

From a drilling and construction standpoint, the updated plan introduces a transition to Super Single drilling rigs, replacing traditional mud rotary systems. This change improves automation, enhances safety, and accelerates drilling operations by a factor of three. As a result, the total drilling campaign duration has been reduced to 366 operational days—152 days shorter than the Original DFS projection. This updated approach yields an estimated CAPEX reduction of $26.9 million and an OPEX saving of $1.8 million per year. Direct Mud Rotary drilling was selected for its superior performance in unconsolidated salar sediments. Wells are constructed using 316L stainless steel casing and Johnson Screens Shur-Pak™ prepacked glass bead screens, designed to resist corrosion, enhance hydraulic conductivity, and minimize biofouling over a 25-year mine life. Electric Submersible Pumps (ESPs) will be deployed in the extraction wells, offering high durability components, real-time telemetry, and optimized pumping efficiency.

## 5.5 Brine Gathering Network

The Brine Gathering Network ("BGN"), engineered by Hatch, has been reconfigured to support the updated wellfield layout. The network eliminates the need for centroid ponds, reduces surface pipeline volume, and simplifies hydraulic design. Above-ground polyethylene (PE-100 SDR9) pipelines are used throughout the system. The brine extraction pipeline layout employs a telescopic design,

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consolidating flow from multiple wells into fewer trunklines, minimizing pressure loss and simplifying maintenance. Telescopic pipelines connect the 13 ESP-equipped extraction wells to the brine delivery point near the processing plant. Similarly for reinjection, two telescoping pipelines have been designed; one for the eastern and one for western networks. Across all reinjection systems, flow assurance is being evaluated, with pigging capability and access points under consideration for inclusion during front-end engineering design ("FEED").

The capital cost for the updated wellfield development—including drilling, materials, freight, and commissioning—is estimated at $67.2 million USD. This figure excludes contingency, which is captured at the project level, and represents a significant cost reduction in the Original DFS estimate, primarily due to the transition to Super Single rigs, casing redesign, and elimination of the centroid pond infrastructure. The drilling campaign schedule assumes 24-hour operations using a single Super Single rig and a separate core rig for observation wells. Drilling durations are projected at 158 days for extraction wells, 189 days for reinjection wells, and approximately 50 days for freshwater and observation wells combined.

## 5.6 Environmental

The plan also includes a detailed closure strategy compliant with Catamarca provincial and federal Argentinian environmental regulations. This includes well sealing with bentonite or cement plugs using a tremie line, removal of all surface infrastructure, and pad reclamation. Closure activities are expected to cost approximately $1.6 million USD and take about 35 days to execute. Land subsidence is being proactively managed through a reinjection-based pressure stabilization strategy. A preliminary monitoring program using InSAR, fixed GPS stations, and survey benchmarks has been established to capture baseline data and support ongoing risk mitigation through Trigger Action Response Plans ("TARPs").

Collectively, the revised design outlined in this section establishes a technically robust and operationally efficient foundation for the successful implementation of Kachi and provides a clear pathway to scalable, low-impact lithium brine production.

# 6. General Infrastructure

## 6.1 Power Supply

During construction of the Project, electrical power will be provided by the EPC Contractor. For the operational period of the Project, a power supply study determines the best alternative for high tension line power to be brought to the site. This will potentially be supplemented by a solar photovoltaic power plant. The following power supply study evaluates the best combination of these power sources.

### *6.1.1 Power*

In the Original DFS, the Project could demand up to 82 MW at peak intervals with an anticipated average demand of approximately 70 MW required to facilitate the production of 25 ktpa of LCE. However, following the DFS Addendum, revised power loading requirements are significantly reduced. With the introduction of higher brine lithium concentration and next generation DLE processing, the projected peak power demand is 72 MW with a sustained loading of approximately 57 MW.

The facility will be situated 250-300 km away from the nearest power grid connection, the Kachi Project anticipates securing this power through a Power Purchase Agreement ("PPA"). This strategic approach aims to shift all power-related CAPEX, including plant connections, into OPEX.

YPF Luz ("YPF") was selected to complete a FEED study on providing power to the site location. YPF has proposed a 220 kV line, shown in the route below (Figure 6-1). As of the issuance of this Report,

YPF has successfully completed the FEED study[12]. The completed FEED study provides a solution for Kachi's electrical interconnection to the Argentine national grid, including proposed infrastructure routing, system specifications, and integration options tailored to Kachi's projected power demands. Further negotiations are needed in connection with the PPA.

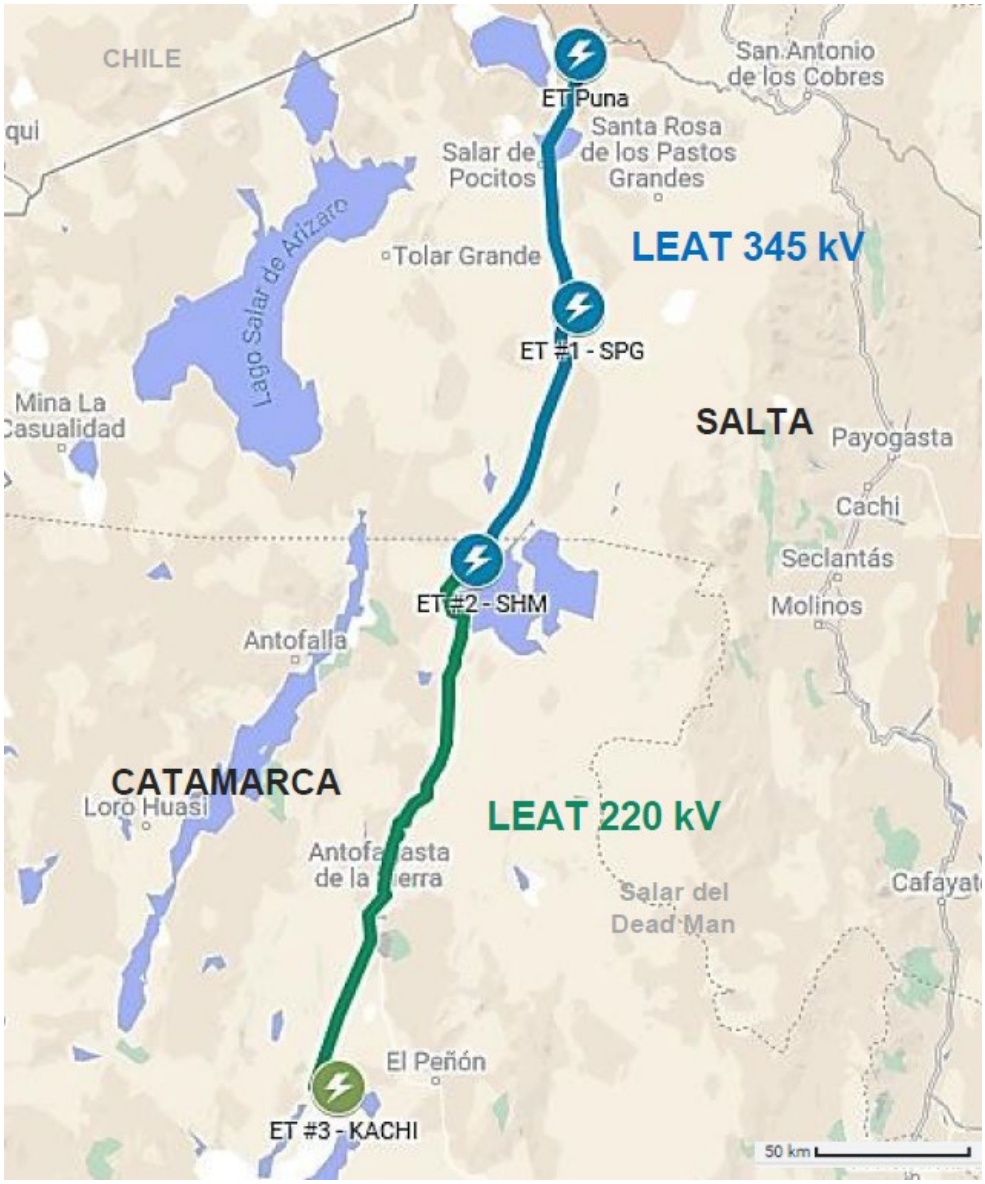
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[12] Refer to ASX announcement dated 2 July 2025

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### *6.1.2 Grid Connection*

**Figure 6-1 Power Line Route**




### *6.1.3 Power Island*

In the Original DFS[13], in addition to the grid connection, the Project planned a 20 MW hybrid "Power Island," combining a 25 MW on-site solar park with diesel generators. The demand for a stand-alone power island has been mitigated by the delay in project timeline, and the advanced proposed timeline for grid connection. However, the solar park will be retained.

### *6.1.4 Future Wok / Opportunities*

The Project explored a stand-alone solar plus Battery Energy Storage System ("BESS") but ultimately a BESS solution was not selected due to technology immaturity and cost efficacy reasons. The evaluation of Thermal Energy Storage ("TES") for load balancing with the grid, particularly for the significant power usage in steam generation (~8MW), is under consideration, though currently not pursued due to predicted low margins between on-site generation costs and available options. The Project will continue to evaluate future opportunities as they arise.

[13] Refer to ASX announcement dated 19 December 2023 - "Kachi Phase One Definitive Feasibility Study", Section 6.1

## 6.2 Raw Water Supply

The water supply demand for the Project will be phased in order to achieve Lake's project objective of as low a consumptive water use as possible. The initial project will involve a higher overall water use of about 60 L/s for a two-year period, follow by a reduction to about 15 L/s as a result of the commissioning of the Zero Liquid Discharge ("ZLD") system.

The 15 L/s water demand will be composed of the following elements:

- Potable water for camp use: 2 L/s
- Process water: 9 L/s
- Brine extraction and injection system maintenance: 2 L/s
- Contingency: 2 L/s

## 6.3 Accommodation Camp

The accommodation camp will be located close to the Process Plant. The camp will have two configurations:

- Construction Camp (Temporary): This camp will be to accommodate the Process Plant construction workforce over the duration of the construction effort (approximately 30 months). The construction camp will be of prefabricated modular construction and have capacity to accommodate 1,000 people and will cover an area of approximately 2.4 hectares. With further construction optimization and areas of increased modularization evaluated in the DFS Addendum, the camp size will reduce significantly to accommodate approximately 800 people.

- Operations Camp (Permanent): This camp will be to accommodate the operational staff for the operating life of the facility (i.e., 25 years). The operations camp will be of site-built steel construction and will have capacity to accommodate approximately 400 people and will cover an area of approximately 1.5 hectares.

No other changes to the accommodation camp were made in the DFS Addendum.

## 6.4 Plant and Wellpad Access Roads

No significant changes to the plant and wellpad access roads was considered in the DFS Addendum. Refer to the Original DFS for information regarding this topic[14].

## 6.5 Waste Management Facilities

During the construction phase, the myriad waste generated necessitates a strategic approach. Domestic waste may be effectively managed through on-site landfilling, contingent on regulatory approval. Alternatively, the Project may opt for the sanctioned municipal landfills in El Peñon or Antofagasta de la Sierra. The industrial waste stream will undergo meticulous segregation by type, with interim storage awaiting final disposal solutions tailored to the specific characteristics of each waste type. The overarching waste management strategy emphasizes the off-site disposal of construction waste, prioritizing the principles of waste reduction through reuse, recycling, and responsible disposal practices.

[14] Refer to ASX announcement dated 19 December 2023 - "Kachi Phase One Definitive Feasibility Study", Section 6.3



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# 7. Metallurgy

## 7.1 Summary

The Project is designed to produce 25 ktpa of battery-grade lithium carbonate from a lithium chloride brine resource. In this process, the lithium is extracted from the brine via lithium ion exchange (IX), concentrated and purified by various methods, then precipitated, washed, and dried.

The proposed flowsheet for the project is shown in Figure 7-1. The lithium rich feed brine from the salar is extracted and pumped from the brine extraction network to the Feed Pond, which provides surge volume between the extraction wells and the main processing plant.

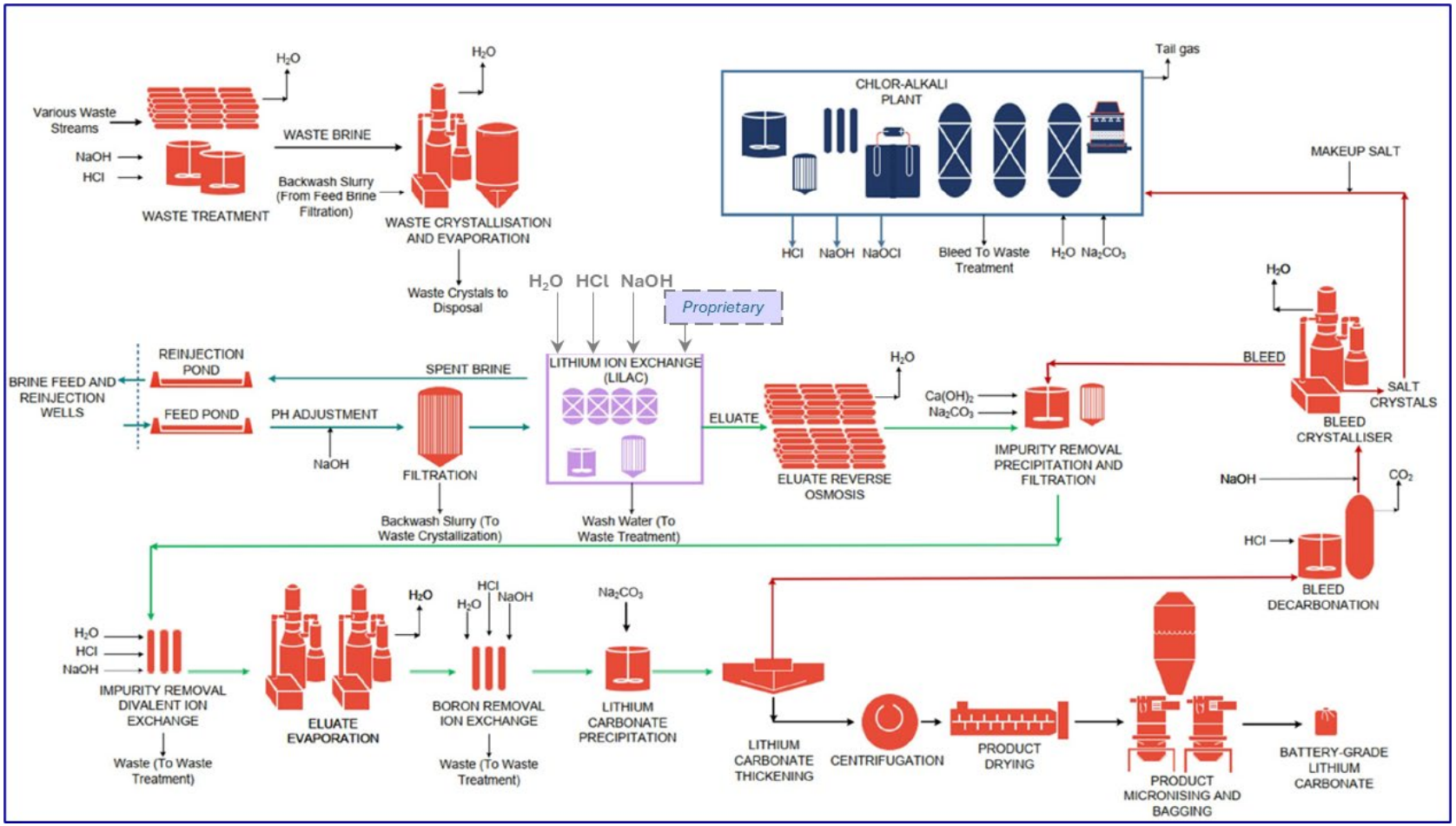
The brine is pH-adjusted with sodium hydroxide to precipitate iron and manganese, then fed to a filtration system to remove suspended solids. The filtered brine is then processed in the lithium ion exchange package, which recovers and concentrates lithium to the eluate stream.

The lithium ion exchange step (formerly referred to as direct lithium extraction / DLE) employs a novel ion exchange media and system developed by Lilac to extract lithium from the brine and elute the extracted lithium with a hydrochloric acid solution. Effluent and depleted brine from the lithium ion exchange are sent to waste RO treatment and brine reinjection, respectively. Notably, since the Original DFS, Lilac has updated the project basis to incorporate its Gen 4 technology, which offers improved lithium recovery and selectivity, and reduces both water and reagent consumption compared to Gen 3 used in the Original DFS.

The eluate stream is concentrated through reverse osmosis then treated for impurities (primarily magnesium and calcium) by the stage-wise addition of lime and sodium carbonate, with the solid precipitates separated by filtration. Further trace divalent impurities are removed by ion exchange to target battery-grade product specifications. To enhance lithium recovery the solution is further evaporated by mechanical vapour recompression ("MVR"). Boron is then removed from the concentrated solution by ion exchange.

Lithium carbonate is precipitated from the purified stream by addition of sodium carbonate. The precipitated lithium carbonate is washed through two stages of centrifuging to achieve a battery grade lithium carbonate final product. This product is dried, micronized, and packaged for sale. The mother liquor from lithium carbonate precipitation, which contains a residual amount of soluble lithium chloride, is fed into a crystallization system for additional lithium recovery and the production of sodium chloride solids. An on-site chlor-alkali plant electrochemically converts recovered sodium chloride (supplemented by fresh salt addition) into hydrochloric acid, sodium hydroxide, and sodium hypochlorite. Used process water is recovered and recycled from various waste streams by reverse osmosis and waste salt crystallization to minimize overall facility water consumption.

**Figure 7-1: Schematic of Proposed Lithium Carbonate Plant**




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The purpose of this section is to outline metallurgy work that has been conducted over the course of the DFS Addendum. Each of the affected areas of work are detailed below.

## 7.2 Design Basis

### *7.2.1 Brine Characteristics*

The updated feed brine composition used in the simulation is shown in Table 7-1 and Table 7-2. The design lithium concentration corresponds to the median concentration of composite feed brine analyses. The updated composition of the eluate produced from the lithium ion exchange can be seen in Table 7-3. These were treated as feed streams to Hatch MEB.

**Table 7-1: Design Elemental Composition of Raw Feed Brine**

| Element | Units | Original DFS | DFS Addendum |
|---|---|---|---|
| Li | mg/L | 205 | 249 |
| Na | mg/L | 109,000 | 119,234 |
| Mg | mg/L | 3,600 | 2,369 |
| Ca | mg/L | 600 | 534 |
| B | mg/L | 476 | 378 |
| K | mg/L | 6,000 | 5,303 |
| Sr | mg/L | 20 | 0 |
| Fe | mg/L | 12 | 0 |
| Mn | mg/L | 10 | 0 |
| Ba | mg/L | 10 | 0 |
| Chlorides | mg/L | 172,000 | 181,873 |
| Sulphate | mg/L | 19,200 | 21,049 |

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**Table 7-2: Modeled Species Composition of Raw Feed Brine**

| Species | Units | Original DFS | DFS Addendum |
|---|---|---|---|
| LiCl | wt% | 0.10 | 0.13 |
| MgCl2 | wt% | 1.16 | 0.77 |
| B(OH)3 | wt% | 0.22 | 0.18 |
| NaCl | wt% | 21.76 | 23.72 |
| BaCl2 | ppm | 15 | 0 |
| SrCl2 | ppm | 36 | 0 |
| FeCl2 | ppm | 27 | 22 |
| MnCl2 | ppm | 23 | 19 |
| CaSO4 | wt% | 0.17 | 0.15 |
| K2SO4 | wt% | 1.10 | 0.98 |
| Na2SO4 | wt% | 1.26 | 1.62 |
| H2O | wt% | 74.20 | 72.16 |
| Suspended solids (modelled as SiO2) | ppm | 30 | 50 |

**Table 7-3: Elemental Composition of Neutralized Eluate**

| Species | Units | Eluate | |
|---|---|---|---|
| | | Original DFS | DFS Add. |
| Li | mg/L | 2,276 | 2,312 |
| Na | mg/L | 3,252 | 2,682 |
| K | mg/L | 158 | 298 |
| Mg | mg/L | 247 | 222 |
| Ca | mg/L | 178 | 436 |
| Sr | mg/L | 7 | 7 |
| B | mg/L | 2 | 2 |
| Fe | mg/L | 0 | 0 |
| Ba | mg/L | 0 | 0 |
| Mn | mg/L | 0 | 0 |
| Chlorides | mg/L | 17,824 | 17,641 |
| Sulphates | mg/L | 129 | 129 |

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### *7.2.2 Lithium Carbonate Production Basis*

The production rate target is 25 ktpa of battery grade lithium carbonate equivalent with a plant availability of 90% (7,884 h/a). This production basis is unchanged from that contained in the Original DFS.

### *7.2.3 Process Design Criteria Updates*

The following are the key design criteria that have been updated during the DFS Addendum:

- Substitution of ultrafiltration with pressure filtration and addition of filter aid.
- Updated lithium recovery and discharge stream compositions for Lithium IX with Lilac Gen 4 Technology.
- Reduced reagent consumption for Lithium IX.

## 7.3 Metallurgical Test Work

Refer to the Original DFS[15] for information pertaining to metallurgical test work. Updates to the metallurgy were not included in the DFS Addendum.

## 7.4 Mass-Energy Balance and Process Flow Diagrams

### *7.4.1 Methodology*

The MEB, prepared using the SysCAD software package (Version 139.33001), was updated according to the changes in the Process Design Criteria outlined in section 7.3.3.

### *7.4.2 Key Mass-Energy Balance Results*

Table 7-4 compares the key inputs and results of the updated MEB with the values modelled in the Original DFS compared with the values modelled in the DFS Addendum.

**Table 7-4: Mass-Energy Balance Highlights**

| Parameter | Units | Original DFS | DFS Addendum |
|---|---|---|---|
| Brine Lithium Concentration | mg/L | 205 | 249 |
| Brine Feed Flow | $m^3/h$ | 3,858 | 2,750 |
| Brine Lithium Flow | kg/h | 792 | 687 |
| Brine Reinjection Flow | $m^3/h$ | 3,865 | 2,747 |
| Li IX Eluate Flow | $m^3/h$ | 280 | 282 |
| Hydrochloric Acid (32% HCl) Consumption | t/h | 20.7 | 18.5 |
| Sodium Hydroxide (32% NaOH) Consumption | t/h | 19.9 | 16.2 |
| Sodium Carbonate Consumption | t/h | 6.0 | 6.2 |
| Sodium Chloride Consumption | t/h | 3.9 | 2.3 |
| Lime Consumption | kg/h | 233 | 209 |
| Lithium in the Final Product | kg/h | 596 | 596 |

Due to the changes in the process design criteria, the overall mass balance has the following differences compared with the Original DFS:

- Higher lithium concentration and improved recovery have allowed for smaller brine processing systems, reducing the total volume of brine that needs to be extracted and reinjected.
- Reduced reagent consumption by Lithium IX system has resulted in smaller chlor-alkali plant.
- Final eluate flowrate and concentrations have not changed significantly.
- Reduced water consumption by Lithium IX system has resulted in a smaller water treatment area.

[15] Refer to ASX announcement dated 19 December 2023 - “Kachi Phase One Definitive Feasibility Study”, Section 7

- Reduced water production by Lithium IX system has resulted in a smaller waste treatment area.

### *7.4.3 Process Water Balance*

The summary of the updated water balance across the entire process can be seen in Table 7-6, with a block flow representation in Figure 7-2. The water balance only considers water used in the process and excludes rainwater, fire water, storm water run-off and seepage.

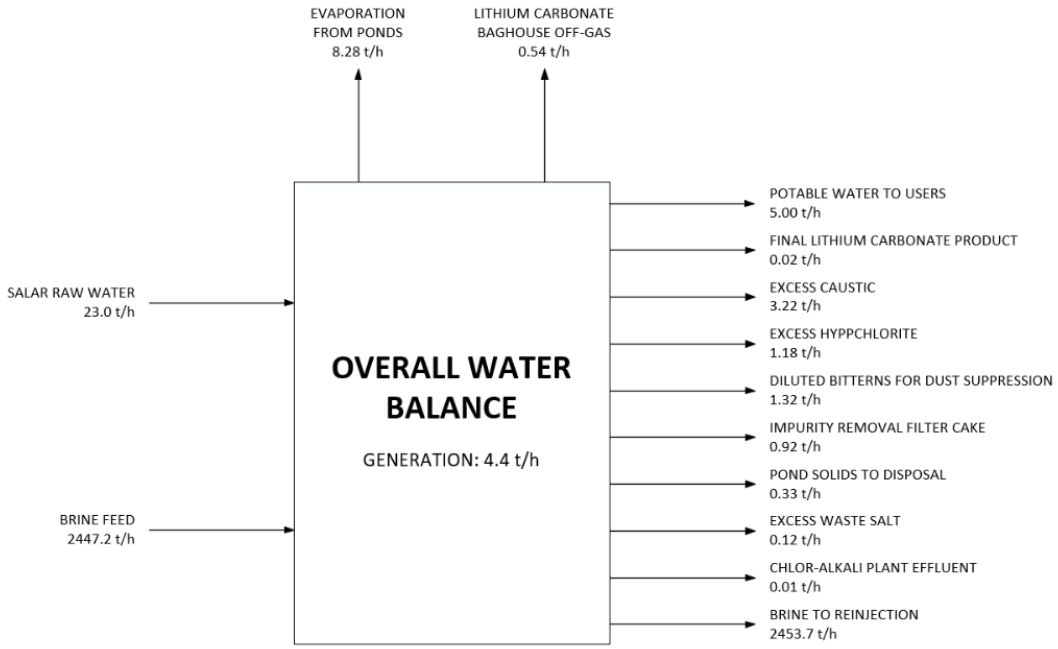
The salar raw (fresh) water acts as a make-up source for the reverse osmosis ("RO") water supplied to the plant, making up 4.4% of the total RO water demand requirements with the remainder being supplied by recovered process water. A comparison of the key water metrics in the Original DFS and the DFS Addendum are shown in Table 7-5. A breakdown of the RO water users can be seen in Table 7-7, where 73% of the RO water demand of the entire process is from the lithium-ion exchange. Notably, the total RO water consumption of the process has decreased compared with the process in Original DFS since the lithium IX water requirement has decreased with Lilac's Gen 4 technology.

A breakdown of cooling water users is shown in Table 7-8.

**Table 7-5: Key Water Metrics Comparison**

| Stream Description | Original DFS | | DFS Addendum | |
|---|---|---|---|---|
| | t/h | t/t LCE | t/h | t/t LCE |
| Salar Raw Water Source | 26.4 | 8.33 | 23.0 | 7.26 |
| RO Water Plant Demand | 205.8 | 64.9 | 99.6 | 31.4 |

**Figure 7-2: Block Flow Diagram of Overall Water Balance**




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**Table 7-6: Summary of Water Balance Across Entire Process**

| Description | $H_2O$ Mass flow (t/h) |
|---|---|
| **IN** | **2470.2** |
| Brine Feed | 2447.2 |
| Salar Raw Water | 23.0 |
| **OUT** | **2475.7** |
| Spent Brine | 2454 (net brine: 6.51) |
| Evaporation (Ponds, Tanks) | 8.28 |
| Potable water to users | 5.00 |
| Excess Caustic | 3.22 |
| Diluted Bitterns for Dust Suppression | 1.32 |
| Excess Hypochlorite | 1.18 |
| Impurity Removal Filter Cake | 0.92 |
| Lithium Carbonate Baghouse Off-gas | 0.54 |
| Pond Solids Removal | 0.33 |
| Excess Waste Salt | 0.12 |
| Final Lithium Carbonate Product | 0.02 |
| Chlor-Alkali Plant Effluent | 0.01 |
| **GENERATION*** | **4.4** |
| Lithium IX | 7.23 |
| Bleed Crystallizer | 0.15 |
| Divalent and Boron IX | 0.08 |
| Effluent Treatment Circuit | 0.04 |
| Lime Slaker | -0.06 |
| Chlor-Alkali Plant | -3.00 |
| **BALANCE** | **0.00** |

*The “GENERATION” section lists the process areas which contain chemical reactions where water is either consumed or generated.

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**Table 7-7: Breakdown of RO Water Users**

| Water User | % of Total Water Usage |
|---|---|
| Li IX RO Water | 73.0% |
| Gland water | 7.2% |
| Impurity Removal RO Water | 5.5% |
| Chlor-Alkali Hydrochloric Acid Scrubber RO | 2.8% |
| Chlor-Alkali Cell Dilution Water | 2.0% |
| Soda Ash RO Water | 1.6% |
| Miscellaneous | 8.0% |

**Table 7-8: Breakdown of Cooling Water Users**

| Cooling Water User | % of Total Cooling Water Usage |
|---|---|
| Chlor-Alkali Cooling Water | 68.1% |
| Cooling Water to Bleed Crystallizer | 20.8% |
| Cooling Water to Waste Evaporator / Crystallizer | 8.9% |
| Miscellaneous | 2.2% |

### *7.4.4 Lithium Balance*

The summary of the elemental lithium balance across the entire process can be seen in Table 7-9. The elemental lithium balance accounts for all incoming ("IN") and outgoing ("OUT") lithium from the process. The overall lithium recovery increased from 75.3% (in the Original DFS) to 86.8%, due to the increased lithium recovery in the updated lithium-ion exchange technology (Lilac Gen 4 Technology).

**Table 7-9: Summary of Elemental Lithium Balance Across Entire Process**

| Description | Li (kg/h) |
|---|---|
| **IN** | **686.68** |
| Brine Feed | 686.68 |
| **OUT** | **687.88** |
| Final Lithium Carbonate Product | 595.74 |
| Spent Brine Pond to Reinjection | 52.43 |
| Impurity Removal Filter Cake to Disposal | 25.35 |
| Diluted Bitterns for Dust Suppression | 10.25 |
| Halite to Disposal | 3.12 |
| Excess Sodium Hydroxide | 0.91 |
| Waste Effluent Backwash Liquor | 0.07 |
| **BALANCE*** | **-1.20** |
| **OVERALL LITHIUM RECOVERY** | **86.8%** |

*The negative balance reflects the minor differences between Lilac MEB and Hatch MEB.

## 7.5 Process Description

Changes from the Original DFS are:

- Removal of the ultrafiltration and replacement with pressure leaf filters since additional testing from Lilac showed a tolerance to conventionally filtered brine. The filter cake will be flushed off periodically and be sent to waste crystallization centrifuges to have the solids separated. The filter aid will be provided by an alpha cellulose make up system.

Table 7-10 shows the updated compositions of key process streams.

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**Table 7-10: Compositions of Key Process Streams**

| Parameter | Unit | Feed Brine | Spent Brine | Li IX Eluate | Feed to Bleed Treatment | Eluate RO to Impurity Removal | IR IX Discharge | Evaporator Discharge | Purified concentrated LiCl | Final Lithium Carbonate Product | Salt Crystals to NaCl Stack |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Stream # | | 1200 | 1600 | 1360 | 2309 | 1401 | 2280 | 1424 + 1415 | 2215 | 2355 | 2572 |
| Mass Flow | t/h | 3,362 | 3,369 | 283.0 | 53.8 | 87.7 | 96.5 | 30.3 | 31.2 | 3.2 | 9.1 |
| Volume Flow | m3/h | 2,750 | 2,747 | 281.5 | 46.4 | 85.9 | 92.2 | 26.3 | 27.2 | 1.5 | 4.3 |
| Solid Content | wt % | 0.0 | - | - | 0.0 | - | - | 0.0 | - | 99.5 | 95.0 |
| Aqueous Composition | | | | | | | | | | | |
| Li | mg/l | 249.7 | 19.1 | 2,268 | 1,573 | 7,380 | 7,274 | 25,489 | 24,677 | 0.1 | 14,401 |
| B | mg/l | 378.8 | 377.9 | 1.9 | 0.7 | 3.9 | 4.0 | 13.9 | 1.1 | 0.2 | 6.2 |
| Na | mg/l | 119,515 | 119,913 | 2,664 | 85,177 | 8,874 | 17,512 | 61,393 | 60,177 | 0.8 | 103,083 |
| Mg | mg/l | 2,374.2 | 2,353.6 | 220.3 | - | 715.5 | 1.0 | 3.5 | 3.4 | - | 0.2 |
| S | mg/l | 7,055.5 | 7,033.7 | - | 60.0 | 0.0 | 4.0 | 14.1 | 13.6 | 0.3 | 0.5 |
| Cl | mg/l | 182,700 | 181,961 | 17,372 | 153,024 | 56,917 | 76,981 | 270,225 | 261,610 | - | 464,402 |
| K | mg/l | 5,315 | 5,286 | 295.9 | 28,338 | 1,108 | 14,284 | 50,053 | 48,470 | 2.5 | 255,840 |
| Ca | mg/l | 534.9 | 473.8 | 432.9 | - | 1,405.7 | 1.0 | 3.5 | 3.4 | - | 0.3 |
| Mn | mg/l | 10.2 | - | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 |
| Fe | mg/l | 11.9 | - | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - |
| Sr | mg/l | - | - | 7.1 | 0.0 | 23.1 | 0.0 | 0.1 | 0.1 | - | 0.4 |
| Ba | mg/l | - | - | - | - | - | - | - | - | - | - |

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| Parameter | Unit | Feed Brine | Spent Brine | Li IX Eluate | Feed to Bleed Treatment | Eluate RO to Impurity Removal | IR IX Discharge | Evaporator Discharge | Purified concentrated LiCl | Final Lithium Carbonate Product | Salt Crystals to NaCl Stack |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Stream # | | 1200 | 1600 | 1360 | 2309 | 1401 | 2280 | 1424 + 1415 | 2215 | 2355 | 2572 |
| Solid Composition | | | | | | | | | | | |
| Mg(OH)2 | wt % | - | - | - | 0.00 | - | - | - | - | 0.00 | 0.00 |
| NaCl | wt % | - | - | - | 0.00 | - | - | - | - | 0.03 | 99.86 |
| SiO2 | wt % | - | - | - | 0.00 | - | - | - | - | 0.00 | 0.00 |
| Li2CO3 | wt % | - | - | - | 99.98 | - | - | - | - | 99.94 | - |
| Ca(OH)2 | wt % | - | - | - | - | - | - | - | - | - | - |
| MgCO3 | wt % | - | - | - | 0.01 | - | - | - | - | 0.01 | - |
| Fe(OH)2 | wt % | - | - | - | 0.00 | - | - | - | - | 0.00 | 0.00 |
| CaCO3 | wt % | - | - | - | 0.01 | - | - | - | - | 0.01 | - |
| Na2CO3 | wt % | - | - | - | - | - | - | - | - | 0.00 | - |
| Na2SO4 | wt % | - | - | - | 0.00 | - | - | - | - | 0.00 | 0.14 |
| K2SO4 | wt % | - | - | - | 0.00 | - | - | - | - | 0.00 | 0.00 |

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## 7.6 Process Waste, Effluents and Emissions

### *7.6.1 Liquid Effluents*

The process has been designed to minimize the production of liquid effluents. The only two primary liquid waste products are the spent lithium brine and the waste crystallizer bleed (Table 7-11), both of which have reduced flowrates compared with the Original DFS.

In addition to these two waste streams, excess sodium hydroxide and excess sodium hypochlorite are produced, which are saleable liquid side-products. It is worth noting that the excess sodium hydroxide production is higher compared with the Original DFS, and that there was no anticipated excess sodium hypochlorite in the Original DFS. These products will be loaded onto trucks and delivered to customers. The variability of these streams is dependent on the chlor-alkali vendor control systems.

**Table 7-11: Compositions of Liquid Effluent**

| Parameter | Unit | Spent Brine | Diluted Bitterns for Dust Suppression | Excess Sodium Hydroxide | Excess Sodium Hypochlorite |
|---|---|---|---|---|---|
| Stream # | | 1600 | 2440 | 2817 | 2551 |
| Mass Flow | t/h | 3,369 | 1.8 | 4.8 | 1.5 |
| Volume Flow | m3/h | 2,747 | 1.5 | 3.6 | 1.4 |
| Solid Content | wt % | - | 0.4 | - | 0.0 |
| Aqueous Elemental Composition | | | | | |
| Li | mg/l | 19.1 | 6,740 | 256.4 | 75.9 |
| B | mg/l | 377.9 | 1,930 | - | 0 |
| Na | mg/l | 119,913 | 49,112 | 247,166 | 72,210 |
| Mg | mg/l | 2,354 | 3,014 | - | 0 |
| S | mg/l | 7,034 | 1,341 | - | 0 |
| Cl | mg/l | 181,961 | 166,931 | - | 101,600 |
| K | mg/l | 5,286 | 33,108 | 4,532 | 1,325 |
| Ca | mg/l | 473.8 | 3,653 | - | 0 |
| Mn | mg/l | - | 6.5 | - | 0 |
| Fe | mg/l | - | 0.0 | - | 0 |
| Sr | mg/l | - | 3.9 | - | 0 |
| Ba | mg/l | - | - | - | - |
| Annual Production | kt/y | 26,562 | 13.8 | 37.6 | 11.5 |

### *7.6.2 Solids*

The process produces multiple solid waste streams (Table 7-12), which have not changed significantly compared with the Original DFS.

However, in the DFS Addendum, the waste crystallisation solids (stream #2435) now include the filtered solids from feed brine filtration backwash in addition to the solids from the waste crystalliser. As such, the composition of this waste material includes entrained dust and debris from the brine feed pond, brine pre-treatment precipitation solids, and filter aid solids. Waste crystallisation solids will be transferred to on-site disposal. The composition of this stream may vary over time since the effluent treatment feed composition is dependent on process upsets and other changes in parameters.

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**Table 7-12: Compositions of Solid Effluent Streams**

| Parameter | Unit | Impurity Removal Filter Cake to Disposal | Impurity Removal IX Guard Filter Solids | Waste Crystals to Onsite Disposal | Chlor-Alkali Filter Cake | Sodium Carbonate Filter Solids* | Spent Brine Pond Solids to Disposal | Lime Grits |
|---|---|---|---|---|---|---|---|---|
| Stream # | | 2207 | 2218 | 2435 | 2502 | 2833 | 1214 | |
| Mass Flow | t/h | 1.9 | 0.9 [kg/h] | 4.7 | 0.02 | 0.1 [kg/h] | 0.1 | TBD |
| Volume Flow | m3/h | 1.3 | 0.4 [L/h] | 2.2 | 0.01 | 0.06 [L/h] | 0.03 | TBD |
| Solid Content | wt % | 50.0 | 100.0 | 95.0 | 70.0 | 70.0 | 100.0 | 100.0 |
| Solid Composition | | | | | | | | |
| Mg(OH)2 | wt % | 15.18 | 16.05 | - | 0.00 | 3.62 | - | - |
| NaCl | wt % | 0.00 | - | 92.37 | - | - | - | - |
| SiO2 | wt % | 0.44 | 0.47 | 2.71 | 0.00 | 0.00 | 100.00 | 14.29 |
| Li2CO3 | wt % | 13.31 | 14.07 | - | - | - | - | - |
| Ca(OH)2 | wt % | 5.78 | 6.12 | - | - | - | - | - |
| MgCO3 | wt % | - | - | - | 0.05 | - | - | - |
| Fe(OH)2 | wt % | 0.00 | 0.00 | 1.17 | 0.00 | 0.00 | - | - |
| CaCO3 | wt % | 59.86 | 63.29 | - | 0.04 | - | - | 85.71 |
| Na2CO3 | wt % | 5.06 | - | - | - | - | - | - |
| Na2SO4 | wt % | 0.01 | 0.01 | 0.52 | 99.91 | - | - | - |
| K2SO4 | wt % | 0.00 | 0.00 | 0.32 | 0.00 | 0.00 | - | - |
| Annual Production | kt/a | 14.93 | 0.01 | 37.05 | 0.16 | 1 [t/a] | 0.66 | TBD |

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# 8. Process Plant Design

## 8.1 General

This section incorporates various changes that were recommended from the DFS Addendum engineering. Whilst the changes to the main process plant are minor, the areas that have changed are described here.

There are no updates to the plot plan or the building layout as part of the DFS Addendum. For a description of the general site facilities, please refer to the Original DFS[16].

## 8.2 Non-Process Buildings/Services

There are no updates to the non-process buildings and service infrastructure as part of the DFS Addendum. For details on these, please refer to Original DFS[17].

## 8.3 Site Utilities and Services

This includes the following areas:

- Electrical Power Distribution
- Fuel Storage
- Water Systems
- Waste and Effluent Treatment
- Compressed Air System
- Steam Generation and Distribution
- Pipe and Cable Racks
- Control Systems and Communications

There are no updates to the areas listed above except for the electrical power supply and the effluent treatment.

The electrical power supply has changed due to the removal of diesel generators that were required to power the plant before grid power became available. The required power for the plant is now provided by a power line from local grid connection, supplemented by solar power. Some diesel generators have been retained for emergency back-up supply.

The Waste Evaporation Feed Pond is now 29.8 m wide and 29.8 m in length, which is smaller than the Original DFS design due to the reduced wastewater generation.

For details on the other site utilities and services, please refer to the Original DFS[18].

## 8.4 Process Areas

The process areas consist of the following:

- Brine Handling
- Lithium Ion Exchange
- Eluate Concentrator
- Impurity Removal
- Lithium Carbonate Precipitation and Separation
- Lithium Drying, Micronizing and Bagging
- Waste Evaporation and Crystallization
- Chlor-Alkali Plant

[16] Refer to ASX announcement dated 19 December 2023 - “Kachi Phase One Definitive Feasibility Study”, Section 8
[17] Refer to ASX announcement dated 19 December 2023 - “Kachi Phase One Definitive Feasibility Study”, Section 8.1
[18] Refer to ASX announcement dated 19 December 2023 - “Kachi Phase One Definitive Feasibility Study”, Section 8.2

- Reagents Storage and Distribution.

The major changes to the process areas are due to the change in brine feed concentration and increased recovery from Lilac's Gen 4 technology. While some process equipment is expected to reduce in size, no change to the layout has been considered in the DFS Addendum. The specific areas that have changed are Brine Handling, where the ultra-filtration has been replaced with pressure filtration, and Lithium Ion Exchange (IX), due to Lilac's improved technology. The Brine Feed and Spent Brine ponds' sizes have also been reduced.

However, note that the Ore Reserve update[19] modelled an average lithium grade of 268 mg/L while the DFS Addendum work assumed an average lithium grade of 249 mg/L. This discrepancy stems from the fact that the DFS Addendum work and the work to update the Ore Reserve ran in parallel. This highlights potential opportunity for additional cost optimisations not fully considered in the DFS Addendum.

### *8.4.1 Brine Handling*

Raw brine from the extraction wellfield is received at the Brine Feed Storage Ponds. The capacity is sufficient to supply the plant for 24 hours at nominal throughput. At grade level each pond is 71.7 m wide, 71.8 m long and maximum 7.7 m deep with sloped bottoms. This is a reduction from the Original DFS design and is due to the reduced brine throughput. The pond walls will be constructed at a 3:1 slope (horizontal: vertical). The Brine Feed ponds are configured as two connected ponds, separated by a shared gate that houses the pumps.

Spent brine is transferred from the Lithium Ion Exchange system to the Spent Brine Storage Ponds. The two ponds have capacity to store brine generated over a 24-hour period at nominal throughput. The spent Brine ponds have the same updated size and configuration as the Feed Brine Pond.

The ultrafiltration system has been replaced with pressure leaf filters. These will be located outdoors and include three filters (two operating, one standby). The filtration system includes a backwash system consisting of a filter cake discharge tank (10 m3, PFA-lined steel, equipped with an agitator) and two filter cake discharge pumps (one operating, one standby).

A filter aid system will also be required and will consist of the following equipment:

- One Brine Filter Aid Storage Bin equipped with a dust collector and a screw feeder. The storage bin will have capacity for 24 hours of operation. Additional filter aid material (in bags) will be stored in the reagent warehouse.
- One Brine Filter Body Feed Tank (0.7 m diameter x 1.1 m tall, FRP construction) equipped with an agitator.
- Three (two duty/one standby) Sodium Carbonate Body Feed Pumps.

The other process functions and configuration within the Brine Handling area remain unchanged from the Original DFS[20].

### *8.4.2 Lithium Ion Exchange*

The implementation of Lilac Gen 4 IX technology at the Kachi facility has resulted in the following changes to the Lithium IX area:

- The number of ion exchange modules is reduced from 8 to 4.
- The exterior of Building 1, which houses the ion exchange and depleted brine filtration processes, is reduced from 150 m long to 102 m long, while the building width and maximum height remain unchanged at 64 m and 25.1 m, respectively.

[19] Refer to ASX announcement dated 4 August 2025 - "Kachi Ore Reserve Update"
[20] Refer to ASX announcement dated 19 December 2023 - "Kachi Phase One Definitive Feasibility Study", Section 8



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- A clarifier is added to treat lithium-depleted brine before it reports to the depleted brine pond.

The other process functions and configuration within the Lithium IX area remain unchanged from the Original DFS[21].

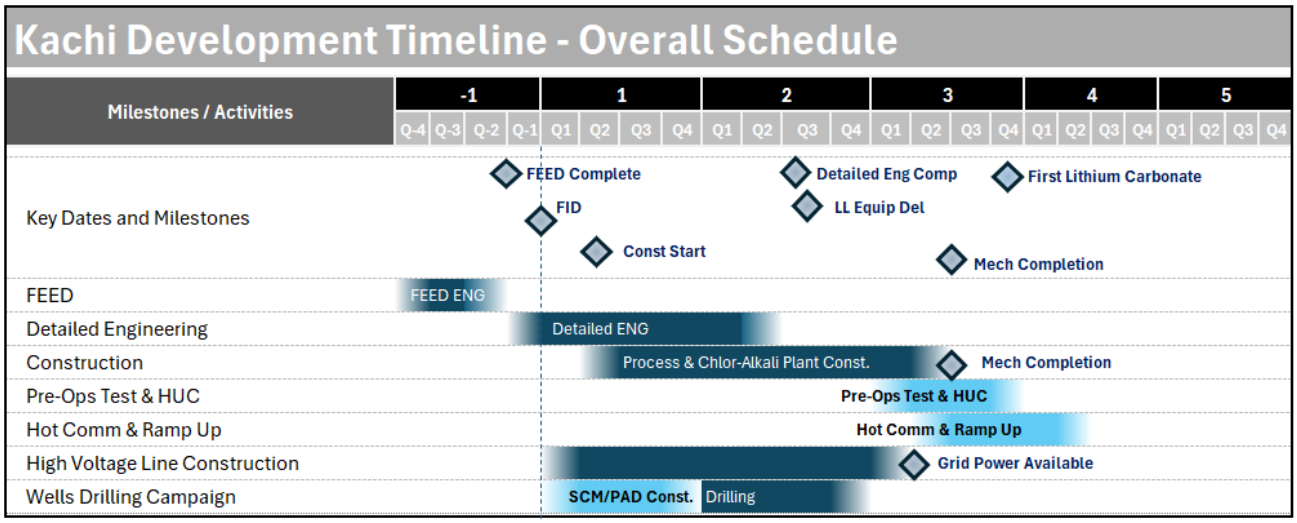
# 9. Logistics

Whilst there are no material changes to this section at this time, Lake continues to evaluate the logistics plan to ensure optimal efficiencies. Please refer to Original DFS[22] for details on the logistics plan.

# 10. Project Execution Plan

In the Original DFS, a two-phased construction philosophy was implemented due to the lack of grid power available early in the Project's life. However, this approach is now considered unnecessary based on the assumption that grid power will be available by construction completion and ramp-up. Because of this a single-phase construction approach will be utilized as shown in the updated Project Schedule in Figure 10-1. This change represents a significant improvement for the Project Execution Plan ("PEP"). No other major changes to the PEP have been considered in this DFS Addendum. Refer to the Original DFS for a description of the PEP[23].

**Figure 10-1 Project Schedule**




# 11. Capital Expenditure

## 11.1 Summary

The updated CAPEX estimate was developed by a team of engineering companies working collaboratively, independently contracted by Lake. Lilac, as a partner in the Project, provided the design and capital cost estimate related to the supply and installation of the Lithium-Ion Exchange package.

The CAPEX estimate from the Original DFS has been updated in this DFS Addendum to reflect process modifications and new market conditions.

[21] Refer to ASX announcement dated 19 December 2023 - "Kachi Phase One Definitive Feasibility Study", Section 8
[22] Refer to ASX announcement dated 19 December 2023 - "Kachi Phase One Definitive Feasibility Study", Section 9
[23] Refer to ASX announcement dated 19 December 2023 - "Kachi Phase One Definitive Feasibility Study", Section 10

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## 11.2 Roles and Responsibilities

A description of the DFS Addendum updated CAPEX estimate responsibilities according to responsible entity and Work Breakdown Structure ("WSB") is provided below in Table 11-1.

**Table 11-1: Project Responsibilities by WBS**

| WBS | Description | Quantities Responsible | Prices Responsible |
|---|---|---|---|
| **1000** | **Offsite Facilities/Infrastructure** | | |
| 1100 | Brine Extraction System and Pipeline Network - | | |
| included in 1100 | Extraction system (Equipment and wells) | Lake Resources | Lake Resources |
| included in 1100 | Extraction Pipeline Network | Hatch | Hatch |
| 1200 | Brine Reinjection System and Pipeline Network | | |
| included in 1200 | Reinjection system (Equipment and wells) | Lake Resources | Lake Resources |
| included in 1200 | Pipeline Network | Hatch | Hatch |
| 1300 | Utilities (Off-site) | | |
| included in 1310 | Raw Water Supply System (Equipment and wells) | Lake Resources | Lake Resources |
| included in 1310 | Extraction Pipeline Network | Hatch | Hatch |
| 1320 | Power Supply (Site generators) | Lake Resources | Lake Resources |
| 1400 | Logistics | Lake Resources | Lake Resources |
| 1410 | Site Access Road | Hatch | Hatch |
| 1500 | Permanent Camp | Hatch | Hatch |
| **2000** | **Site Preparations and Infrastructure** | | |
| 2100 | Site preparations | Hatch | Hatch |
| 2200 | Non-Process Buildings | Hatch | Hatch |
| 2300 | Site Utilities & Services | Hatch | Hatch |
| **3000** | **Process Plant – Stage 1** | | |
| 3100 | Brine handling & pre-treatment | Hatch | Hatch |
| 3200 | Lithium Ion Exchange | | |
| included in 3200 | Lithium-Ion Exchange Modular System Package | Lilac Solutions | Lilac Solutions |
| included in 3200 | Lithium-Ion Exchange building and utilities area | Lilac Solutions | Hatch |
| 3300 | Eluate RO and Evaporator and Bleed Treatment | Hatch | Hatch |
| 3400 | Impurity removal | Hatch | Hatch |
| 3500 | Lithium carbonate crystallization and separation | Hatch | Hatch |
| 3600 | Lithium drying, micronizing and bagging | Hatch | Hatch |
| 3700 | Waste Zero-liquid Discharge Plant | Hatch | Hatch |
| 3800 | Chlor-alkali plant | Hatch | Hatch |
| 3900 | Reagents Storage and Distribution | Hatch | Hatch |
| **4000** | **Waste Management Facilities** | | |
| 4100 | Process Wastes | Hatch | Hatch |
| 4200 | Non-Process Wastes | Hatch | Hatch |
| **7000** | **Indirect costs** | | |
| 7100 | Temporary Construction Facilities and Services | Hatch | Hatch |
| 7200 | Freight | Hatch | Hatch |
| 7300 | EPCM | Hatch | Hatch |
| 7400 – except 7450 | Miscellaneous (Spare parts, first fills, vendor's representatives, third-party consultants) | Hatch | Hatch |
| 7450 | Lilac Ion-Exchange package indirect cost | Lilac Solutions | Lilac Solutions |
| 7500 | Pre-Operational Testing | Hatch | Hatch |

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| | | | |
|---|---|---|---|
| 8000 | Contingency | | |
| included in 8000 | Lithium Carbonate plant and production and reinjection systems contingency | Hatch | Hatch |
| 9000 | Owners Costs | | |
| 9100 | Lake Resources Owner's Cost | Lake Resources | Lake Resources |
| 9200 | Lilac Solutions Owner's costs | Lilac Solutions | Lilac Solutions |

## 11.3 Estimate Summary

### *11.3.1 Estimate Summary Breakdown*

Summaries of the estimated updated CAPEX are presented in the following tables:

- Updated CAPEX estimate summary by WBS (refer to Table 11-2 below)
- Updated CAPEX direct cost estimate summary by Discipline (refer to Table 11-3 below)

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**Table 11-2: Estimated CAPEX Summary by WBS**

| WBS | Description | Estimated Cost (M USD) |
|---|---|---|
| | **Direct Costs** | 749.08 |
| 1000 | Offsite Facilities/Infrastructure | 165.44 |
| 1100 | Brine Extraction System and Pipeline Network | 61.20 |
| 1200 | Brine Reinjection System and Pipeline Network | 81.66 |
| 1300 | Utilities (Off-site) | 9.74 |
| 1400 | Logistics | 1.01 |
| 1500 | Permanent Camp | 11.83 |
| 2000 | Site Preparations and Infrastructure | 200.12 |
| 2100 | Site preparations | 24.15 |
| 2200 | Non-Process Buildings | 15.81 |
| 2300 | Site Utilities & Services | 160.16 |
| 3000 | Process Plant – Stage 1 | 379.26 |
| 3100 | Brine handling & pre-treatment | 11.01 |
| 3200 | Lithium Ion Exchange | 115.53 |
| 3300 | Eluate RO and Evaporator and Bleed Treatment | 52.12 |
| 3400 | Impurity removal | 20.44 |
| 3500 | Lithium carbonate crystallization and separation | 37.35 |
| 3600 | Lithium drying, micronizing and bagging | 20.90 |
| 3700 | Waste Zero-liquid Discharge Plant | 22.28 |
| 3800 | Chlor-alkali plant | 73.60 |
| 3900 | Reagents Storage and Distribution | 26.04 |
| 4000 | Waste Management Facilities | 4.26 |
| 4100 | Process Wastes | 4.26 |
| | **Indirect Costs** | **201.48** |
| 7100 | Temporary Construction Facilities and Services | 70.34 |
| 7200 | Freight | 13.13 |
| 7300 | EPCM | 86.50 |
| 7400 | Miscellaneous (Indirect Cost related to equipment) | 27.31 |
| 7500 | Assistance during pre-Operational Testing | 4.21 |
| | **Contingency** | 142.58 |
| 8000 | Contingency | 142.58 |
| | **Owner's Costs** | 63.50 |
| 9100 | Lake Resources Owner's Costs | 59.50 |
| 9200 | Lilac Solutions Owner's Costs | 4.00 |
| | **Total Installed Cost** | **1,156.64** |

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**Table 11-3: Estimated CAPEX Direct Costs by Discipline**

| Discipline/Trade | Trade Code | Estimated Cost (M USD) |
|---|---|---|
| Site Development | A | 2.93 |
| Concrete | C | 69.63 |
| Earthworks | E | 33.58 |
| Architectural and Pre-Engineered Buildings | F | 24.39 |
| Controls and Instrumentation | J | 25.63 |
| Electrical Equipment | L | 88.31 |
| Mechanical Equipment | M | 277.68 |
| Platework and Tanks | N | 23.16 |
| Pipe and Fittings | P | 38.07 |
| Cable Tray and Conduit | R | 3.79 |
| Structural Steel | S | 57.04 |
| Electrical Bulks (Wire and Cable) | W | 37.70 |
| Multidiscipline (Wells) | X | 67.17 |
| Indirect Costs | Y | 201.48 |
| Contingency | Z | 142.58 |
| Owner's Costs | V | 63.50 |
| **Total Installed Cost** | | **1,156.64** |

### *11.3.2 Accuracy Statement and Base Date*

The original CAPEX estimate in the Original DFS was developed in 2023 in accordance with guidelines established by the Association for the Advancement of Cost Engineering (AACE) for a Class 3 (Semi-Detailed Unit Costs with Assembly Level Line Items) estimate. The updated CAPEX estimate has been developed according to the same parameters.

The updated CAPEX estimate has a base date of February 2025 ("Base Date"). No escalation due to inflation is included beyond the base date.

### *11.3.3 General Assumptions and Qualifications*

The updated CAPEX estimate was prepared in US dollars ("USD") and compiled based on the following parameters:

- Budgetary quotes for mechanical and electrical equipment were obtained from vendors in 2022 and 2023 for major equipment included in the Project.
- All costs are presented in USD and updated in USD. Local supplies and prices provided in other currencies were converted using exchange rates specified below.
- Unit rates were developed from first principals according with the best understanding of the regional conditions. SUMA Ingenieria, a local third-party consultant hired by Lake in 2023 provided advice on specific items.
- Labour rates were based on local union information (UOCRA collective agreements) and typical agreements for the type of project and specific region. Labour includes base workforce costs, burdens, expenses, construction equipment and contractor's indirect costs.
- Owner's costs were provided by Lake and Lilac.
- All costs are exclusive of escalation beyond the Base Date.
- Duties, Tariffs, Goods & Services Tax (IVA) are excluded.
- The contingency applied to direct and indirect cost is 15%. Hatch conducted an internal quantitative risk analysis in 2023 to validate the level of confidence of the selected contingency.

## 11.4 Estimate General Basis

### *11.4.1 Foreign Exchange*

All prices obtained in 2023 were escalated in USD. Prices submitted in 2025 in other currencies have been converted to USD according to exchange rates presented in the Table 11-4. No provision has been included for currency fluctuation or any fees applicable to currency exchange.

**Table 11-4: Project Exchange Rates Template**

| Country | Currency | Code | Inverse | Per USD | Source |
|---|---|---|---|---|---|
| USA | Dollar | USD | 1 | 1 | |
| Argentina | Peso | ARS | 0.000958 | 1,044.25 | Dollar BNA* - Average February 2025 |
| European Union | Euro | EUR | 1.0421 | 0.9596 | US Federal Reserve Board – Average February 2025 |
| Canada | Dollar | CAD | 0.6947 | 1.4395 | Bank of Canada – Average February 2025 |

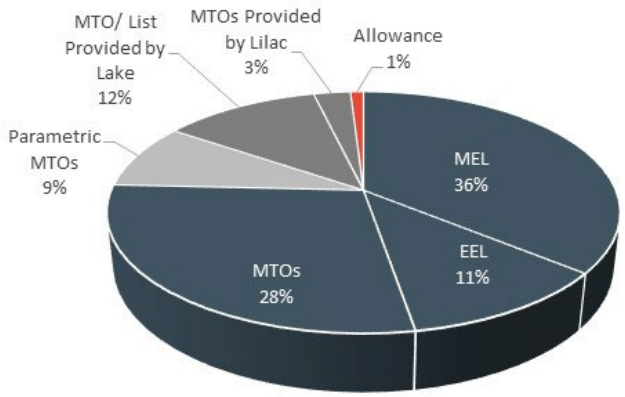
*Dollar BNA: Dólar venta Banco de la Nación Argentina. (Sell Price US dollar National Bank of Argentina)

### *11.4.2 CAPEX Maturity*

Updated estimated quantities were calculated using various sources as described below and summarized in Figure 11-1.

- MTO: Material take-off from 3D models or 2D drawings and diagrams.
- Parametric MTOs: Material take-off calculated from volume or area (Buildings).
- MEL = Mechanical Equipment List derived from PFD's and modelled quantities.
- EEL = Electrical Equipment List derived from P&ID's and modelled quantities.
- Allowance = Estimates based on limited information or very general assumptions.

**Figure 11-1: Direct Cost Quantity Sources**




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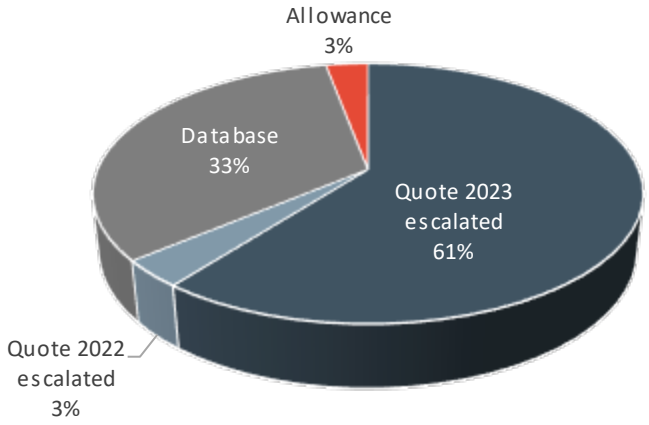
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Equipment supply costs were obtained from various sources:

- 2022 Quotes escalated: Prices resulted from bid evaluation of three or more vendors during 2022 study, escalated in capacity and date to the present needs and Base Date.
- 2023 Quotes: Budgetary quotes from vendors escalated to the present Base Date and capacity.
- Database: Prices obtained from Hatch in-house database.
- Allowances: Prices applied with limited information.

Equipment supply cost information sources are summarized in Figure 11-2.

**Figure 11-2: Equipment Price Sources**




## 11.5 Indirect Costs

### *11.5.1 Summary and Basis*

A list of indirect cost categories included in the CAPEX estimate is shown in Table 11-5. Descriptions of the methodologies for estimating the costs are provided in the following subsections.

**Table 11-5: Indirect Cost Summary**

| WBS | Description | Basis/ Remarks |
|---|---|---|
| 7100 | Temporary Construction Facilities, Equipment and Services | Calculated based on a first principles following the construction schedule and using information from local market. |
| 7100 | Construction Camp Facilities | Escalated from previous study budgetary quote, adjusted using Hatch's in-house data. |
| 7200 | Freight (Only equipment) | Factored according with the location of the provider. |
| 7300 | EPCM - Brine Extraction and Re-Injection Systems | Included in Owner's Costs |
| 7300 | EPCM - Balance of Process Plant + Camp (Excluding FEED) | Estimated by Hatch. Calculated by man-hour worked plus expenses. |

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| WBS | Description | Basis/ Remarks |
|---|---|---|
| 7410 | Spares parts | When available, the cost was extracted from budgetary quote. For all the rest, a factor of 3% of equipment costs was added. |
| 7420 | Vendor Representatives | When available, the cost was extracted from budgetary quote. For all the rest, a factor of 0.5% of equipment costs was added. |
| 7430 | Third Party Services | Excluded. |
| 7440 | First Fills | Only common consumables considered, 0.5% of Equipment supply cost. Lithium extraction media excluded. |
| 7450 | EPCM and package related indirect costs – Direct Lithium Extraction package | Estimated by Lilac Solutions |
| 7500 | Assistance crew during Pre-Operational Testing | Crews to assist vendors and engineering team. |

## 11.6 Cost Variation 2023 – 2025

The following Section summarizes the cost variations produced in the process of the DFS Addendum.

The updated CAPEX estimate has been updated from the Original DFS using current quotes and escalation factors as were described in the previous sections. The overall estimated Project cost variation related to escalation is 3.4% (+46.28 MUSD).

The table below shows the price update approach by discipline:

**Table 11-6: Main Prices Updates**

| Discipline | Approach | Comments |
|---|---|---|
| Labor (Direct and Indirect) | Labour rates recalculated using current Union Agreement | |
| Equipment rentals | Prices updated from the market | |
| Concrete supply | New quote obtained / in-country producer price indexes (PPI) | |
| Rebars | Prices updated from the market | |
| Structural steel | Prices updated from the market | |
| Pipelines HDPE | Prices updated from the market | |
| CPVC pipes | Prices updated from the market | |
| Carbon steel pipes and valves | Escalated using PPI | 3% |
| Power and control cable | New quote obtained | |
| Electrical equipment | Escalated using PPI | 3.7% |
| HVAC system | Escalated using PPI | 0.95% |
| Ductwork | Escalated using PPI | 1% |
| Crystallisation and ion exchange equipment (Impurity removals) | Escalated using PPI | 13.8% |
| Pumps | Escalated using PPI | 6% |
| All other equipment | Escalated using PPI | 7.6% |
| Lithium Ion Exchange package | New estimate obtained | Provided by Lilac |
| Chlor-Alkali plant | Quote from previous project applied | |
| Metallic tanks | Escalated using PPI | 14% |
| FRP tanks | Escalated using PPI | 8% |

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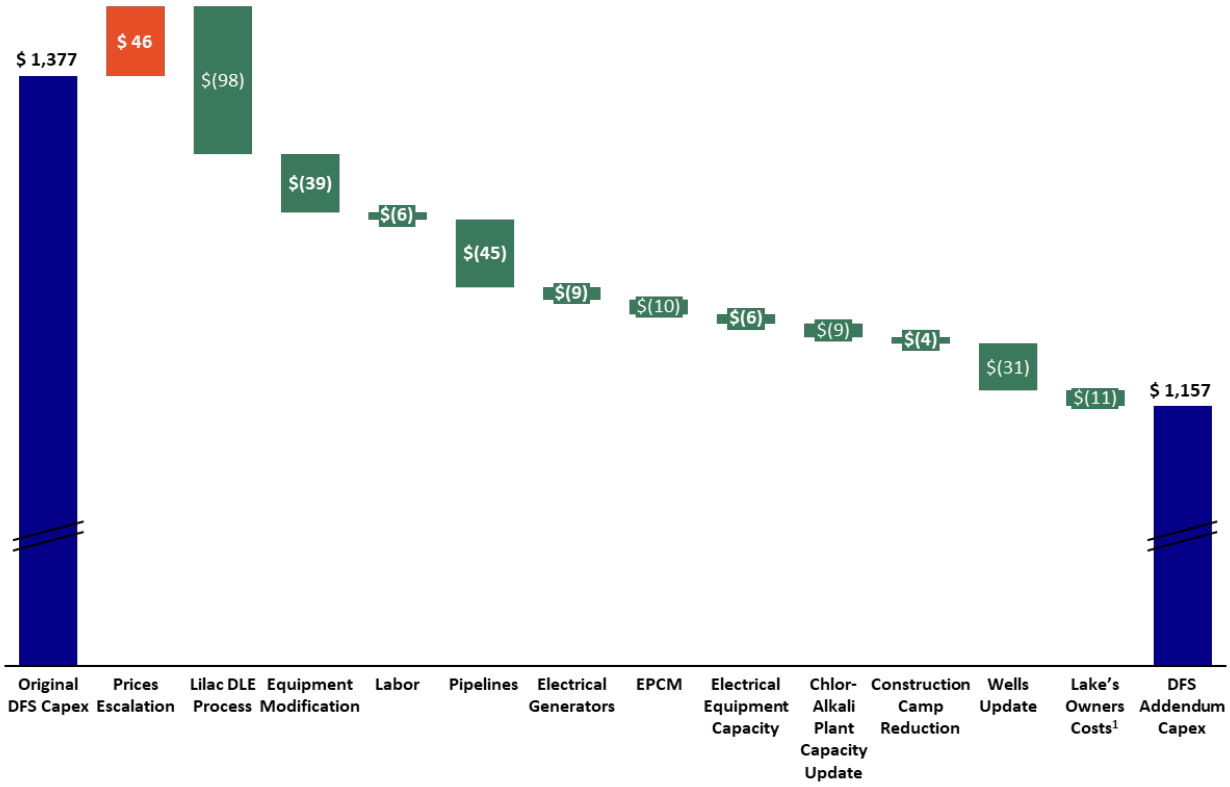
After the prices were updated to correspond with the Base Date, changes in the process premises and the improvement of engineering parameters and design led to a reduction of 16% (-220 MUSD).

The main changes in order of magnitude are:

- Lilac DLE process cost reduction (Direct and Indirect Cost: The Lithium Ion Exchange package have been reviewed by Lilac Solutions and a new quote was produced.
- Pipelines were redesigned. The length and diameters reduced and the material changed to HDPE.
- Mechanical Equipment in the plant was modified according with the reduced feed rates.
- The wells system was updated and a new estimate calculated.
- Chlor-Alkali plant was updated using new capacity and a more recent quote for a similar project in Argentina.
- Most diesel generators were removed, as the plant is expected to obtain power from the grid.
- EPCM cost was reduced according with the modification in the scope of work.
- Electrical equipment capacity was reduced according with the new power necessary.
- Operation team was reduced and that has an impact in the size of the operation camp.
- Owner's costs were recalculated and a new estimate was provided.

The following Figure 11-3 shows the overall Project variation classified by its origin:

**Figure 11-3: CAPEX variation from the Original DFS to the Base Date in MUSD**



# 12. Operational Expenditure

## 12.1 Summary

This section summarizes the updates to the OPEX estimate from the Original DFS to the DFS Addendum. The purpose of revising the estimate is to reflect the process design changes and to update the unit costs to Base Date value. The basis and methodology for the estimate have not changed.

A summary of the OPEX by categories across all areas is provided in Table 12-1. The production and injection wells costs were provided by Lake and the lithium IX costs were provided by Lilac.

As shown in Table 12-1, the estimated OPEX has dropped by approximately USD $300/t battery-grade Li2CO3 (BG LC). The major contributors to this decrease include:

- Improvements to the Lilac DLE technology,
- Inclusion in the estimate of NaClO by-product credits,
- Reduction in onsite labour, and
- Reduction in assumed general and administration costs.

These reductions are offset by multiple factors. The major offsetting factors include:

- A reagent cost increase attributable to a rise in the assumed unit cost of sodium carbonate from 401 USD/ton to 500 USD/ton.
- The utilities cost increase is attributable to an increase in the assumed unit cost for grid power.

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**Table 12-1: Summary of Total OPEX**

| Operating Cost Item | Original DFS | | DFS Addendum (2025) | |
|---|---|---|---|---|
| | Cost per Annum (USD/y) | Cost per Tonne BG LC (USD/t BG LC) | Cost per Annum (USD/y) | Cost per Tonne BG LC (USD/t BG LC) |
| **Overall Plant OPEX** | | | | |
| Labour | 10,014,052 | 397 | 7,277,613 | 289 |
| Utilities | 64,356,772 | 2,551 | 84,963,160 | 3,379 |
| Reagents | 24,118,086 | 956 | 27,114,014 | 1,078 |
| Consumables | 4,871,454 | 193 | 2,936,670 | 117 |
| Maintenance | 5,522,575 | 219 | 5,706,397 | 227 |
| General and Administration | 17,078,618 | 677 | 10,229,732 | 407 |
| Production and Injection Wells Sustaining Costs | 5,962,872[1] | 236 | 0[2] | 0[2] |
| **By-product Credits** | | | | |
| NaOH by-product credits | (11,460,087) | (454) | (6,792,427) | (270) |
| NaClO by-product credits | N/A | N/A | (2,424,660) | (96) |
| **Third-Party OPEX** | | | | |
| Lilac | 32,100,000 | 1,272 | 19,198,527 | 764 |
| **Total Operating Cost (with NaOH and NaClO credit)** | **152,564,342** | **6,047** | **148,209,025** | **5,895** |
| **Total Operating Cost (without by-product credits)** | **164,024,429** | **6,502** | **157,426,113** | **6,262** |

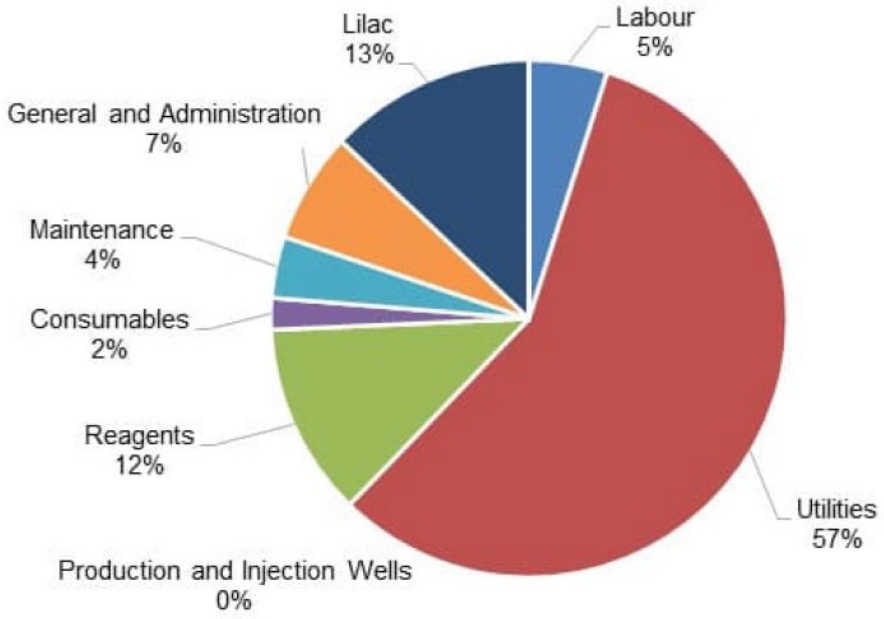
1 Sustaining capital cost is not included in this value.

2 The wellfield sustaining cost (i.e. workover costs) calculation for the DFS Addendum are included in the CAPEX estimated cost as opposed to the OPEX estimate costs.

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Figure 12-1 shows the relative magnitude of the contributions to the OPEX estimate. As can be seen, the primary contributor to the OPEX estimate is the cost of utilities, with power expenses being the most significant factor. The next largest contributors are the DLE and reagent cost. The reagent cost is driven by the cost of sodium carbonate. Note this is offset by a by-product credit for excess sodium hydroxide and sodium hypochlorite production.

**Figure 12-1: Summary of Operating Costs**




## 12.2 Operating Cost Basis of Estimate

The estimate has been prepared based on the following parameters:

- Estimate is current as of the Base Date.
- USD is used with prices being inflated using the U.S. Labor Department's Bureau of Labor Statistics' Consumer Price Index to the Base Date.
- Estimates are based on local costs in Argentina.
- An escalation factor of 3% has been applied to costs from the Original DFS wherein no updated values or quotes were provided. This is consistent with the CAPEX estimate escalation and applies to the following:
    - Labour rates for all roles.
    - Utility operating costs.
    - Equipment operating costs (utilities and maintenance costs).
    - Reagents and consumables costs.
- Plant availability of 90% (as validated by capacity analysis) or 7,884 hours per annum.
- The OPEX estimate is for a typical operating year after ramp-up.

## 12.3 Balance of Plant

A review of the site staffing was conducted during the DFS Addendum. This, including a change to the time roster from 7 days on, 7 days off to 14 days on, 14 days off, resulted in a decrease from 329 to 220 personnel.

Assumed salaries were determined from the same basis as the Original DFS with a 3% escalation factor applied.

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### 12.4 DLE System Basis

The Lilac DLE system includes equipment and facilities associated with the lithium-ion exchange and eluate neutralization processes. The DLE area is integrated with the overall process facility and includes a dedicated control room. Laboratory, warehouse, and maintenance/workshop facilities are shared with the balance of plant.

See the Original DFS[24] for the basis and cost sources considered. The process parameters have been updated to reflect the performance improvements with Lilac Gen 4 IX technology.

## 13. Market Analysis / Overview

Lake maintains a paid annual subscription to Benchmark Mineral Intelligence ("BMI"), which includes access to BMI's quarterly lithium market forecast reports. These reports provide high-level insights into global lithium market trends, including supply-demand fundamentals and price outlooks, based on BMI's proprietary methodologies. While this market overview section draws upon the Q2 2025 BMI forecast for directional industry context, the following commentary represents Lake's own interpretation of the broader lithium market and should not be construed as a bespoke analysis prepared by BMI specifically for the Kachi Project or Lake.

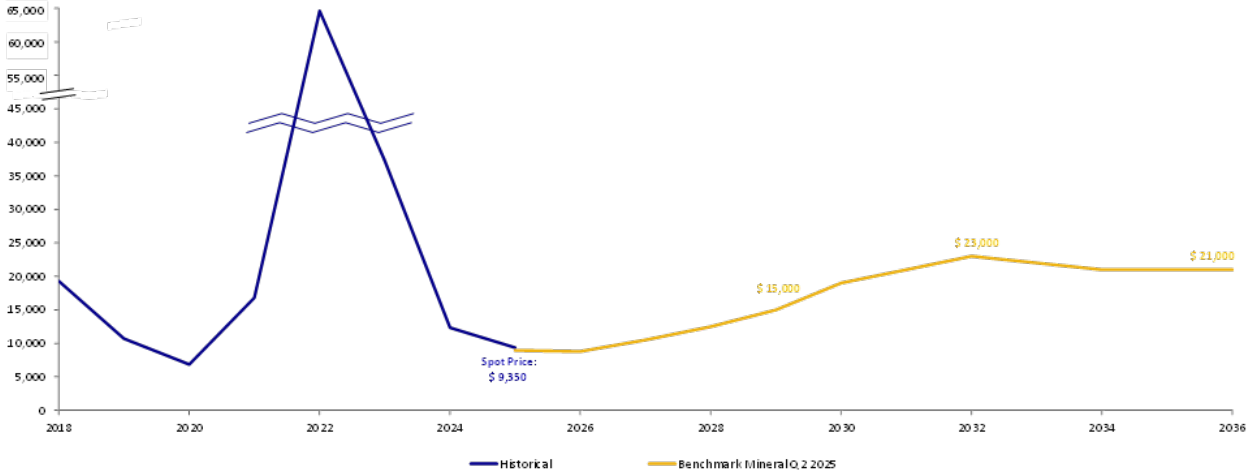
Lake has not independently verified the accuracy, completeness, or reliability of the BMI forecast or any other third-party market analysis referenced herein. The information provided is intended solely to frame the DFS Addendum's commercial assumptions and should not be relied upon as a definitive projection of future market conditions.

### 13.1 Price Trends and Forecast

After peaking in 2022, lithium prices declined sharply through 2023 and remained subdued in 2024 due to oversupply and cautious procurement strategies. According to BMI's Q2 2025 forecast, average battery-grade lithium carbonate prices (CIF Asia) are expected to be approximately $8.9/kg in 2025, with a modest recovery anticipated from H2 2026. Long-term prices are forecast to rise steadily, returning to incentive levels of ~$21/kg by 2031, driven by supply deficits projected to begin in 2029 and become more pronounced by 2033.

[24] Refer to ASX announcement dated 19 December 2023 - "Kachi Phase One Definitive Feasibility Study", Section 12

**Figure 13-1 Battery Grade Lithium Carbonate Price (US$ / t, Real 2024). Source BMI Q2 2025 Forecast**




## 13.2 Demand Overview

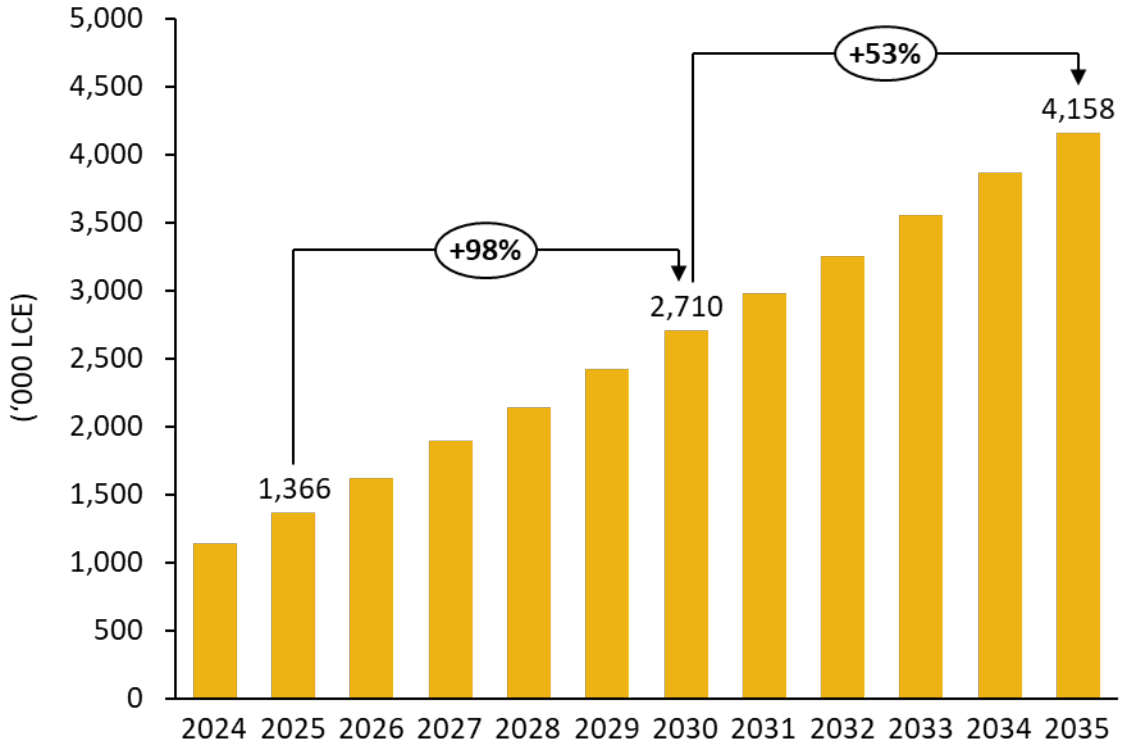
The lithium market is undergoing a dynamic transformation, with rapid demand growth from the electric vehicle ("EV") and energy storage sectors outpacing near-term supply surpluses. Despite recent pricing headwinds, the long-term outlook remains structurally robust. Global lithium demand is forecast to increase by 20% year-over-year. The EV sector remains the primary driver, projected to consume over 920 kt LCE in 2025, alongside a significant boost from BESS, with global installations expected to reach nearly 325 GWh in 2025.

Demand for lithium carbonate is forecast to grow in line with the increasing market share of LFP chemistries in China and broader adoption of cost-effective battery technologies across emerging markets. This growth supports a favorable long-term environment for lithium carbonate producers such as Kachi.

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**Figure 13-2 Lithium Demand Forecast. Source: BMI Q2 2025 Lithium Forecast**




## 13.3 Supply Outlook

Global lithium supply is anticipated to grow by 15% in 2025, led by expansions in Australia, Africa, and China. Australia is expected to maintain its leadership with 39% of global output. African production is rising, notably in Zimbabwe and Mali, although geopolitical risks persist. In North America, the focus continues to shift toward vertical integration and localised supply amid heightened trade and security concerns.

The Project's target production of ~25ktpa of high-purity battery-grade lithium carbonate positions the project as a strategic, mid-sized entrant capable of serving global OEMs and cathode manufacturers seeking responsible, and jurisdictionally stable supply.

## 13.4 Geopolitical and Trade Considerations

U.S.–China trade tensions continue to impact lithium supply chains. Tariffs on Chinese EVs and batteries, coupled with China's proposed restrictions on the export of lithium processing technologies, have prompted automakers and battery producers to diversify sourcing strategies.

These developments increase the strategic value of lithium projects located outside China. With operations in Argentina and a focus on environmentally responsible extraction through DLE, Kachi is well-aligned with the evolving procurement priorities of Western OEMs and battery manufacturers.

## 13.5 Marketing Strategy

The Project's scalable DLE production and ESG credentials position it as a compelling option for Tier 1 offtake partners. The Company will continue advancing discussions with North American, European, and East Asian OEMs and battery manufacturers seeking long-term, transparent, and responsible supply agreements.

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# 14. Economic and Financial Analysis

## 14.1 Summary

A detailed economic model was prepared for the DFS Addendum. The model collates the DFS Addendum results to update the Kachi Project cash flows and economic viability.

The inputs to the economic model are extensive. The Kachi brine production forecast is from the Hydrogeologic Model described in Section 4 Mineral Resource and Ore Reserve Estimates of the DFS Addendum. The estimated capital and operating costs are derived from a combination of sources and summarized in Sections 11 and 12 of the DFS Addendum.

The updated economic analysis was evaluated using a real (non-escalated), after-tax discounted cashflow (DCF) model on a 100% project equity basis (unlevered). Included in the financial model are the production costs, revenues, operating costs, capital costs and estimated taxes.

This financial analysis covers the period from the beginning of construction to end of mine life, and all costs, revenues and future cashflows are reported in real US dollars with no allowance for inflation-based escalation.

The cash flow analysis was used to estimate the economics of processing Kachi brine to produce in Year 1 - 23,310 tonnes and in Years 2 to 25 - 25,141 tonnes of battery grade lithium carbonate, for total production volume of approximately 626,760 tonnes over the life of mine.

## 14.2 Key Financial Modelling Assumptions

Key financial modelling assumptions are noted in the tables and figures below.

### *14.2.1 Lithium Carbonate Price Forecast*

The pricing assumptions in the financial model are based on BMI Q2 2025 Lithium Supply-Demand-Price Forecast for battery-grade lithium carbonate. The forecasted annual prices used are detailed in Table 14-1. These prices do not reflect any potential discounts or commercial concessions that Lake may agree upon in the future as part of its ongoing strategic alternatives process[25].

The forecasted lithium prices are used to estimate project revenues. Notably, prices in the first three years of production (Years 1–3 in Table 14-1) are significantly below the average life-of-mine price of US$20,500/t. The lower prices in the early years reduce forecast revenues and project cashflows, negatively impacting the NPV calculation of the Kachi Project.

Lithium prices are inherently volatile and subject to external factors including global supply-demand imbalances, macroeconomic conditions, and geopolitical developments. A sustained decline or high volatility in lithium prices could adversely affect the economic performance of the Kachi Project.

[25] Refer to ASX announcement dated 7 May 2025

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**Table 14-1 Annual Forecast Price of Battery Grade Lithium Carbonate ($/Metric Tonne)[26]**

| Year | Original DFS | DFS Addendum |
|---|---|---|
| Year -2 | $20,564 | $8,968 |
| Year -1 | $19,000 | $8,800 |
| Year 0 | $18,000 | $10,500 |
| Year 1 | $18,000 | $12,500 |
| Year 2 | $23,000 | $15,000 |
| Year 3 | $24,000 | $19,000 |
| Year 4 | $28,000 | $21,000 |
| Year 5 | $32,000 | $23,000 |
| Year 6 | $35,000 | $22,000 |
| Year 7 | $35,000 | $21,000 |
| Year 8 | $35,000 | $21,000 |
| Year 9 | $35,000 | $21,000 |
| Year 10 | $35,000 | $21,000 |
| Year 11 | $35,000 | $21,000 |
| Year 12 | $35,000 | $21,000 |
| Year 13 | $35,000 | $21,000 |
| Year 14 | $35,000 | $21,000 |
| Year 15 | $35,000 | $21,000 |
| Year 16 | $35,000 | $21,000 |
| Year 17 | $35,000 | $21,000 |
| Year 18 | $35,000 | $21,000 |
| Year 19 | $35,000 | $21,000 |
| Year 20 | $35,000 | $21,000 |
| Long term price | $35,000 | $21,000 |

**Offtake Agreements**

Any future offtake agreements entered by the Kachi Project will subject to the outcome of the ongoing strategic alternatives process.[27]

### *14.2.2 Detailed Financial Modelling Assumptions*

Analysis of the financial model on the main economic assumptions indicates that the Project is robust in terms of all operating costs, and product pricing; it is most sensitive and at greatest risk to changes impacting revenues (either market pricing or production volumes), capital costs and operating costs.

**Technical Assumptions**

As part of the economic analysis, Lake has applied production rates in line with feedback and test work data received from its technical and operational teams. The inputs to the economic model are extensive. The Kachi brine production forecast is in line with the updated Hydrogeologic Model described Section 4 Mineral Resource and Ore Reserve Estimates of the DFS Addendum. The estimated capital and operating costs are derived from a combination of sources and summarized by Hatch and presented in Sections 11 and 12 of the DFS Addendum. Hatch led the estimations for the Carbonation plant, reagent generation and general infrastructure. Lake provided the well-field plan and costs. Lilac provided the costs and process data associated with the Gen 4 Ion Exchange (IX) technology. The Kachi Project considers an approximately three-year construction and commissioning

[26] The above prices are for battery-grade lithium carbonate and are based on the long market pricing forecast for Q2 2025 by BMI, for which Lake has an annual paid subscription. The Company does not verify the accuracy of information derived from BMI or from other company presentations or reports.
[27] Refer to ASX announcement dated 7 May 2025

schedule with first production commencing 11 quarters from FID and three quarters to full ramp up. The electric power load was estimated by Hatch from the mechanical equipment list. Electric drive sizes were either derived from engineering calculations, supplier input or the Hatch in-house database. Electric power costs were estimated following from YPF-Luz's recent completion of the Front-End Engineering Design (FEED) study for Kachi power supply[28].

**Discount Rate**

In the Original DFS, an 8% real discount rate was used in line with common industry practice at the time and consistent with the approach taken by several peer lithium developers.

For this DFS Addendum, a 10% real discount rate has been adopted. This change reflects Lake's view that a 10% rate better captures current market conditions.

The higher discount rate also provides a more conservative and rigorous assessment of the Kachi Project's economic resilience and risk-adjusted returns. While this change reduces the reported NPV to a lower value compared to using an 8% discount rate, it strengthens the credibility of the economic case and reflects our commitment to disciplined financial analysis.

Table 14-2 below describes key financial model assumptions.

**Table 14-2 Key Financial Modelling Assumptions**

| Item | Basis | DFS Addendum Value / Input | Original DFS Value/ Input | Source |
|---|---|---|---|---|
| Weighted Average Cost of Capital (WACC) Discount Rate | % | 10.0%[29] | 8.0% | Lake |
| Valuation Date | Date | January 1 2025 | April 1 2025 | Lake |
| Argentine Government Export Duty | % | 0 of Gross Revenues[30] | 4.5 of Gross Revenues | Govt. |
| Catamarca Province Royalty | % | 3.5 of "Boca Mina" Value[31] | 3.5 of "Boca Mina" Value | Govt. |
| Corporate Income Tax | % | 25% of Pre-tax Earnings[32] | 35% of Pre-tax Earnings | Govt. |
| Life of Mine | Calendar Years | See Figure 14-2 below[33] | See Figure 14-3 below | Lake |
| Flow Rate | $M^3/hr$ | See Section 5 in DFS Addendum | See Section 4 in Original DFS | Lake |
| Plant Availability | % | See Section 7 in DFS Addendum | See Section 4 in Original DFS | Lake |
| Brine Lithium Concentration | Mg/L | See Section 4 in DFS Addendum | See Section 4 in Original DFS | Lake |
| Carbonate Conversion | | 5.32 | 5.32 | Lake |

[28] Refer to ASX announcement dated 2 July 2025
[29] WACC rate of 10% is based on peer industry average (See Appendix A for peer data).
[30] Based on provisions of Argentina RIGI Law. Passed in 2024 which eliminates export duties after three years of obtaining RIGI, for qualified capital projects that invest more than $200M in Argentina. Subject to extension of RIGI deadline to July 2027 and the outcome of direct negotiations with the Government during the application process.
[31] Lithium chloride revenues to represent "boca mina" value (e.g., mine head value) of extracted mineral for Catamarca province under the Mining Investment Law. As final royalty rates for the project are yet to be agreed with the Government of Catamarca, the mine head value has been provisionally set to represent lithium chloride revenues at a provisional price of $5,000/tonne.
[32] Based on provisions of Argentina RIGI Law. Passed in 2024 which eliminates export duties after three years of obtaining RIGI, for qualified capital projects that invest more than $200M in Argentina. Subject to extension of RIGI deadline to July 2027 and the outcome of direct negotiations with the Government during the application process.
[33] The Hydrogeologic Model described in Section 4 Mineral Resource and Ore Reserve Estimates of the DFS Addendum and Financial Model are matched to produce the same quantity of lithium over the lifetime of the project.



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| Item | Basis | DFS Addendum Value / Input | Original DFS Value/ Input | Source |
|---|---|---|---|---|
| Lithium Recovery Rate | % | See Section 4 in DFS Addendum | See Section 8 in Original DFS | Lake |
| Lithium Carbonate Production | Tonnes | 626,760[34] | 624,400 | Lake |
| Sodium Hydroxide Production | Tonnes | 628,928[35] | 716,250 | Lake |
| Sodium Hypochlorite Production | Tonnes | 631,422 | - | Lake |
| Run Rate Operating Expenditure (OPEX) | $/t | 5,895 | 6,047 | Lake |
| Initial Capital Expenditure (CAPEX) | $M | 1,157 | 1,377 | Lake |
| Average Sustaining CAPEX | $'000/annum | 7,500 | 6,057 | Lake |
| Depreciation Method | | Straight Line[36] | Straight Line | Lake |
| Debtor Days | Days | 30 | 30 | Lake |
| Creditor Days | Days | 30 | 30 | Lake |

### *14.2.3 Annual Lithium Carbonate Production Profile – Life of Mine*

The Kachi Project is estimated to produce approximately 25 ktpa of battery grade lithium carbonate over the LOM. Production ramps up within the first year of production as shown in the figure below. The financial model ramp-up does not account for all early production or off-spec product generated in commissioning. There are a number of options for reprocessing off-spec product. Table 14-3 and Figures 14-2 and 14-3 show comparisons between the ramp-up profiles in the DFS Addendum compared with the Original DFS.

[34] As shown in Section 4 Mineral Resource and Ore Reserve Estimates, Section 4 Figure 5-10: Predicted lithium (Li) extraction and LCE production
[35] As shown in Section 12 of this DFS Addendum
[36] Accelerated depreciation adopted for tax purposes based on provisions of the Argentina RIGI Law

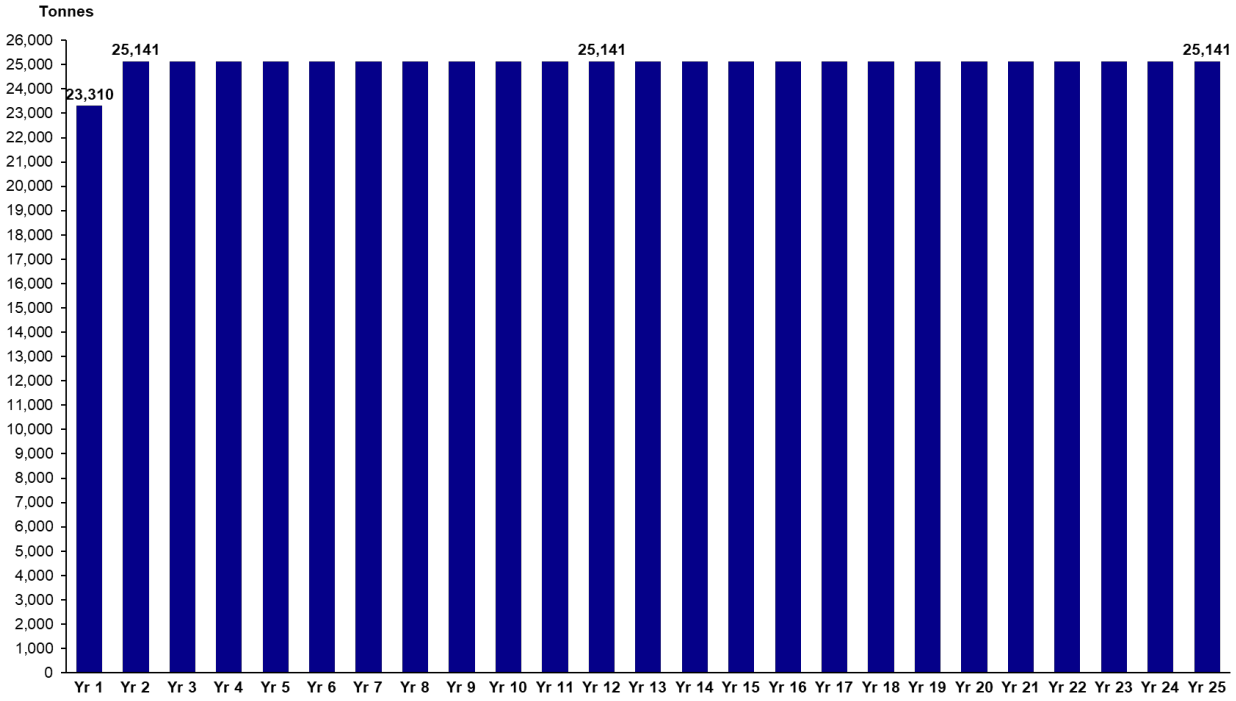


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**Table 14-2 Estimated Production Ramp-up**

| | Year 1 | Year 2 Onwards |
|---|---|---|
| DFS Addendum | 93% | 100% |
| Original DFS | 75% | 100% |

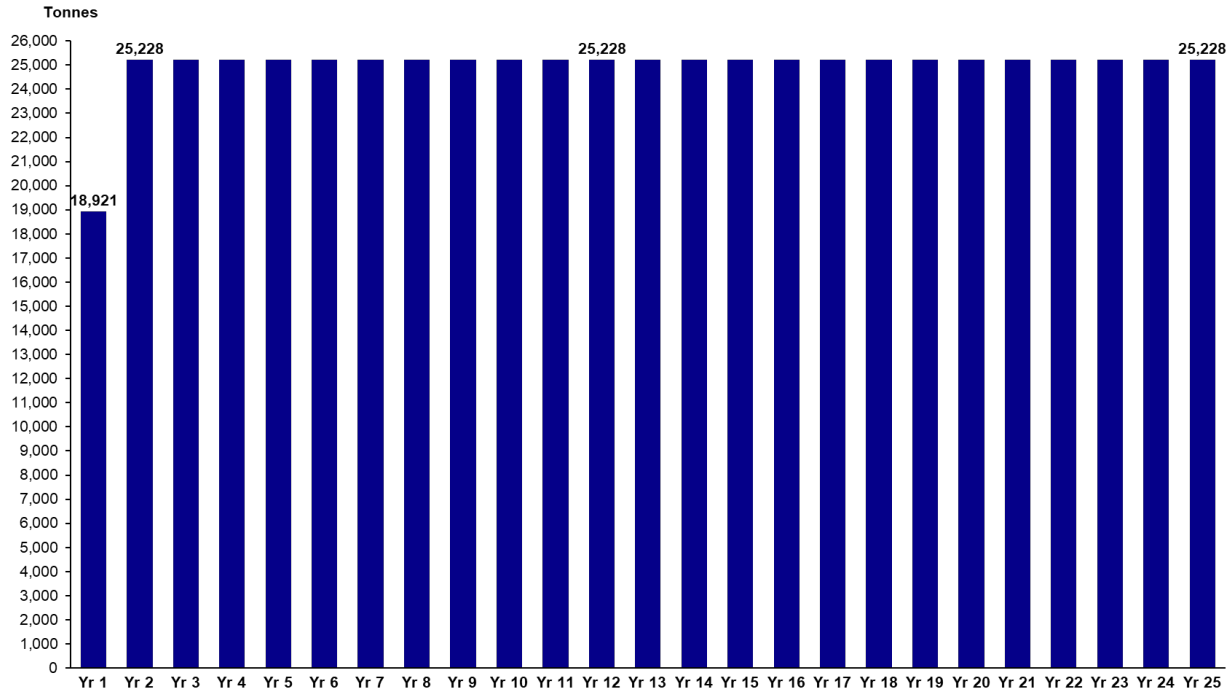
**Figure 14-2 DFS Addendum Annual Lithium Carbonate Production (in Tonnes) – Life of Mine**




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**Figure 14-1 Original DFS Annual Lithium Carbonate Production (in Tonnes) – Life of Mine**




## 14.3 Key Financial Model Outputs

The Kachi Project demonstrates the following project economics as a result of the DFS Addendum:

Pre-tax Net Present Value ($NPV_{10}$) of **$1.5 billion** with free cashflows of **$7.7 billion** from Life of Mine (LOM) revenues of **$12.8 billion**, LOM Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) of **$9.0 billion,** Pre-tax Internal Rate of Return (IRR) of **22.5%** and short payback period of **4.1 years**.

Post-tax Net Present Value ($NPV_{10}$) of **$1.0 billion** with free cashflows of **$5.8 billion** from Life of Mine (LOM) revenues of **$12.8 billion**, LOM Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) of **$9.0 billion**, Post-tax Internal Rate of Return (IRR) of **19.7%** and short payback period of **4.5 years.**

### *14.3.1 Target Project Financial Results*

Key Project results from the DFS Addendum are listed in Table 14-4, demonstrating robust Project financial outcomes and metrics.

**Table 14-1 Key Financial Results**

| Item | Units | Period | DFS Addendum Result | Original DFS Result |
|---|---|---|---|---|
| **Lithium Carbonate Revenue** | $M | Life of Mine | **12,837** | **20,700** |
| **Lithium Carbonate Revenue** | $M | Annual Average | **513** | **827** |
| **EBITDA** | $M | Life of Mine | **9,031** | **15,870** |
| **EBITDA** | $M | Annual Average | **361** | **635** |

| Item | Units | Period | DFS Addendum Result | Original DFS Result |
|---|---|---|---|---|
| **EBITDA Margin** | % | Run Rate | **71%** | **76%** |
| **Net Profit After Tax** | $M | Life of Mine | **5,771** | **8,959** |
| **Opex**[37] | $/t | Run Rate | **5,895** | **6,047** |
| **Total CAPEX** | $M | | **1,157** | **1,377** |
| **$NPV_8$ Pre-Tax** | $M | | **-** | **3,854** |
| **$NPV_8$ Post-Tax** | $M | | **-** | **2,333** |
| **$NPV_{10}$ Pre-Tax** | $M | | **1,469** | **-** |
| **$NPV_{10}$ Post-Tax** | $M | | **1,011** | **-** |
| **IRR Pre-Tax** | % | | **22.5** | **25.4** |
| **IRR Post-Tax** | % | | **19.7** | **20.9** |
| **Total Post-Tax Free Cashflows** | $M | Life of Mine | **6,794** | **9,310** |
| **Payback Period (Post-Tax)** | Years | | **4.5** | **4.5** |

### *14.3.2 Target Annual Revenues – LOM*

Based on the price assumptions in the economic model described above, estimated annual revenues from the sale of battery-grade lithium carbonate are displayed below in Figure 14-4 and Figure 14-5 for the Kachi Project.

**By-Product Chemicals**

Lake expects to produce two by-products at Kachi – Sodium Hydroxide (NaOH) and Sodium Hypochlorite (NaClO). These by-products are non-core to Lake's business model and potential revenues have been applied as a by-product credit in OPEX.

[37] Operating Expenditures includes facility wide costs, direct extraction package, reagents, lithium chemical plant, general and administrative expenses, transportation and power



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**Figure 14-4 Target Annual Revenues for Kachi Project**

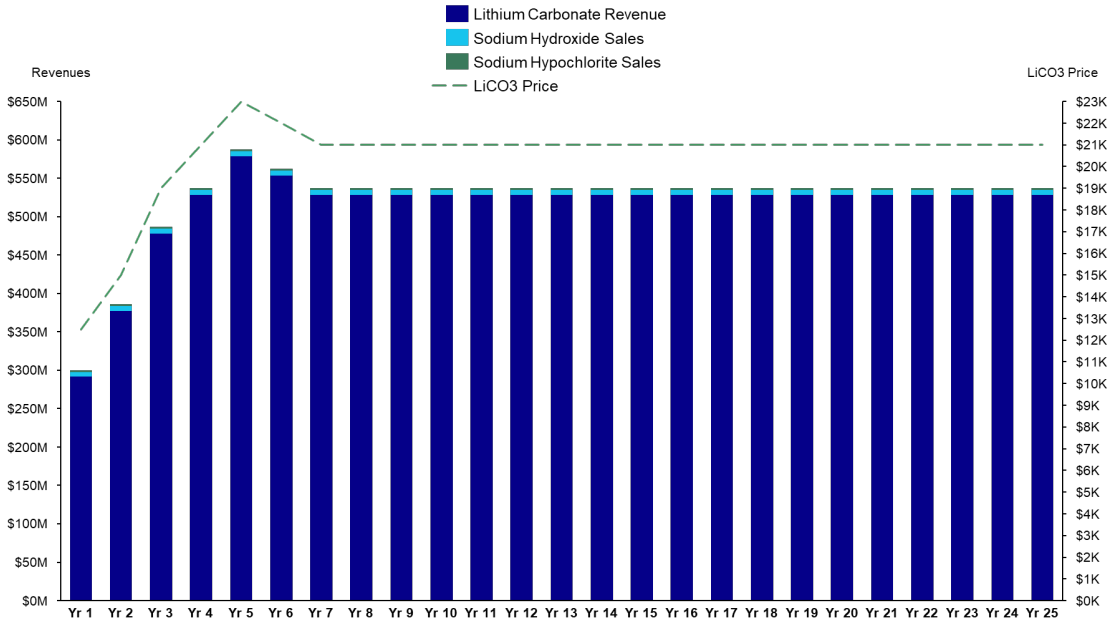
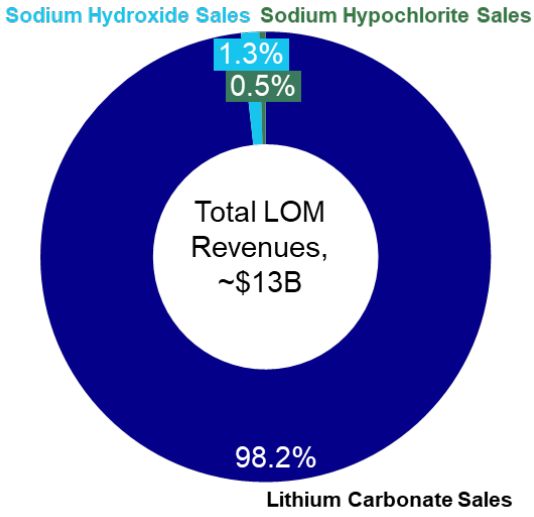



**Figure 14-5 Target Revenues Breakdown, Life of Mine**



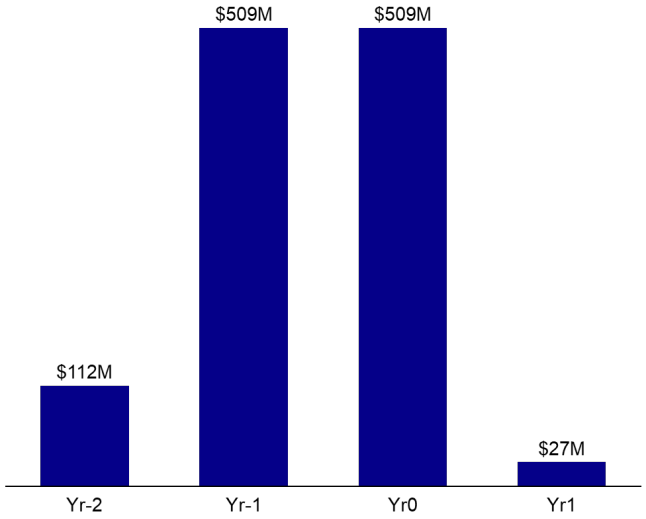
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### *14.3.3 Capital Expenditure Overview*

CAPEX covers the period from FID to commissioning and is reported in real US dollars, with no allowance for escalation or currency fluctuation. Below in Figure 14-6 is the spending schedule for initial CAPEX.

Additional information on capital expenditures including deferred and sustaining capital expenditures is found in Section 11 of this DFS Addendum.

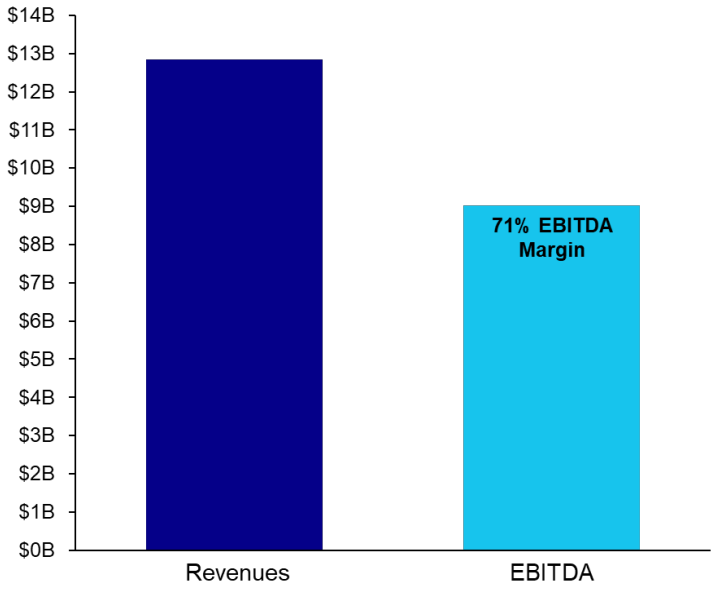
**Figure 14-6 Capital Expenditure Spend**




### *14.3.4 Target EBITDA Margin – LOM*

Estimated EBITDA margin is summarised below in Figure 14-7, showing an average of approximately 71% over the LOM.

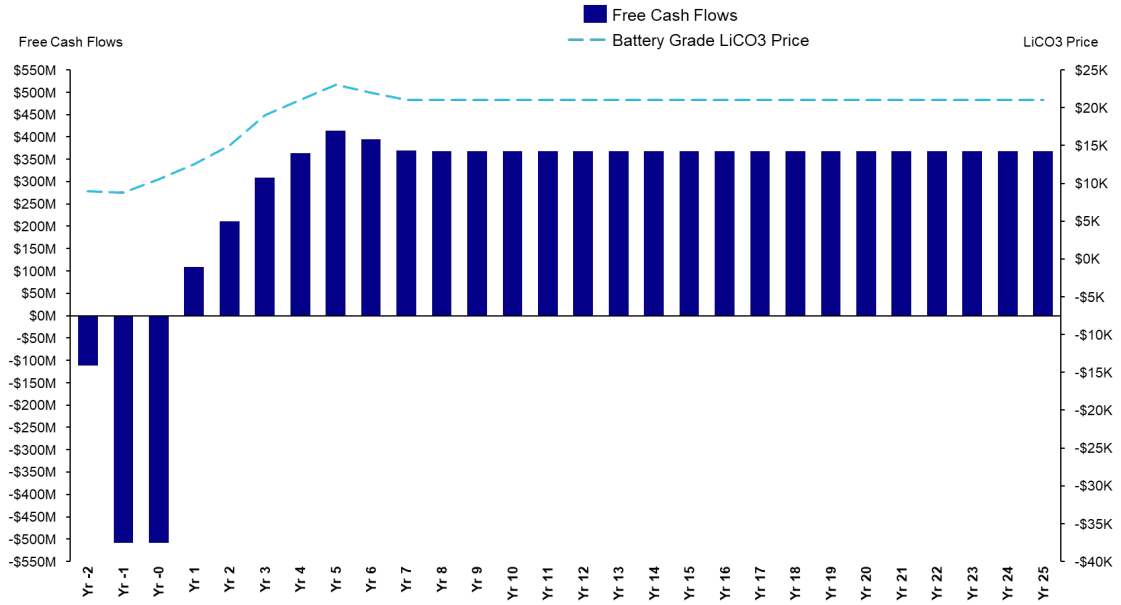
**Figure 14-7 Target EBITDA Margin**




### *14.3.4 Target Free Cash Flow*

Estimated pre-tax, Free Cash Flows ("FCF") are summarised below in Figure 14-8, showing an average of approximately $352 million per annum over the LOM.

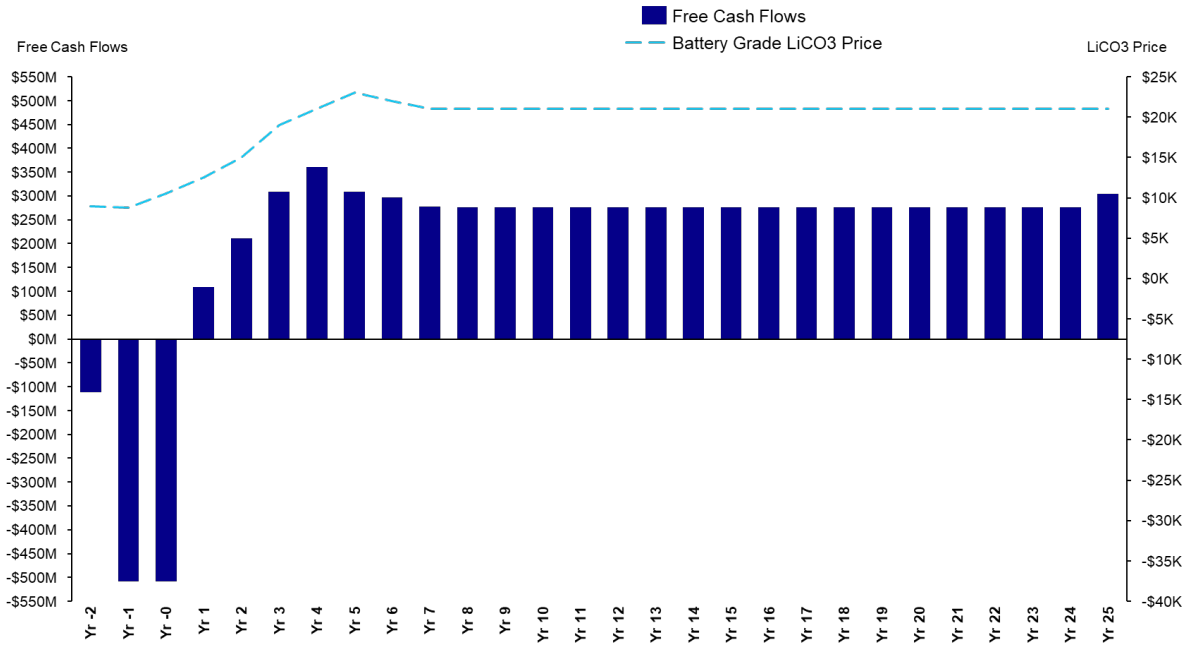
**Figure 14-8 Target Annual Free Cash Flow (Pre-Tax), Life of Mine**




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Estimated post-tax, FCF are summarized below in Figure 14-9, showing an average of approximately $275 million over life of mine.

**Figure 14-9 Target Annual Free Cash Flow (Post-Tax), Life of Mine**




## 14.4 Forecast Estimated Global Cost Curve Position

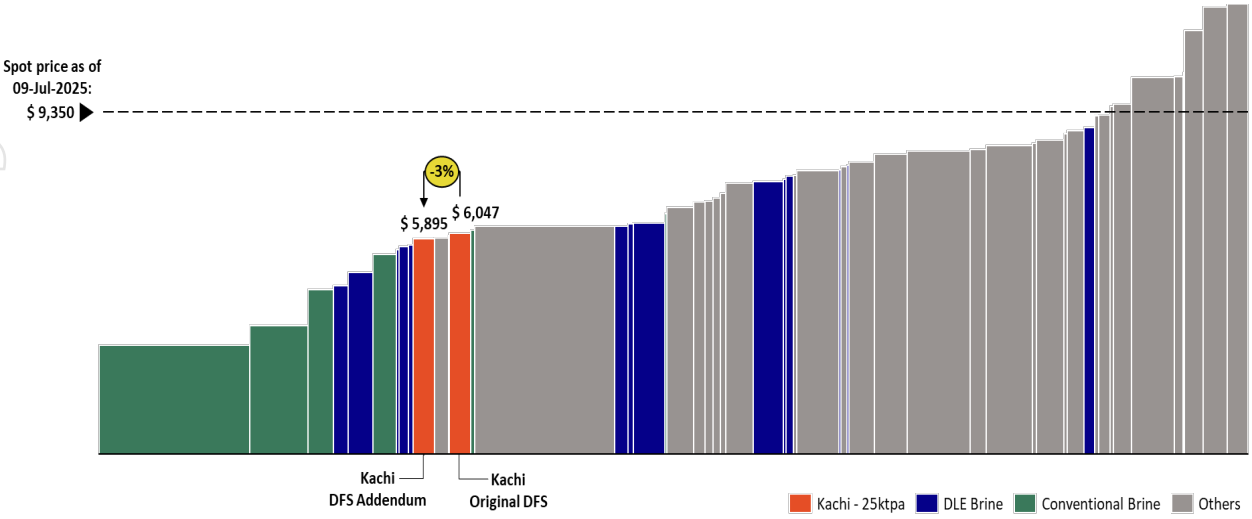
Kachi Project's run rate OPEX is forecast at approximately $5,895/tonne, which currently places the Project in the lower end of the global cost curve for lithium developers, using the forecast data from Benchmark Minerals[38], shown in Figure 14-10 below. It is also worth noting that the Kachi Project targets being an integrated brine to battery grade chemical producer and is therefore well positioned to avoid risks with upstream or downstream cost escalation.

[38] Source: Benchmark Mineral Intelligence – Lithium Total Cost Model Q2, 2025 via Lake Resources Corporate Subscription. Kachi run-rate OPEX inserted in Benchmark Minerals cost curve by Lake



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**Figure 14-10 Kachi Operating Costs on the Global Cost Curve, C1 Costs, 2025**




## 14.5 NPV Sensitivity

Sensitivity analysis was conducted on key project inputs and assumptions. The resulting impacts on both Pre-Tax and Post-Tax NPV$_{10}$ are illustrated in Tables 14-5, 14-6, 14-7, 14-8 and Figures 14-11 to 14-12 below.

Post-tax NPV$_{10}$ is most sensitive to revenue drivers – particularly the lithium price. The BMI Q2 2025 price curve used in the financial model assumes lithium carbonate prices of $12,500/t, $15,000/t and $19,000/t respectively in the first three years of production, which are also the most NPV-sensitive years. This results in a disproportionately negative impact on project NPV$_{10}$, as compared to a scenario where a constant average price of US$20,500/t is maintained across the life of mine.

Operating and capital expenditures also affect NPV$_{10}$ but to a lesser extent than lithium price, with both having a broadly similar level of sensitivity.

**Table 14-5 Pre-Tax NPV$_{10}$ Sensitivity Table Using BMI Q2 2025 Price Curve, Million USD**

| Discount Rate | 8.0% | 9.0% | 10.0% | 11.0% | 12.0% |
|---|---|---|---|---|---|
| NPV ($M) | 2,034 | 1,730 | 1,469 | 1,243 | 1,049 |

**Table 14-6 Post-Tax NPV$_{10}$ Sensitivity Table Using BMI Q2 2025 Price Curve, Million USD**

| Discount Rate | 8.0% | 9.0% | 10.0% | 11.0% | 12.0% |
|---|---|---|---|---|---|
| NPV ($M) | 1,445 | 1,212 | 1,011 | 838 | 688 |

**Table 14-7 Pre-Tax NPV10 Sensitivity Table Using $20,500/t Flat Price Curve, Million USD**

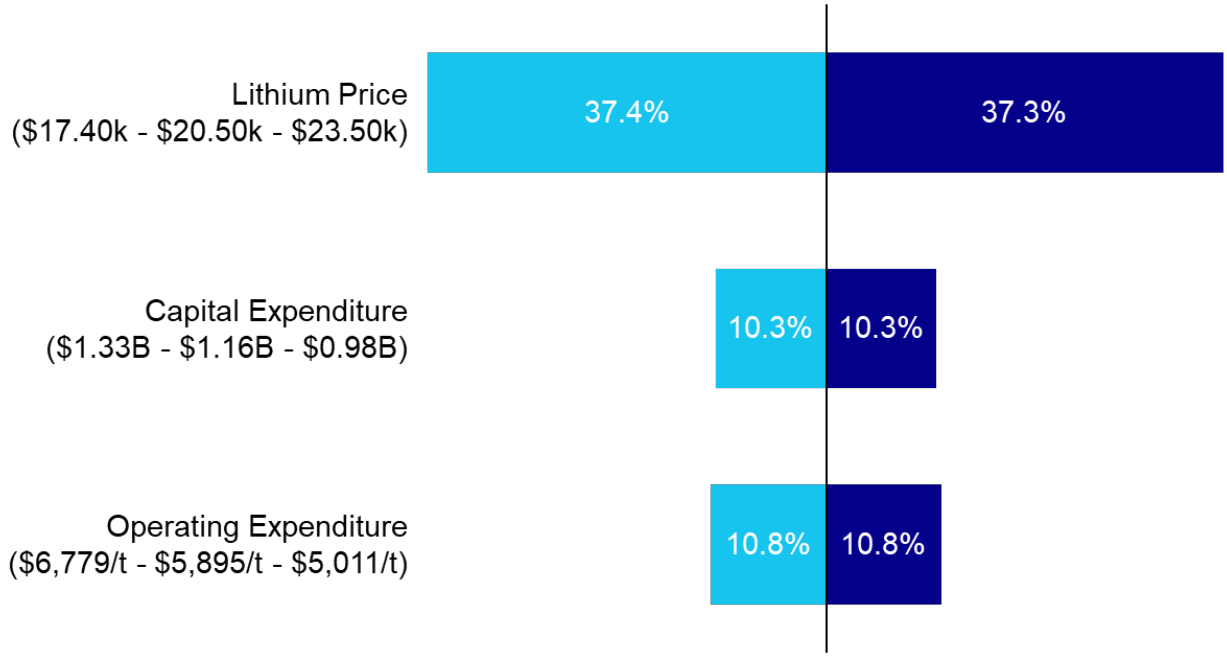
| Discount Rate | 8.0% | 9.0% | 10.0% | 11.0% | 12.0% |
|---|---|---|---|---|---|
| NPV ($M) | 2,178 | 1,878 | 1,619 | 1,396 | 1,202 |

**Table 14-8 Post-Tax NPV10 Sensitivity Table Using $20,500/t Flat Price Curve, Million USD**

| Discount Rate | 8.0% | 9.0% | 10.0% | 11.0% | 12.0% |
|---|---|---|---|---|---|
| NPV ($M) | 1,565 | 1,335 | 1,137 | 966 | 817 |

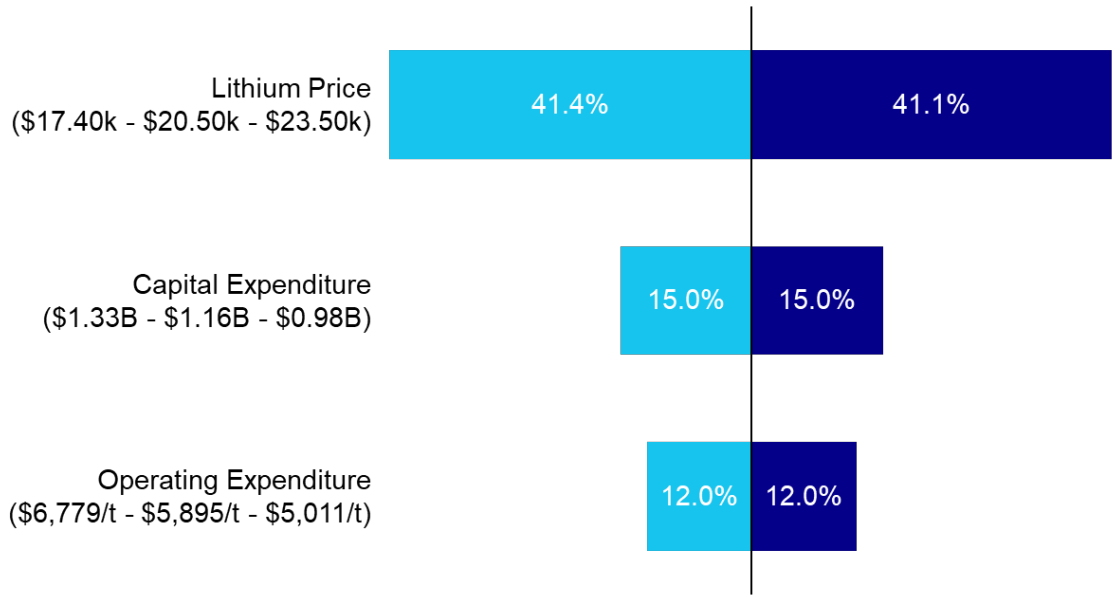
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**Figure 14-11 Pre-Tax $NPV_{10}$ Sensitivities Chart (-15%/+15%; Base $1,469M)**




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**Figure 14-12 Post-Tax $NPV_{10}$ Sensitivities Chart (-15%/+15%; Base $1,011M)**




### *14.5.1 Lithium Price*

Project cash flows are most sensitive to changes in the realized selling price of lithium carbonate. A 15% decrease in the lithium price results in an approximate 37% increase in the Pre-Tax $NPV_{10}$, while a 15% increase in price leads to a similar ~37% reduction in Pre-Tax $NPV_{10}$. On a post-tax basis, the effect is more pronounced: a 15% decrease in price increases the Post-Tax $NPV_{10}$ by approximately 41%, whereas a 15% increase reduces it by ~41%.

This inverse relationship is driven by our use of a conservative, front-loaded pricing curve, where lower early revenues reduce overall Project value. The impact of lithium price volatility may be partially mitigated through pricing mechanisms to be negotiated with future offtake partners.

Variations in production volume are also expected to have a comparable impact on project NPV, given their direct correlation with revenue generation.

### *14.5.2 Initial Capital Expenditure (CAPEX)*

Due to the function and nature of discounted revenue streams, $NPV_{10}$ is also quite sensitive to CAPEX (although to a lesser degree than lithium price) because these expenditures occur earlier in the Project.

### *14.5.3 Operating Expenditure (OPEX)*

OPEX through the entire Project lifetime is more discounted in later years. As a generally low-cost operation, OPEX has a limited impact on financials, and this accounts for the lower sensitivity on a pre-tax and post-tax NPV basis.

## 14.6 IRR Sensitivity

The results of the sensitivity analysis for Pre-tax and Post-tax IRR to CAPEX, OPEX and lithium pricing are presented below in Figure 14-13 and Figure 14-14.

The IRR of the Project is equally highly sensitive to the lithium price due to future cashflows being directly impacted by the linear relationship between lithium volumes and lithium sales price. Other factors considered were CAPEX and OPEX, with Pre-Tax and Post-Tax IRR being more sensitive to CAPEX than OPEX.

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**Figure 14-13 Pre-Tax IRR Sensitivities Chart (-15% / +15%; Base 22.5%)**

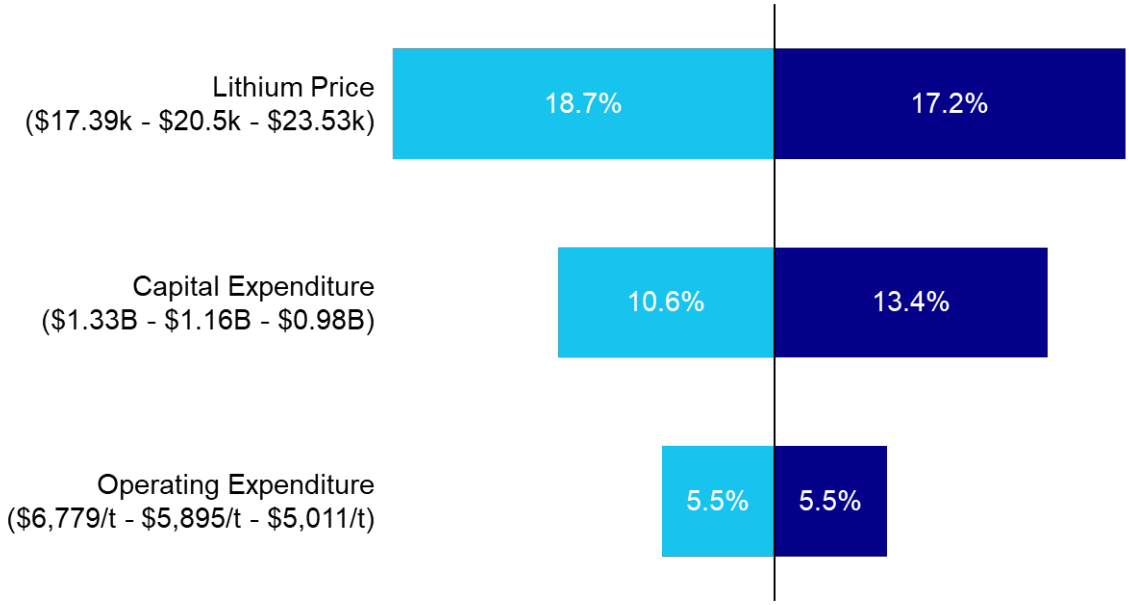
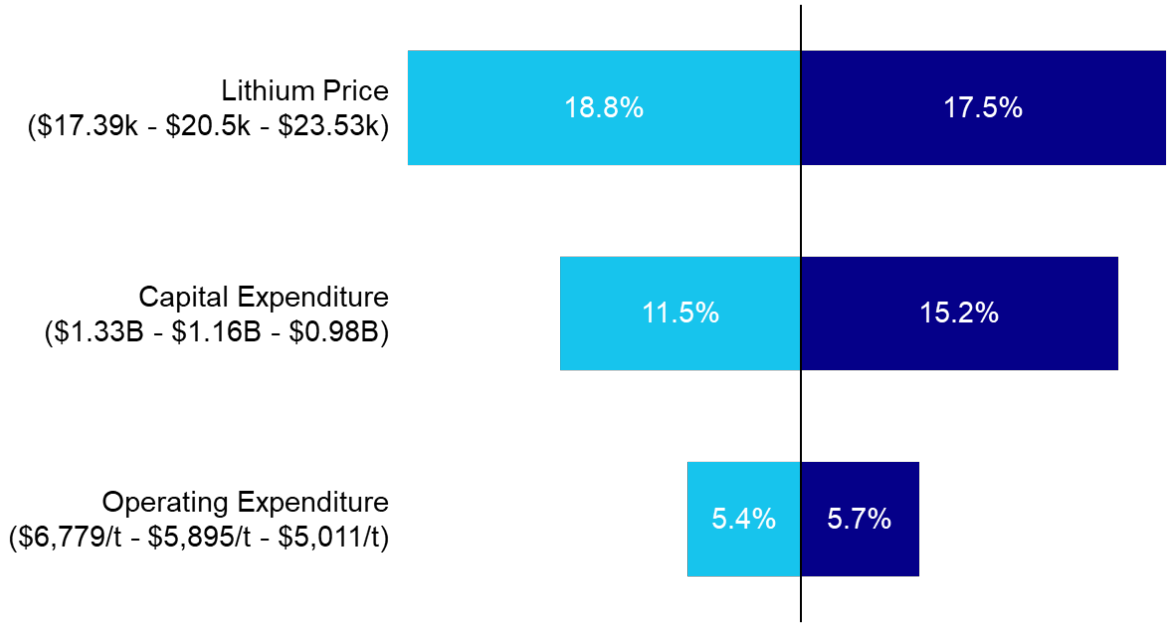



**Figure 14-13 Post-Tax IRR Sensitivities Chart (-15% / +15%; Base 19.7%)**




### *14.6.1 Lithium Price*

Project IRR is most sensitive to changes in lithium carbonate prices. A 15% decrease in lithium prices results in an 18.7% decrease in the Pre-Tax IRR, while a 15% increase in prices leads to a 17.2% increase in Pre-Tax IRR.

On a Post-Tax basis, a 15% increase in lithium prices results in a ~19% increase in IRR, while a 15% decrease leads to a 17.5% reduction in IRR.

The impact of lithium pricing may be mitigated through pricing mechanisms included in future offtake agreements. Changes in production volume are expected to have a similar effect on IRR.

#### *14.6.2 Initial Capital Expenditure (CAPEX)*

IRR is more sensitive to initial CAPEX due to those expenditures occurring naturally in the first three years of the Project. On a Pre-Tax basis, a 15% increase in CAPEX reduces IRR by 10.6% and a 15% reduction in CAPEX increases IRR by 13.4%. On a Post-Tax basis, a 15% increase in CAPEX reduces IRR by 11.5% and a 15% reduction in CAPEX increases IRR by 15.2%. This asymmetry in IRR sensitivity is driven by the non-linear timing of cash flows, with upfront capital costs having a disproportionate effect on Project economics.

#### *14.6.3 Operating Expenditure (OPEX)*

IRR is less sensitive to OPEX because it occurs throughout the Project lifetime and is therefore more discounted in the later years. On a Pre-Tax basis, a 15% increase in OPEX reduces IRR by 5.5% and a 15% reduction in OPEX increases IRR by 5.5%. On a Post-Tax basis, a 15% increase in OPEX reduces IRR by 5.4% and a 15% reduction in OPEX increases IRR by 5.7%.

### 14.7 Project Financing

The final project financing approach and timing will be subject to the outcome the strategic alternatives process[39].

## 15. Environmental and Social Impact Assessment (EIA)

The Environment and Social Impact Assessment has been submitted to the appropriate Argentina authorities for review[40] and continues through the review and approval process with estimated date of approval being in the second half of 2025.

No other material changes have been made to the Original DFS as pertaining to Section 15. Refer to the Original DFS[41] for additional information.

## 16. Risks (Threats and Opportunities)

Whilst there are no material changes to this section at this time, the Risk Register remains a critical tool for proactively identifying and evaluating potential uncertainties that could affect the successful delivery of the Project within its estimated budget and forecasted schedule. Refer to the Original DFS[42] for a full list of Project Risks.

## 17. Permitting Plan

No material changes have been made to the Original DFS as pertaining to this Section 17. Refer to the Original DFS[43] for additional information.

[39] Refer to ASX announcement dated 7 May 2025
[40] Refer to ASX Announcement dated 26 March 2024
[41] Refer to ASX Announcement dated 19 December 2023 - "Kachi Phase One Definitive Feasibility Study", Section 15
[42] Refer to ASX announcement dated 19 December 2023 - "Kachi Phase One Definitive Feasibility Study", Section 16
[43] Refer to ASX Announcement dated 19 December 2023 - "Kachi Phase One Definitive Feasibility Study", Section 17



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# APPENDIX 1: JORC Table 1

**The following information is provided in accordance with Table 1 of Appendix 5A of the JORC Code 2012**.

NOTE: All references to Figures and Tables in this JORC Table 1 (Sections 1-4) are references to the Figures and Tables in the ASX Announcement dated 4 August 2025 relating to the Updated Ore Reserve at the Kachi Project and all material assumptions contained in that announcement continue to apply and have not materially changed.

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## Section 1

**Sampling Techniques and Data related to Kachi drilling.**

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| Criteria | Section 1 – Sampling Techniques and Data | |
|---|---|---|
| Sampling techniques | ▪ Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.<br>▪ Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.<br>▪ Aspects of the determination of mineralisation that are Material to the Public Report.<br>▪ In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. | ▪ Brine samples were collected using multiple sampling methods from diamond core and rotary drilling including:<br>▪ Bottom of hole spear point during HQ diamond core drilling advance<br>▪ Straddle and single packer device to obtain representative samples of the formation fluid by purging a volume of fluid from the isolated interval to minimise the possibility of contamination by drilling fluid prior to sample collection. 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 which is lined with black plastic to avoid leakage. Single packer sampling is the current standard form of sampling.<br>▪ Installed standpipes with discrete screening intervals.<br>▪ Bailer sampling during advance, removing significant brine volumes to draw formation fluids into the base of the drill stem.<br>▪ Development of test wells and during pumping test of varying durations.<br>▪ The brine sample was collected in clean plastic bottles (1 litre) and filled to the top to minimise air space within the bottle. Duplicate samples were submitted at a high frequency to allow statistical evaluation of laboratory results. These were collected at the same time as the primary samples for storage and submission of duplicates to the laboratory. Each bottle was taped and marked with the sample number.<br>▪ Drill core in the hole was recovered in 1.5 m length core runs in core lexan tubes to minimise sample disturbance.<br>▪ Drill core was collected in Lexan Tubes for minimal disturbance to obtain representative samples of the sediments that host brine. |
| Drilling techniques | ▪ Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is | ▪ 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.<br>▪ Rotary drilling used 21.6 cm (8.5 in) or 25.4 cm (10 in) tricone bits which produced drill chips that were |

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| | | |
|---|---|---|
| | oriented and if so, by what method, etc). | subsequently logged. Holes were also geophysically logged.<br>▪ Brine has been used as drilling fluid for lubrication during drilling, for mixing of additives and muds. |
| Drill sample recovery | ▪ Method of recording and assessing core and chip sample recoveries and results assessed.<br>▪ Measures taken to maximise sample recovery and ensure representative nature of the samples.<br>▪ Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. | ▪ Diamond drill core was recovered in 1.5 – 3 m length intervals in the triple (split) tubes. Appropriate additives were used for hole stability to maximise core recovery. The core recovered from each run was measured and compared to the length of each run to calculate the recovery. Chip samples were collected for each metre drilled and stored in segmented plastic boxes for rotary drill holes.<br>▪ Brine samples were collected using a double packer at discrete depths over variable intervals (generally between 1 - 6 m). This was dependent on hole diameter as measured using caliper logs. Sample intervals were isolated using double packers where samples were collected from these via airlifting brine Single packer configurations typically utilized 10 m intervals that were open to the base of the hole.<br>▪ Additives and muds were used to maintain hole stability and minimise sediment samples from washing away from the triple tube.<br>▪ Brine samples are collected from inflows into the hole and not directly from the drill core. Thus, brine samples are mostly independent of core quality and recovery. However, the permeability of the lithologies where samples are collected is related to the permeability and Li grade of the resource.<br>▪ Multiple methods were used to measure physical and chemical properties of the formation in order to prevent sample bias. For example, core samples were collected and measured for drainable porosity at multiple laboratories. Drainable porosity was also measured in-situ using borehole magnetic resonance. A statistical review of these various laboratory and downhole datasets was done. One laboratory had anomalously high drainable porosity values so that data set was not used. The drainable porosity values between the remaining laboratory and the BMR tool was evaluated and the most conversative values were chosen from the BMR tool.<br>With regards to brine sampling, multiple sampling techniques were used to collect samples. A QAQC program entailed collecting field blanks and field duplicates. Some of these data overlapped. If a brine sample returned a highly anomalous result, the data were flagged in the database and some of those anomalous data were not included in the resource and reserve estimates. Typically, averaging of the data was done and sample zones were composited to provide a more conservative approach. In addition, both prime and check laboratories were used where one laboratory consistently over-predicted lithium grades. Because of that, the laboratory became the check laboratory and was used to analyze relative trends. However, the prime laboratory chosen was the one with the more conservative lithium grades. To |

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| | | reiterate, where there may be sample anomalies, Lake chose the conservative values in every case. |
| Logging | ▪ Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.<br>▪ Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.<br>▪ The total length and percentage of the relevant intersections logged. | ▪ Sand, clay, silt, and minor occurrences of ignimbrite were 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.<br>▪ Diamond holes are logged by a geologist who also supervised taking of samples for laboratory porosity analysis (with samples drilled and collected in lexan polycarbonate tubes) as well as additional physical property testing.<br>▪ 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. Cores are photographed for reference, prior to storage. |
| Sub-sampling techniques and sample preparation | ▪ If core, whether cut or sawn and whether quarter, half or all core taken.<br>▪ If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.<br>▪ For all sample types, the nature, quality and appropriateness of the sample preparation technique.<br>▪ Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.<br>▪ Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.<br>▪ Whether sample sizes are appropriate to the grain size of the material being sampled. | ▪ Brine samples were collected by inflatable packer, bailer, and spear sampling methods over a variable interval. Low pressure airlift tests were used to purge test intervals and gauge potential brine flow yields. Samples were also collected during development of piezometers and test wells, and from pumping tests.<br>▪ Brine samples were collected in one-litre sample bottles, that were first rinsed and then filled with brine. Each bottle was taped and marked with the sample number. Duplicates and blanks were collected, and standards were inserted into the sample stream as part of the quality assurance and quality control (QAQC) protocols.<br>▪ Sample sizes are appropriate to the grain size of the material being sampled. For hydraulic property testing, laboratories utilize standard length cores for specific tests based on ASTM methods and from peer reviewed published literature, specifically for sedimentary lithologies. Lake worked in conjunction with the laboratories and provided the appropriate intact core that would be required for each test conducted.<br>▪ In regards to brine sampling, test intervals varied based on the sampling method and hole conditions. While there is not a direct link between grain size and test interval length for the techniques utilized, often sample collection was limited to test intervals where the hole would remain open, as opposed to caving or washing out which would be a direct effect of sediment grain size, depth (and compaction effects), and cohesiveness. |
| Quality of assay data and laboratory tests | ▪ The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is | ▪ Analytical laboratory services are currently split between Alex Stewart International Argentina in Jujuy, Argentina (with oversight from their Mendoza laboratory), and SGS laboratory in Buenos Aires, Argentina which is used for both primary and check |

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| | considered partial or total.<br>▪ For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.<br>▪ Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. | samples. The laboratories assayed blind control samples and duplicates in the analysis chain. The Alex Stewart laboratory and the SGS laboratory are ISO 9001 and ISO 14001 certified and are specialized in the chemical analysis of brines and inorganic salts.<br>▪ The quality control and analytical procedures used at the Alex Stewart 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. |
| Verification of sampling and assaying | ▪ The verification of significant intersections by either independent or alternative company personnel.<br>▪ The use of twinned holes.<br>▪ Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.<br>▪ Discuss any adjustment to assay data. | ▪ Field duplicates, standards and blanks were used to monitor potential contamination of samples and the repeatability of analyses. Accuracy, the closeness of measurements to the "true" or accepted value, was monitored by the insertion of standards, or reference samples, and by check analysis at an independent (or umpire) laboratory.<br>▪ Duplicate samples in the analysis chain were submitted to Alex Stewart or SGS laboratories as unique samples (blind duplicates) during the process.<br>▪ Stable blank samples (distilled water) were used to evaluate potential sample and cross contamination.<br>▪ Field parameters were measured on site using a hand-held Hanna pH and electrical conductivity (EC) multiprobe meter.<br>▪ Routine field equipment calibration was done using standards and buffers. |
| Location of data points | ▪ Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.<br>▪ Specification of the grid system used.<br>▪ Quality and adequacy of topographic control. | ▪ The diamond drill hole sample sites and rotary drill hole sites were located with a hand-held global positioning system (GPS) and subsequently located by a surveyor, with the majority of hole collars eventually defined by the surveyor.<br>▪ The properties are located at the junction of the Argentine POSGAR grid system Zone 2 and Zone 3 (within UTM 19) and in WGS84 Zone 19 south. The Project uses Zone 2 as the reference zone, as the critical infrastructure is located on the edge of Zone 2. |
| Data spacing and distribution | ▪ Data spacing for reporting of Exploration Results.<br>▪ Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore | ▪ Drill holes in the central area where Measured resources have been defined have a spacing of approximately 1.5 km between drill holes, with a greater spacing in the area where Inferred resources have been defined.<br>▪ Brine samples were generally collected over various intervals using straddle packers, single packers, spear points, and discrete screen intervals from installed |

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| | Reserve estimation procedure(s) and classifications applied.<br>▪ Whether sample compositing has been applied. | piezometers with samples collected at variable intervals vertically, due to varying hole conditions and over the life of the Project. The average distance between samples varies statistically based on duplicity.<br>▪ Compositing was applied to porosity data obtained from the borehole magnetic resonance (BMR) geophysical tool, as data is collected at closer than 10 cm intervals.<br>▪ Sufficiency of spacing and distribution for estimation procedures and classifications were applied. Lake followed guidance offered by AMEC and Houston (2011).<br>▪ As per AMEC Guidelines for Resource and Reserve Estimation for Brines, the selection of drilling methods, drill hole spacing, and drilling depths is the responsibility of the Competent Person(s). In developing the drilling and sampling program, the Competent Person(s) should consider:<br>▪ The drilling technique(s) should be conducive to recovery of appropriate representative samples for the evaluation of multiple parameters including determination of aquifer porosity, permeability and brine chemistry<br>▪ For the determination of specific yield (Sy), brine-sample intervals should support Mineral Resource estimation and be designed around observed changes in stratigraphy, at the time of drilling; and brine-sampling protocols should accurately determine the in-situ location of the sampled intervals.<br>▪ As per Houston, J., Butcher, A., Ehren, P., Evans, K., and Godfrey, L. 2011. The Evaluation of Brine Prospects and the Requirement for Modifications to Filing Standards. Economic Geology. V 106, the authors cite specific drill spacing where Measured, Indicated, and Inferred Resources should be applied, of which Lake used.<br>▪ Drainable porosity and brine samples were collected at the same depths for a direct comparison. Sample intervals are also specified for the resource classification. It should also be noted that changes in lithology require sufficient sampling to be able to estimate the contact zones or breaks in lithologies and Lake adjusted to these contacts. |
| Orientation of data in relation to geological structure | ▪ Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.<br>▪ If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and | ▪ The salt lake (salar) deposits that contain lithium-bearing brines generally have horizontal to sub-horizontal beds and lenses that contain sand, gravel, salt, silt, and clay. The vertical diamond drill and rotary holes provide the best understanding of the stratigraphy and the nature of the sub-surface brine bearing aquifers.<br>▪ Geological structures are important for the formation of salar basins, but not as a host for brine mineralization. |

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| | reported if material. | |
| Sample security | ▪ The measures taken to ensure sample security. | ▪ Samples were transported to the Alex Stewart or SGS laboratories 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 to the office in Catamarca and then sent by DHL couriers to the laboratories.<br>▪ 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. |
| Review (and Audit) | ▪ The results of any audits or reviews of sampling techniques and data. | ▪ An audit of the database has been conducted by the CP and another Senior Consultant at different times during the Project and prior to finalization of the samples to be used in the resource estimate. The CP has been onsite periodically during the sampling program. The review included drilling practice, geological logging, sampling methodologies for brine quality analysis, and physical property testing of drill core, QAQC control measures, and data management. The practices being undertaken were ascertained to be appropriate, with constant review of the database by independent personnel. Additionally, an external review of field sampling procedures and data collection was undertaken by Geoff Baldwin in April of 2023. An external peer review of the November 2023 resource update was performed by John Houston. |

(Criteria in this section apply to all succeeding sections)

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## Section 2

**Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section)

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| Criteria | Section 2 – Reporting of Exploration Results | |
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| Mineral tenement and land tenure status | ▪ Type, reference name / number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.<br>▪ The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. | ▪ The Kachi Lithium Brine Project, at an elevation of approximately 3,000 masl, is located approximately 100-km south-southwest of Livent's Hombre Muerto lithium operation and 45-km south of Antofagasta de la Sierra in Catamarca province of north-western Argentina.<br>▪ The Project comprises approximately 104,375.6 Ha within fifty-three (53) mineral leases (minas), including one lease (Morena 10 – 2712.9 Ha) with a pending application. Details of the properties are provided in **Table 7- Properties Details**.<br>▪ The tenements are believed to be in good standing, with statutory payments completed to relevant government departments. |
| Exploration by other parties | ▪ Acknowledgment and appraisal of exploration by other Parties. | ▪ Marifil Mines Ltd conducted sparse surface pit sampling in 2009 of groundwater at depths less than 1m.<br>▪ Samples were taken from each hole and analysed at Alex Stewart laboratories in Mendoza Argentina.<br>▪ Results were reported in an NI 43-101 report by J. Ebisch in December 2009 for Marifil Mines Ltd.<br>▪ NRG Metals Inc commenced exploration in adjacent leases under option. Two diamond drill holes intersected lithium- bearing brines. The initial drillhole intersected brines from 172-198 m and below with best results to date of 15 m 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.<br>▪ A 375 m deep borehole on the Luz María tenement drilled by the former owner NRG Metals was between 141 and 144 mg/L Li. The sample from 50 bgs is noted as being extracted from the well during pumping, although the exact period of pumping and well completion interval are unknown, and the results cannot be independently verified. The Xantippe data provide further evidence for the interpreted large-scale spatial extent of the lithium brine resource beyond the drillholes to the north and east and beneath the volcano.<br>▪ No other exploration results were located. |
| Geology | ▪ Deposit type, geological setting and style of mineralisation. | ▪ The known sediments within the salar consist of a thin (several metre thick) salt/halite surficial layer, with interbedded clay, sand and silt horizons that accumulated in the salar from terrestrial sedimentation and evaporation of brines.<br>▪ Brines within the Salt Lake are formed by evapoconcentration and are interpreted to be combined with warm geothermal fluids and brines hosted within sedimentary units.<br>▪ Geology was recorded during the diamond drilling and from chip samples in rotary drill holes. |

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| Drill hole Information | ▪ A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:<br>▪ easting and northing of the drill hole collar<br>▪ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar<br>▪ dip and azimuth of the hole<br>▪ down hole width and depth (length and interception depth)<br>▪ end of hole (hole length).<br>▪ If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. | ▪ Refer to Table 8 above.<br>▪ 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.<br>▪ All drill holes are vertical, (dip -90, azimuth 0 degrees).<br>▪ Coordinates and depths of holes are provided above in the report in the Gauss Kruger Zone 2. Elevations are measured by a surveyor, except for the most recently completed holes.<br>▪ Assay results are provided in Table 8.<br>▪ Drill hole information is shown in included plans.<br>▪ Refer to previous ASX announcements for detailed lithological descriptions (e.g., October 4, 2023; August 22, 2023; November 22, 2023.) |
| Data aggregation methods | ▪ In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.<br>▪ Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.<br>▪ The assumptions used for any reporting of metal equivalent values should be clearly stated. | ▪ Assay averages have been provided where multiple sampling occurs in the same sampling interval. A considerable number of samples were sent to the two laboratories, and averages of these results were used for the resource estimation.<br>▪ Lithium samples are by nature composites of brine over intervals of metres, due to the fluid nature of brine. |
| Relationship | ▪ These relationships are | ▪ Mineralisation is interpreted to be horizontally lying |

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| between mineralisation widths and intercept lengths | particularly important in the reporting of Exploration Results.<br>▪ If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.<br>▪ If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). | and drilling is perpendicular to this, so intersections are considered true thicknesses. Brine is likely to extend to the base of the Carachi Pampa Basin, although this has yet to be confirmed by drilling.<br>▪ Mineralisation is continuous and sampling, despite intersecting intervals of lower grade in places within the resource, has not identified volumes of brine with what are likely to be sub-economic concentrations within the resource. However, the reader is advised that a reserve has yet to be defined for the Project. |
| Diagrams | ▪ Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. | ▪ A drill hole location plan is provided showing the locations of the drill platforms (Figure 6 and others with regards to the Model)<br>▪ Drill hole information is shown in plans included.<br>▪ Refer to October 4, 2023, August 22, 2023 and June 15, 2023 ASX announcement for recent detailed lithological descriptions. |
| Balanced reporting | ▪ Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. | ▪ Brine assays are available from 39 resource drill holes reported in Table 8. Additional information will be provided as it becomes available. |
| Other substantive exploration data | ▪ Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. | ▪ Positive extraction and injection test results were reported in the 16 August 2023 ASX announcement.<br>▪ Hydrogeologic modelling has demonstrated that large scale extraction and injection wellfields are viable, and an Ore Reserve for the Project was defined. See 19 December 2023 ASX Announcement titled "Maiden Ore Reserve Defined Lake Resources Flagship Kachi Project" |
| Further work | ▪ The nature and scale of planned further work | ▪ The Company has drilled over 13,000 m of diamond and rotary drilling. |

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| | (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).<br>▪ Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | ▪ Possible spatial and vertical extensions of the lithium brine are discussed in the Exploration Targets section of the 3 June 2025 ASX Announcement as are characterization approaches and timing. |

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## Section 3

**Estimation and Reporting of Mineral Resources**

(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

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| Criteria | Section 3– Estimation and Reporting of Mineral Resources | |
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| Database integrity | ▪ Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.<br>▪ Data validation procedures used. | ▪ Data was transferred directly from laboratory spreadsheets to the database.<br>▪ Data was checked for transcription errors when in the database, to ensure coordinates, assay values, and lithological codes were correct.<br>▪ Data was plotted to check the spatial location and relationship to adjoining sample points.<br>▪ Duplicates and Standards were used in the assay process.<br>▪ Brine assays and porosity test work were analysed and compared with other publicly available information for reasonableness.<br>▪ BMR geophysical log data has been compared with laboratory porosity values and provides a more continuous but more conservative estimate of drainable porosity (Sy).<br>▪ Comparisons of original and current datasets were made to ensure data integrity.<br>▪ A detailed statistical analysis of the resource data set was completed and presented in the Appendix of the 22 November 2023 ASX announcement. |
| Site visits | ▪ Comment on any site visits undertaken by the Competent Person and the outcome of those visits.<br>▪ If no site visits have been undertaken indicate why this is the case. | ▪ The Competent Person visited the site multiple times during the drilling and sampling program.<br>▪ Procedures have been modified throughout the project that are aimed at improving data and sample recovery, working closely with the drilling superintendent. |
| Geological interpretation | ▪ Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.<br>▪ Nature of the data used and of any assumptions made.<br>▪ The effect, if any, of alternative interpretations on Mineral Resource estimation.<br>▪ The use of geology in guiding and controlling Mineral resource estimation.<br>▪ The factors affecting continuity both of grade and geology | ▪ There is a high level of confidence in the geological interpretation of for the Project, with the three units identified in logging and down hole geophysics. There are relatively consistent sub horizontal geological units with intercalated clastic sediments consisting of sands, sits clays and minor gravel.<br>▪ Any alternative interpretations are restricted to smaller scale variations in sedimentology, related to changes in grain size and fine material in units, or a larger scale grouping of sediments, as changes between units are relatively minor. Such changes would not have a significant impact of the resource estimate.<br>▪ Data used in the interpretation includes rotary and diamond drilling methods.<br>▪ Drilling depths and geology encountered has been used to conceptualise hydro-stratigraphy and build the model units.<br>▪ Sedimentary processes affect the continuity of geology with extensive lateral continuity in the salar area, and the presence of additional overlying gravels further from the salar, whereas the concentration of lithium and other elements in the brine is related to water inflows, evaporation, and brine evolution in the salt lake. |
| Dimensions | ▪ The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the | ▪ The lateral extent of the resource has been defined by the boundary of the Company's properties, the outline of the Kachi volcano and the range of mountains to the west. The brine mineralisation, as defined by current total resource, covers approximately 274.8 km2. |

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| | upper and lower limits of the Mineral Resource. | ▪ 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 600 m depth. The basement rocks underlying the salt lake sediments were intersected in drilling from the SE of the salar.<br>▪ The resource is defined to a depth of 600 m below surface, with the exploration target extending beyond the areal extent of the resource, under the volcano, and also between the base of the resource and the interpreted depth of the basement. |
| Estimation and modelling techniques | ▪ The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.<br>▪ The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.<br>▪ The assumptions made regarding recovery of by-products.<br>▪ Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).<br>▪ In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.<br>▪ Any assumptions behind modelling of selective mining units.<br>▪ Any assumptions about correlation between variables.<br>▪ Description of how the geological interpretation was | ▪ Ordinary Kriging was applied to the composited BMR porosity data, to reduce the 200,000 individual measurements to a smaller number. The Inverse Distance Squared (ID2) method was used to estimate the distribution of lithium through the resource, given the much smaller number of assays available.<br>▪ The resource with a 2.5 km radius was estimated in two passes with a search ellipse of 2,000 and 4,000 m respectively.<br>▪ The resource between 2.5 and 5 km of drill holes was estimated using three expanding search ellipses of 2,000, 4,000 and 12,918 m, using ID2 to encompass all of the data.<br>▪ Three essentially horizontal hydrostratigraphic units were defined in the salar area, based on geological logging and downhole geophysics. These have different amounts of sand, silt and clay content, with lithium concentration varying slightly between units.<br>▪ The resource was estimated with soft boundaries and a horizontal search ellipse, to reflect the horizontal continuity of geological units. Lithium concentration appears independent of the geological units, and differences in porosity between units are only slight.<br>▪ No grade cutting or capping was applied to the model.<br>▪ Check estimates were conducted using different estimators, with a version of the model estimated entirely with ID2 methodology, ordinary kriging, and another using the Leapfrog Radial Basis Function.<br>▪ No assumptions were made about correlation between variables or recovery of by-products. Lithium is the value proposition of the project.<br>▪ The brine contains other elements in addition to lithium, such as magnesium and sodium, which can be considered deleterious elements. The project plan considers extraction of lithium via a DLE (Direct Lithium Extraction) process, where extraction of lithium is independent of other elements, which remain in the brine. The distribution of other elements will be included in the next resource update.<br>▪ Model blocks are defined as 200 by 200 m blocks in an east and north direction and 10 m in the vertical direction. |

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| | used to control the resource estimates.<br>▪ Discussion of basis for using or not using grade cutting or capping.<br>▪ The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available. | ▪ Extraction of brine allows for limited control of selective mining and selective mining units are not considered, as the resource is relatively homogeneous.<br>▪ The development of the inner three-layer model and outer homogeneous layer in the alluvial gravels/fans, with essentially horizonal layers, was used to define the search ellipses to control the resource estimation.<br>▪ Visual comparison was conducted of drill hole results and the block model, together with a comparison of sample statistics and the block model statistics. The result is considered to be acceptable. |
| Moisture | ▪ Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. | ▪ Moisture content of the cores was not Measured with regards to consideration of density and moisture content. In brine projects, the contained content of brine fluid is an integral part of the project and thus porosity, drainable porosity (Sy), and sediment density measurements were made to support this. As brine will be extracted by pumping, moisture content (in regard to density) is not relevant for the brine resource estimation.<br>▪ Tonnages are estimated as metallic lithium dissolved in brine.<br>▪ Tonnages are then converted to a Lithium Carbonate Equivalent tonnage by multiplying by the molecular equivalent factor of 5.32, which takes into account the presence of carbon and oxygen in Li2CO3, compared to metallic lithium, or simply the element Li. |
| Cut-off parameters | ▪ The basis of the adopted cut-off grade(s) or quality parameters applied. | ▪ A 100 mg/L external cut-off grade was applied to the large and uniform resource.<br>▪ The proposed DLE technology demonstrated to operate cost-effectively at much lower Li concentrations (e.g., less than 75 mg/L). |
| Mining factors or assumptions | ▪ Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. | ▪ The resource was quoted in terms of brine volume, concentration of dissolved elements, contained lithium, and lithium carbonate.<br>▪ No mining or recovery factors were applied (although the use of the specific yield as drainable porosity is used to reflect the reasonable prospects for economic extraction with the proposed mining / pumping methodology).<br>▪ Extraction and injection well designs and related pumping systems have been developed to a DFS level as part of the well field development plan (see December 19 ASX Announcement Maiden Reserve Defined for Flagship Kachi Project). However, wellfield layout was optimized down to 11 extraction wells and 14 injection wells.<br>▪ Dilution of brine concentrations may occur over time and typically there are lithium losses in the processing plant in brine mining operations. However, potential dilution estimated in the groundwater Model for the maiden reserve estimate incorporated into the DFS Addendum, indicated dilution over the life-of-mine was about 3-percent (see Figure 13). Assumptions inherent to the Model include the premise that the calibrated Model is a reliable predictive tool. Assumed dispersivity estimates of |

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| | | 10 m, 0.1 m and 0.01 m for longitudinal, transverse and vertical expressions, respectively.<br>▪ The overall process plant lithium recovery rate is assumed to be 86.8%. This includes DLE and any losses in other processes, as described Mining and Methods section of this ASX Announcement.<br>▪ After lithium extraction, spent brine will be injected back into the aquifer.<br>▪ Infrastructure required for mining includes extraction and injection wells, surface pumping networks and pumping infrastructure, storage ponds, raw water wells and pipelines, and monitoring and communications equipment. |
| Metallurgical factors or assumptions | ▪ The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. | ▪ The metallurgical process proposed for extraction of lithium from the resource feed brine is direct lithium extraction. The DLE method uses an ion exchange, a proven technology used extensively in water treatment. Lilac Solutions has developed a proprietary IX media tailored to high-TDS brines, enabling selective lithium extraction of lithium from high total dissolved solids (TDS) brine.<br>▪ Lithium chloride eluate (LiCl) produced from the DLE system is purified and concentrated using conventional Reverse Osmosis (RO), Evaporation, and impurity precipitation technology.<br>▪ The purified and concentrated LiCl solution is converted to lithium carbonate via conventional carbonation process using sodium carbonate reagent to precipitate lithium carbonate.<br>▪ The ion exchange DLE process has been tested at bench-scale, pilot-scale, and demonstration-scale with thousands of hours of batch and continuous test work. Real brine feed from the Kachi site has been used for all levels of testing. Bench and pilot scale testing were carried out at the Lilac Solutions research and development laboratory in Oakland, California. Demonstration scale testing was carried out via an on- site demonstration unit that operated in campaigns from October 2022 to November 2023 which processed over 5.2 million litres of brine and produced over 200,000 litres (200$m^3$) of concentrated lithium chloride product.<br>▪ The Kachi demonstration plant campaign validated the IX system under site-representative conditions, confirming consistent performance and the robustness of its modular design.<br>▪ The Generation 4 performance basis used in the DFS update is supported by separate demonstration-scale testing conducted under site-representative conditions in Argentina. Consistent results across multiple test environments confirm the robustness of the technology and provide a sound technical basis for the recovery assumptions applied in the reserve estimate.<br>▪ Analytical validation was conducted by Lilac's laboratories in Oakland and on-site at Kachi. Independent third-party analyses were also performed using ICP-OES by accredited commercials labs – SGS, Kemetco and McCampbell – across Argentina, Canada and the U.S. |

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| | | ▪ Balance of plant (BOP) eluate purification, concentration, and lithium carbonate production test work was carried out by Lilac Solutions at their research and development laboratory in Oakland, California. Additional bench-scale test work (1,000 L) was completed by Hazen Research in Golden, Colorado. Bench scale (20 L), pilot scale (1,000 L), and demonstration scale (120,000 L) test work was conducted by Saltworks Technologies in Richmond, British Columbia to validate the BOP process for battery grade lithium carbonate production from Kachi brine via Lilac Solution ion exchange DLE technology. |
| Environmental factors or assumptions | ▪ Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. | ▪ A high degree of consideration was given to field development planning that will minimise impact on sensitive environmental areas.<br>▪ Process water recovery early in the project will minimise freshwater resource impacts.<br>▪ The production / exploitation environmental impact assessment is well advanced and has been undertaken in parallel with the Resource and Reserve estimation process.<br>▪ Lake Resources is taking the initiative with regards to the permitting process early and ensuring environmental protection requirements are considered in the project design.<br>▪ A permitting plan was developed, with emphasis initially on the Environmental Impact Assessment (EIA) which was submitted to the Mining Ministry of Catamarca in March 2024. It is currently being evaluated by regulators with the goal of receiving the Environmental Impact Declaration (EID) resolution by the end of the second half of 2025.<br>▪ The Kachi Project currently has a valid exploration environmental impact assessment that was approved in 2017 and updated in accordance with the established legislation. The last renewal was in in November of 2022. An extension was requested to extend the duration of the permit until the Mining Ministry approves the permits for the exploitation stage. Additionally, the Kachi Project holds other sectoral permits including for fuel tanks, freshwater use, hazardous waste, quarry, and a local industrial permit.<br>▪ Numerical modelling indicates that operational impacts to sensitive areas will be small and within expected ranges of natural seasonal variations because of the Lake's injection strategy that maintains reservoir and aquifer pressures of operations in sensitive areas.<br>▪ The Kachi Project has a temporary freshwater extraction permit for a period of one year (valid until December 2025), authorizing the extraction from 4 wells at a rate of 64 m3 per day. Activity is underway to secure the definitive permit for future phases<br>▪ The project is within Ramsar site 1865 "Lagunas Altoandinas y Puneñas de Catamarca" established in February 2009 under an agreement between the Ramsar Convention Organization and the government of Argentina and is represented by the Environmental Secretariat of the |

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| | | Catamarca Province. In 2021, the provincial government approved lithium extraction and mine development at the nearby Tres Quebradas lithium brine Project, which is located in a similar wetland zone to the Kachi Project. |
| Bulk density | ▪ Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.<br>▪ The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.<br>▪ Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. | ▪ 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.<br>▪ Note that no mining is to be carried out, so density measurements are not directly relevant for resource estimation, as brine is to be extracted by pumping and consequently sediments are not actively mined. The lithium is extracted by pumping of mineral bearing brine.<br>▪ No bulk density was applied to the estimates because resources are defined by volume, rather than by tonnage. |
| Classification | ▪ The basis for the classification of the Mineral Resources into varying confidence categories.<br>▪ Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).<br>▪ Whether the result appropriately reflects the Competent Person's view of the deposit. | ▪ The resource was classified into resource categories based on confidence in the estimation.<br>▪ The Measured resource, within a 2.5 km radius of drillholes, reflects the predominance of drilling with a spacing of approximately 1.5 km between holes. Porosity measurements have been made in these diamond and rotary holes with the BMR porosity tool, providing over 200,000 individual measurements. Any measurements that were related to washouts in holes were removed and porosity data was composited to 10 m data points. Physical porosity samples were also taken and compared with BMR porosity data, with samples from drill cores well constrained within the holes. These samples have an overall higher average porosity, but sampling was less systematic than the BMR porosity data, which was used in preference, with the laboratory data as a check on this data source.<br>▪ Indicated Resources defined in the project are beneath the Measured Resources, from 400 to 600 m and lateral to the Measured Resources except where drilling at K24 and K25 led to upgrading resource within this depth interval to Measured. Indicated Resources are defined extending to the SE of the Measured Resources, in the area around hole K06. Similarly, they are defined as the northern extension from the Measured Resources, around holes K22 and K23 and to the south around K21. 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.<br>▪ The Inferred resource surrounding the Measured and Indicated resource in the properties reflects more limited |

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| | | drilling in the surrounding area, and locations closer to the border of the basin. This classification includes holes and data within 5 km of holes. Brine within this radius was classified more conservatively as Inferred resources than the suggestion of Houston et. Al., 2011 regarding the classification of resources. It is expected that with further drilling much of the Inferred resources can be converted to Indicated resources although this is not guaranteed. |
| Audits or reviews | ▪ The results of any audits or reviews of Mineral Resource estimates. | ▪ Estimation of the Mineral Resource was supervised by the Competent Person. An audit has not been carried out, although discussions about different scenarios and search criteria was done and check estimates reviewed by the CP.<br>▪ An audit of sampling and field procedures was undertaken by Geoffrey Balwin in February 2023. |
| Discussion of relative accuracy/ confidence | ▪ Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.<br>▪ The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.<br>▪ These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. | ▪ An additional estimate of the resource was completed using an ID2 estimate and a Nearest Neighbour estimate. The comparison of the results with the ordinary kriging/ID2 estimate suggests the latter is a more conservative estimate and is considered to be acceptable.<br>▪ Visual inspection against samples in the model, and evaluation of sample and block statistics was undertaken as a check on the model and results are considered to be reasonable.<br>▪ *References:*<br>  ▪ *Houston, J., Butcher, A., Ehren, P., Evans, K., and Godfrey, L. The Evaluation of Brine Prospects and the Requirement for Modifications to Filing Standards. Economic Geology. V 106.*<br>  ▪ *AMEC Guidelines for Resource and Reserve Estimation for Brines* |

## Section 4

**Estimation and Reporting of Mineral Ore Reserves**

(Criteria listed in section 1, and where relevant in section 2 and 3, also apply to this section.)

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| Criteria | Section 4 – Estimation and Reporting of Mineral Ore Resources | |
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| Mineral Resource estimate for conversion to Ore Reserves | ▪ Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.<br>▪ Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. | ▪ The Mineral Resource estimate used as the basis of the Ore Reserve analysis is detailed in the 3 June 2025 ASX Announcement.<br>▪ Lake has undertaken a considerable amount of exploration drilling, sampling and processing test work such that the Kachi Resource has now been revised with Measured and Indicated Resource in excess of 8.2 Mt allowing Reserve Estimation and Definitive Feasibility Studies to be completed.<br>▪ The Mineral Resource estimate was completed by the Andy Fulton, the CP who also led the Ore Reserve estimates.<br>▪ Additional details on the Mineral Resource estimate are provided in Section 3 above.<br>▪ The mineral resource is inclusive of Ore Reserves. |
| Site Visits | ▪ Comment on any site visits undertaken by the Competent Person and the outcome of those visits.<br>▪ If no site visits have been undertaken indicate why this is the case. | ▪ Regular site visits by the CP have been undertaken since early in the project, including two site visits in 2023 with the most recent in March 2025.<br>▪ Close coordination with CP and Lake's technical team throughout exploration program and resource / reserve estimation programs. |
| Study Status | ▪ The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.<br>▪ The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. | ▪ The DFS Addendum has been released concurrently with this Ore Reserve update.<br>▪ The DFS Addendum has defined well field development plans (i.e., mine plan) for Kachi, which are based on a solidly defined resource model and dynamic numerical flow and transport Model with a geologic framework consistent with the resource model.<br>▪ Key components of the study that underpin the Ore Reserve calculation encompass sampling and analytical methods, the development of the geologic and Mineral Resource models, understanding of brine and sediment properties and their variability, and large scale and long duration pumping and injection tests of 12, 15 and 31 days.<br>▪ These data formed the basis for the numerical flow and transport Models and the Models were calibrated to historical data including groundwater and brine levels, laguna stage, spring flows, drawdown, and mounding during pumping and injection tests.<br>▪ The Models consider variable density flow to capture dynamics associated with shallow freshwater aquifers and dense brine present both in portions of the shallow system and at depth.<br>▪ This comprehensive approach culminated in the creation of integrated numerical Models that serve as the basis for the Ore Reserve assessment. As a result, there is a reasonable level of confidence that Kachi will be able to extract the specified quantities and grades of brine. It's important to note that the estimates provided here are considered reasonable based on the data available at the time this Competent Person's Statement was prepared.<br>▪ The mine plan for a brine project is the well field layout, well depths and construction details and the pumping schedule haven been designed to a DFS level. The mine plan has been simulated in the numerical Model, and the results demonstrate its technical feasibility. |

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| | | ▪ The project material balance carries a total lithium recovery factor of 86.8% from lithium extraction through to final lithium carbonate product. This represents a material increase from the 75.3% recovery factor used in the Original DFS, driven primarily by the adoption of Lilac's Generation 4 ion exchange (IX) technology, which has increased the Direct Lithium Extraction (DLE) recovery from 80% to 90%. The balance of plant (BOP) recovery remains unchanged from the Original DFS. The updated recovery has been used in the technical and economic assessments of the project.<br>▪ Costs and modifying factors have been extensively considered. |
| Cut-off parameters | ▪ The basis of the cut-off grade(s) or quality parameters applied. | ▪ Resources are estimated utilizing a cut-off grade of 100 mg/L lithium, as the minimum viable processing grade. The Mineral Resources are reported as the in-situ total, theoretical, drainable brine volume above the 100 mg/L cut-off grade based on modifying factors described in this document.<br>▪ The proposed DLE technology has been demonstrated to operate cost-effectively at much lower lithium concentrations (e.g., less than 75 mg/L). |
| Mining factors or assumptions | ▪ The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).<br>▪ The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.<br>▪ The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.<br>▪ The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).<br>▪ The mining dilution factors used.<br>▪ The mining recovery factors used. Any minimum mining widths used.<br>▪ The manner in which Inferred Mineral Resources are utilised in mining studies | ▪ Mining of the brine will be completed using extraction wells with the layout presented in Figure 1. Extraction and injection well designs and related pumping systems have been developed to a DFS level as part of the well field development plan (DBSA, 2023) and wellfield layouts were updated as part of this document.<br>▪ As noted above, the mine plan including well locations, well depths and the pumping schedule, have been simulated in the numerical flow and transport Model. "Particle tracking" is used to determine the origin of the brine being captured by the extraction wells. If the origin of the particle is within the Measured Resource it is converted to a Proved Reserve. If the origin of the particle is Indicated Resource then it is converted to Probable.<br>▪ The Proved Ore Reserve is limited in duration to 7-years from the start of mining to account for the fluid nature of the resource and acknowledgement that Model predictions further out in time have a lower level of confidence. With future data and Model refinements, it is anticipated that portions of the Probable Ore Reserve may be upgraded to Proved status.<br>▪ Particle tracking indicates no recovery of Inferred Resource over the LOM and Inferred Resources have not been used in the Ore Reserve estimate.<br>▪ The overall process plant lithium recovery rate is updated to 86.8% in the DFS Addendum, reflecting a DLE recovery of 90% and unchanged balance of plant recovery.<br>▪ After lithium extraction spent brine will be injected back into the reservoir at the locations shown in Figure 1.<br>▪ Dilution of the lithium brine from natural sources and from spent brine injection is explicitly simulated in the Model. After 25-years of operation, modelled dilution is approximately 3%, as illustrated in Figure 13. However, average lithium grades even in Year 25 are well above the design basis for the Project.<br>▪ The Mine Plan extracts less than 9% of the Measured and Indicated Resource over the LOM. |

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| | and the sensitivity of the outcome to their inclusion.<br>▪ The infrastructure requirements of the selected mining methods. | ▪ Infrastructure required for mining extraction and injection wells, surface pumping networks, and pumping infrastructure, storage ponds, raw water wells and pipelines, and monitoring and communications equipment. |
| Metallurgical factors or assumptions | ▪ The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.<br>▪ Whether the metallurgical process is well-tested technology or novel in nature.<br>▪ The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.<br>▪ Any assumptions or allowances made for deleterious elements.<br>▪ The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.<br>▪ For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? | ▪ The metallurgical process proposed for extraction of lithium from the resource feed brine is DLE. The DLE method uses ion exchange, a proven technique in water treatment. Lilac has developed a proprietary IX media tailored to high-TDS brines, enabling selective lithium extraction.<br>▪ Lithium chloride eluate (LiCl) produced from the DLE system is purified and concentrated using conventional Reverse Osmosis (RO), Evaporation, and impurity precipitation technology.<br>▪ The purified and concentrated LiCl solution is converted to lithium carbonate via conventional carbonation process using sodium carbonate reagent to precipitate lithium carbonate.<br>▪ The ion exchange DLE process has been tested at bench-scale, pilot-scale, and demonstration-scale with thousands of hours of batch and continuous test work. Real brine feed from the Kachi site has been used for all levels of testing. Bench and pilot scale testing were carried out at the Lilac Solutions research and development laboratory in Oakland, California. Demonstration scale testing was carried out via an on-site demonstration unit that operated in campaigns from October 2022 to November 2023, processed over 5.2 million litres of brine and produced over 200,000 litres (200$m^3$) of concentrated lithium chloride product.<br>▪ The Kachi demonstration plant campaign validated the IX system under site-representative conditions, confirming consistent performance and the robustness of its modular design.<br>▪ The Gen 4 performance basis used in the DFS Addendum is supported by separate demonstration-scale testing conducted under site-representative conditions in Argentina. Consistent results across multiple test environments confirm the robustness of the technology and provide a sound technical basis for the recovery assumptions applied in the reserve estimate.<br>▪ Analytical validation was conducted by Lilac's laboratories in Oakland and on-site at Kachi. Independent third-party analyses were also performed using ICP-OES by accredited commercial labs, SGS, Kemetco, and McCampbell, across Argentina, Canada, and the U.S.<br>▪ Balance of plant (BOP) eluate purification, concentration, and lithium carbonate production test work was carried out by Lilac Solutions at their research and development laboratory in Oakland, California. Additional bench-scale test work (1,000 l) was completed by Hazen Research in Golden, Colorado. Bench scale (20 l), pilot scale (1,000 l), and demonstration scale (120,000 l) test work was conducted by Saltworks Technologies in Richmond, British Columbia to validate the BOP process for battery grade lithium carbonate production from Kachi brine via Lilac Solution ion exchange DLE technology. |
| Environmental | ▪ The status of studies of potential environmental impacts of the mining and | ▪ A high degree of consideration has been given to field development planning that will minimise impact on sensitive environmental areas. |

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| | processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported. | ▪ Process water recovery early in the project will minimise freshwater resource impacts.<br>▪ The environmental impact assessment for the production phase is well advanced and has been undertaken in parallel with the Resource and Reserve estimation.<br>▪ Lake is taking the initiative with regards to the permitting process early and ensuring environmental protection requirements are considered in the project design. The Kachi Project currently has a valid exploration environmental impact assessment approved as of 2017, and updated in accordance with the established legislation, with the latest renewal in November 2022 and was valid until November 2024. An extension has been requested to extend the duration of the permit until the Mining Ministry approves the permits for the exploitation. Additionally, the Kachi Project holds other sectoral permits including for fuel tanks, freshwater use, hazardous waste, and a local industrial permit.<br>▪ Numerical modelling suggests operational impacts to sensitive areas will remain within the range of natural seasonal variation, owing to the Lake's injection strategy that maintains reservoir and aquifer pressures.<br>▪ The Kachi Project has obtained a temporary freshwater extraction permit for a period of one year (valid until December 2025), authorizing the extraction from 4 wells at a rate of 64m3 per day. Activity is underway to secure the definitive permit for future phases. |
| Infrastructure | ▪ The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed. | ▪ Power and accommodations are not currently available at site. The Project expects to use a grid connection under a PPA with an IPP to start operations. Feasibility study on grid connection has been finalised by YPF Luz[44].<br>▪ Transportation analysis from the Argentine logistics company Transmining SA has been procured to ensure adequate allowance for transport is included in the cost-estimate for Kachi.<br>▪ Kachi site freshwater availability for LOM has been confirmed by the hydrogeologic Model.<br>▪ Required infrastructure includes construction and operations camps, electricity infrastructure, brine pumping and reinjection systems, water storage, chemical storage, product storage, and purification systems. |
| Cost | ▪ The derivation of, or assumptions made, regarding projected capital costs in the study.<br>▪ The methodology used to estimate operating costs.<br>▪ Allowances made for the content of deleterious elements.<br>▪ The source of exchange rates used in the study.<br>▪ Derivation of transportation charges. | ▪ The capital costs were estimated by Hatch engineering with input from project partners to produce a +/- 15% Class III estimate. The cost of the well field development was provided by Lake and the capital costs of the Lilac plant was a joint effort with quantities provided by Lilac and unit costs provided by Hatch.<br>▪ The operating costs were estimated by Hatch engineering with operating and IXM costs provided by Lilac and electricity rates provided by YPF Luz.<br>▪ The IXM process is tolerant to deleterious elements. However, design allowances have been included for potential sulphate removal via barium chloride and acid pre-treatment, though these may not be required based on brine quality. |

[44] Refer to ASX announcement dated 2 July 2025

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| | ▪ The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.<br>▪ The allowances made for royalties payable, both Government and private. | ▪ Allowance for key taxes and charges include:<br>▪ Zero percent export duty[45]<br>▪ Catamarca Province royalties based on "boca mina" value of the extracted minerals. As final royalty terms are not yet finalized, the mine-head value was provisionally based on lithium chloride revenues of $5,000/tonne, consistent with Argentine Mining Investment Law.<br>▪ No private royalties are considered in the model.<br>▪ The Kachi Project forecast includes production of Battery Grade Lithium Carbonate for the duration of the life of mine across the design range of brine chemistries.<br>▪ All costs were estimated in US Dollars. These costs included facility wide costs, direct extraction package, reagents, lithium chemical plant, general and administrative expenses, transportation, power, export duties and government royalties.<br>▪ Operating expenditure excludes corporate overhead costs.<br>▪ Lake expects to produce two by-products at its Kachi plant – sodium hydroxide NaOH and sodium hypochlorite NaClO. Potential revenues from these have been applied as a by-product credit in operating expenditures for the Kachi Project. |
| Revenue factors | ▪ The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.<br>▪ The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. | ▪ The Kachi Project forecast includes production of Battery Grade Lithium Carbonate for the duration of the life of mine across the design range of brine chemistries.<br>▪ The Kachi Project economic forecast utilizes a forward price projection provided in through paid subscription to Benchmark Mineral Intelligence as of Q2 2025. Prices for lithium carbonate considered in the economic evaluation correspond to CIF Asia contract prices in real 2025 terms.<br>▪ These prices do not reflect any assumptions of potential concessions or discounts that Lake may agree in the future with any potential Strategic Partners, Offtake Partners, Royalty Providers, or other type of project partner.<br>▪ The Kachi Project may enter long term binding offtake arrangements to support project financing. The final form of these agreements is yet to be determined.<br>▪ In November 2023, the Kachi Project retained Goldman Sachs as Financial Adviser in connection with exploring a potential strategic partnership for Kachi[46]. Furthermore, the board and management of Lake retained Goldman Sachs as a financial advisor in connection with exploring other strategic alternatives for Kachi, including the possibility of a sale of all or part of Kachi.[47]<br>▪ The impact of any future offtake contract agreements on pricing will be reflected in any subsequent bridging studies.<br>▪ Project economics are based on average price of $20,500 per tonne LCE over the life of mine, derived from forward price projection provided by Benchmark Mineral Intelligence in Q2 2025. |

[45] Based on provisions of Argentina RIGI Law passed in 2024 which eliminates export duties after three years of obtaining RIGI, for qualified capital projects that invest more than $200M in Argentina. Subject to extension of RIGI deadline to July 2027 and the outcome of direct negotiations with the Government during the application process

[46] Refer to ASX announcement dated 29 November 2023

[47] Refer to ASX announcement dated 7 May 2025

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| | | ▪ Additionally, the Project has assessed and presented a number of sensitivity cases including ranges of forward price projections. |
| Market assessment | ▪ The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.<br>▪ A customer and competitor analysis along with the identification of likely market windows for the product.<br>▪ Price and volume forecasts and the basis for these forecasts. • For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. | ▪ Lithium demand has been increasing rapidly over the last few years primarily driven by demand for rechargeable batteries used in Electric Vehicles and the company is well placed to benefit from the increased demand related to electric vehicle uptake globally.<br>▪ Lake Resources has an annual paid subscription to Benchmark Mineral Intelligence (BMI) which includes demand, supply, and pricing outlooks.<br>▪ Insight from BMI outlooks helped Lake Resources leadership conclude that Kachi is strategically well positioned to benefit from the increasing demand for lithium around the world and particularly for battery grade lithium chemicals which show the most robust potential.<br>▪ Some upside and downside factors to lithium price were identified by BMI for the global lithium market, but none were specific to Kachi and are well counterbalanced by the strengths and opportunities Kachi' offers. Some of the upside risk factors include the government policies that bolster CAM, gigafactory and EV rollout, greater and faster EV adoption, government policies towards regionalization, “friend-shoring” and reshoring of key battery commodities. Some of the downside risk factors include persistent high inflation that generates weaker demand or slows industrial output, heightened geopolitical tension, US-China escalating trade tensions, US tariffs on global trade partners, surge in geopolitical tension around the world, slower than expected adoption of EV technology and/or rapid expansion of Li-ion alternatives that push down long term demand, strengthening battery recycling processes and value chains could result in higher supply, and minimal disruptions to current supply combined with aggressive project expansion by Chinese players could result in continued oversupply.<br>▪ Kachi plans to produce a final battery grade product, unlike many hard rock competitor companies. The Kachi Project is well positioned, with forecast C1 costs fall in the first quartile of the global cost curve as per Benchmark Minerals Q2 2025 report.<br>▪ Battery grade product specification is consistent with requirements from major cathode and battery manufacturers. Final customer testing and qualification will be pursued during offtake discussions. |
| Economic | ▪ The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. • NPV ranges and sensitivity to variations in the significant assumptions and inputs | ▪ The project costs will be released to a Class III AACE estimate (+/-15%) in the DFS Addendum. The project cost assessment (OPEX/CAPEX) was completed by Hatch engineering with input from Lilac on DLE costs, Lake on drilling and well field costs, and YPF-Luz on electricity rates.<br>▪ Lake conducted a DFS level economic analysis using its own financial model.<br>▪ The economic evaluation was based on the brine flow rates from the production forecasts. The lithium carbonate production rate after ramp-up is assumed to peak at ~25 ktpa and remain at peak until the last year of production.<br>▪ Mining industry practitioners typically undertake financial modelling using real NPV values, meaning it does not |

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| | | account for the effect of inflation or price escalation. The resultant cashflows are then discounted by a weighted average cost of capital or discount rate. Lake conformed with this practice.<br>▪ A discount rate of 10% was applied to the cashflow in line with the industry average for lithium assets.<br>▪ Sensitivity analyses were conducted to evaluate the LCE prices, OPEX and CAPEX. The Kachi Project is generally resilient to OPEX and CAPEX factors and most sensitive to lithium price. |
| Social | ▪ The status of agreements with key stakeholders and matters leading to social licence to operate | ▪ Engagement is ongoing with local communities, provincial authorities, and federal regulators. The Company has implemented a structured communications and community relations strategy to support development of social license. |
| Other | ▪ To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:<br>▪ Any identified material naturally occurring risks.<br>▪ The status of material legal agreements and marketing arrangements.<br>▪ The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent. | ▪ The Original DFS has identified a number of risk factors, both related to the natural environment and other aspects of the Kachi Project. The natural risks identified are considered to be manageable by application of a rigorous risk management process and include:<br>▪ Finance Kachi Construction with Debt and Equity. Excessive debt affects interest payments, while abundant equity dilutes ownership, impacting future returns. Mitigation in place to include retention of appropriate expert advisors and completion of a robust business plan.<br>▪ Permitting Failure impacting the Bank Loan. Mitigation includes retention of suitably experienced personnel and a 3rd party consultant with experience of Equator Principles.<br>▪ Critical Hazard: Release of Toxic Chlorine Gas and Explosive Hydrogen Gas from Chlor-Alkali Plant. Equipment failure poses dual risks of safety and environmental concerns. Malfunctions in machinery or systems elevates the potential for adverse impacts on the surrounding environment. Mitigation includes siting in the most appropriate area of the process plant to reduce occurrence severity and selection of experienced contractors for supply, delivery and operation.<br>▪ Lithium price drop due to oversupply, from increased production or changing consumer behaviour, leads to a competitive market with surplus goods. This results in businesses losing revenue, facing financial challenges, impacting profitability and economic performance. Mitigation includes pursuing long term offtake agreements which include protection mechanisms such as a 'price floor'.<br>▪ Exceeding planned capital costs due to inadequate control, underestimation of requirements, and miscalculation pose significant project risks. Delays in critical components and external factors like climatic events or civil unrest compound challenges, leading to higher costs, potential investor abandonment, startup delays or failure and insolvency threats. Mitigation includes selection of suitability skilled Project Director, adoption of pro-active approach to management and selection of the most appropriate EPCM contractor.<br>▪ Raw material and contractor costs (OPEX) escalate beyond current estimates. Failure to capture all operating costs, project cost escalation, flawed budgeting, procurement, logistics issues, and external shocks (e.g., inflation). Mitigation includes retaining suitably qualified |

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| | | Project Director, the application of appropriate contingency allowance and implementation of pro-active risk management processes.<br>▪ Cooling tower performance, whether it be a dry cooling tower or a closed-loop system, arise from adverse weather conditions such as extreme heat, strong winds, cold temperatures or rain. Those unforeseen environmental factors, contribute to performance issues in cooling towers, whether dry or closed-loop. These unexpected elements result in additional costs, lost productivity, and necessitate process modifications, collectively impacting the overall operational efficiency of the cooling systems. Mitigation includes adoption of most appropriate design basis during future engineering phases<br>▪ The project can have workforce challenges, including a limited pool of skilled workers, insufficient pre-hire training, and high turnover during rapid development. Mitigation includes strategic human relations management including training, career progression and competitive remuneration and benefits package<br>▪ Changing brine chemistry - The composition of the brine may change over time, moving outside the design range, leading to changes in system performance, requiring process modifications. Variability in feed product poses risks such as increased costs, lost productivity, and the need for process modifications. Mitigation includes extensive investigation and modelling during the Original DFS and taking a conservative position with respect to the basis of design.<br>▪ Material legal agreements are understood to be in good standing. The Kachi Project tenements are granted as mining licenses. Such licenses have no expiry date so long as annual fees are paid, and all obligations are met under the national mining code. The Kachi Project encompasses 53 mineral concessions covering approximately 105,954 hectares. These are in good standing, with only one mineral property application still pending approval. The Project has not yet entered into binding offtake agreements.<br>▪ Whilst there can be no assurance that the Kachi Project will obtain all the permits it needs on time or at all, no reason is known of by the Company to expect delays to permit approvals based on the consultations that the Kachi Project has conducted with the regulatory agencies, local communities and other stakeholders. There are therefore reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the DFS Addendum. |
| Classification | ▪ The basis for the classification of the Ore Reserves into varying confidence categories. •<br>▪ Whether the result appropriately reflects the Competent Person's view of the deposit.<br>▪ The proportion of Probable Ore Reserves that have | ▪ The Ore Reserves CP is of the opinion that Lake has conducted sufficient geologic and hydrogeological and mineral processing test work to provide a high level of certainty for the modifying factors for Kachi Project.<br>▪ Ore Reserves are estimated for Proved and Probable classifications using the numerical Model to determine the origin of the recovered brine from either the Measured or Indicated<br>▪ The Ore Reserves estimate for Kachi is Proved at 170.3 kt LCE, and Probable at 454.1 kt LCE. The Mineral Ore for Kachi are 85% derived from the Measured Mineral |

| | | |
|---|---|---|
| | been derived from Measured Mineral Resources (if any). | Resource mass estimated per Section 5.5 of this Reserves Estimate |
| Audits and Reviews | ▪ The results of any audits or reviews of Ore Reserve estimates. | ▪ An audit of sampling and field procedures was undertaken by Geoffrey Balwin in February 2023.<br>▪ Mineral Resource Estimation of November 2023 was independently reviewed by J Houston. |
| Discussion of relative accuracy/ confidence | ▪ The infrastructure requirements of the selected mining methods. | ▪ The accuracy of the Mineral Resource and Ore Reserve is influenced by several factors, including the quality and quantity of available data, as well as engineering and geological interpretation and judgment. Key components of the study that underpin the Ore Reserve calculation encompass sampling and analytical methods, the development of the 3D hydrostratigraphic mineral resource model, understanding of brine and sediment properties and their variability, and the creation and calibration of integrated numerical Models for groundwater flow and mass transport. These tasks were carried out sequentially, with regular validation and calibration exercises conducted at each stage.<br>▪ Industry accepted guidance was recognised with respect to bore spacing. The M&I for which this Reserve Statement is defined by a compact exploration program with drill hole pattern well within the recommended maximum borehole spacing.<br>▪ All of the multiple parameter assessments have been undertaken with an inherent factor of safety.<br>▪ Sampling protocols have been adapted through the program based on QAQC outcomes to reflect uncertainty of analytical result outside the control of the project.<br>▪ The reserve estimate is based on the previously stated resource estimate. The reserve component is located 100% within the previously announced M&I resource of which 98% is within Measured Resource. The resource which includes inferred is considered global.<br>▪ This comprehensive approach culminated in the creation of integrated numerical Models that serve as the basis for the Ore Reserve assessment. As a result, there is a reasonable level of confidence that Kachi will be able to extract the specified quantities and grades of brine, as presented in this ASX Release. It's important to note that the estimates provided here are considered reasonable based on the data available at the time this Competent Persons Statement was prepared. |

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# APPENDIX 2: Updated Resource Estimate of Contained Lithium

**Measured Mineral Resource May 2025 (to 600 m depth)**

| Unit | Sediment Volume $m^3$ | Specific Yield % | Brine volume $m^3$ | Liters | Li mg/L | Li grams | Li Tonnes | Tonnes LCE |
|---|---|---|---|---|---|---|---|---|
| A | 10,339,000,000 | 0.078 | 806,442,000 | 806,442,000,000 | 0.210 | 169,352,820,000 | 169,000 | 901,000 |
| B | 4,385,500,000 | 0.088 | 385,740,000 | 385,740,248,000 | 0.229 | 88,334,517,000 | 88,000 | 470,000 |
| C to 400 | 7,561,800,000 | 0.068 | 514,202,000 | 514,202,400,000 | 0.230 | 118,266,552,000 | 118,000 | 629,000 |
| Fan West to 400 | 11,088,000,000 | 0.095 | 1,053,360,000 | 1,053,360,000,000 | 0.220 | 231,739,200,000 | 232,000 | 1,233,000 |
| C to 400 | 7,561,800,000 | 0.068 | 514,202,000 | 514,202,400,000 | 0.230 | 118,266,552,000 | 118,000 | 629,000 |
| K24 -K25 below 400 | 7,744,200,000 | 0.093 | 720,211,000 | 720,210,600,000 | 0.250 | 180,132,593,000 | 180,000 | 958,000 |
| **Total** | **41,118,500,000** | | **3,479,955,000** | **3,479,955,248,000** | | **787,825,682,000** | **788,000** | **4,191,000** |

**Indicated Mineral Resource May 2025 (to 600 m depth)**

| Unit | Sediment Volume $m^3$ | Specific Yield % | Brine volume $m^3$ | Liters | Li mg/L | Li grams | Li Tonnes | Tonnes LCE |
|---|---|---|---|---|---|---|---|---|
| A South | 3,694,300,000 | 0.076 | 278,924,000 | 278,924,453,000 | 0.181 | 50,485,326,000 | 50,000 | 269,000 |
| B South | 1,489,000,000 | 0.075 | 111,544,000 | 111,543,670,000 | 0.179 | 19,927,611,000 | 20,000 | 106,000 |
| C South | 4,434,492,000 | 0.067 | 297,111,000 | 297,110,964,000 | 0.182 | 54,076,275,000 | 54,000 | 288,000 |
| A North | 3,075,200,000 | 0.095 | 292,144,000 | 292,144,000,000 | 0.232 | 67,776,824,000 | 68,000 | 361,000 |
| B North | 4,294,400,000 | 0.102 | 438,029,000 | 438,028,800,000 | 0.241 | 105,431,342,000 | 105,000 | 561,000 |
| C North | 4,115,300,000 | 0.102 | 419,761,000 | 419,760,600,000 | 0.182 | 76,396,429,000 | 76,000 | 406,000 |
| D North | 5,073,100,000 | 0.102 | 517,456,000 | 517,456,200,000 | 0.182 | 94,177,028,000 | 94,000 | 501,000 |
| K21 | 8,304,500,000 | 0.065 | 541,394,000 | 541,393,608,000 | 0.192 | 103,822,511,000 | 104,000 | 552,000 |
| Under Measured ABC 400-600 | 7,453,100,000 | 0.067 | 501,818,000 | 501,817,968,000 | 0.242 | 121,529,774,000 | 122,000 | 647,000 |
| Under Measured Fan 400 - 600 | 3,775,900,000 | 0.063 | 239,343,000 | 239,343,351,000 | 0.242 | 57,850,485,000 | 58,000 | 308,000 |
| **Total** | **45,709,292,000** | | **3,637,524,000** | **3,637,523,614,000** | **0** | **751,473,605,000** | **751,000** | **3,998,000** |

**Combined Measured and Indicated**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **86,827,792,000** | **-** | **7,117,478,861** | **7,117,478,861,140** | **-** | **1,539,299,286,959** | **1,539,299** | **8,189,000** |

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| Inferred May 2025 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Unit | Sediment Volume $m^3$ | Specific Yield % | Brine volume $m^3$ | Liters | Li mg/L | Li grams | Li Tonnes | Tonnes LCE |
| A | 3,870,500,000 | 0.08 | 309,640,000 | 309,640,000,000 | 0.185 | 57,283,400,000 | 57,000 | 305,000 |
| B | 1,569,100,000 | 0.079 | 123,959,000 | 123,958,900,000 | 0.191 | 23,676,150,000 | 24,000 | 126,000 |
| C | 5,446,470,000 | 0.074 | 404,338,000 | 404,338,308,000 | 0.218 | 88,218,532,000 | 88,000 | 469,000 |
| Fan North | 9,109,970,000 | 0.102 | 929,217,000 | 929,216,940,000 | 0.232 | 215,578,330,000 | 216,000 | 1,147,000 |
| Fan South | 2,767,500,000 | 0.093 | 257,378,000 | 257,377,500,000 | 0.239 | 61,513,223,000 | 62,000 | 327,000 |
| Under volcano | 6,718,700,000 | 0.074 | 500,187,000 | 500,187,059,000 | 0.193 | 96,425,185,000 | 96,000 | 513,000 |
| **Total** | **29,482,240,000** | - | **2,522,621,000** | **2,522,620,663,000** | - | **542,294,093,000** | **542,000** | **2,885,000** |

- This table is replicated from the Mineral Resource update announced to ASX on 3 June 2025 and has not materially changed from that date.
- JORC definitions were followed for Mineral resources.
- The Competent Person for the Mineral Resource estimate was Andrew Fulton, MAIG.
- No internal cut-off concentration has been applied to the resource estimate. The resource is reported at a 100 mg/L cut-off.
- Some numbers do not add due to rounding.
- Specific Yield (Sy) = Drainable Porosity.
- Lithium is converted to lithium carbonate (Li2CO3) equivalent with a conversion factor of 5.32. For details on the lithology units please refer to the 15 June 2023, 22 August 2023, and 4 October 2023 ASX announcements.

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## APPENDIX 3: Proved and Probable Lithium Reserves

| Reserve Category | Years | Lithium (Tonnes) | LCE (Tonnes) | Average Lithium (mg/L) |
|---|---|---|---|---|
| Proved | 1 | 4,390 | 23,310 | 270 |
| Proved | 2-7 | 28,360 | 150,850 | 270 |
| Probable | 8-25 | 85,060 | 452,540 | 267 |
| Total | 1-25 | **117,810** | 626,760 | |

Notes to the Ore Reserve Estimate:

- This table is replicated from the Ore Reserve update announced to ASX on 4 August 2025 and has not materially changed from that date.
- Lithium is converted to lithium carbonate (Li2CO3) equivalent with a conversion factor of 5.32.
- The effective date for the Ore Reserve estimate is based on the Mineral Resource Estimate update from 3 June 2025.
- The Ore Reserve estimate above includes processing losses in the plant and transfer ponds.
- Projected processing is based on first year rate of 23,310 tonnes LCE from the Model, representing the final 12 months of the 18-month ramp up period. No credit to reserve given for first 6 months of ramp up and it is not simulated in the Model.
- Year 1 throughput estimated at 23,310 t LCE and projected processing for Years 2 – 25 at rate of 25,141 tonnes battery grade LCE, the name plate capacity of the plant based on updated design work by Hatch.
- The Competent Person for the Ore Reserve estimate is Andrew Fulton.
- Numbers may not add due to rounding to nearest 10 t.