

Extraordinary General Meeting

16 September 2024

ASX: LKE; OTC: LLKKF
lakeresources.com.au

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Forward Looking Statements

Certain statements contained in this presentation, including information as to the future financial performance of the projects, are forward-looking statements. Such forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Lake Resources N.L. are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies; involve known and unknown risks and uncertainties and other factors that could cause actual events or results to differ materially from estimated or anticipated events or results, expressed or implied, reflected in such forward-looking statements; and may include, among other things, statements regarding targets, estimates and assumptions in respect of production and prices, operating costs and results, capital expenditures, reserves and resources and anticipated flow rates, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions and affected by the risk of further changes in government regulations, policies or legislation and that further funding may be required, but unavailable, for the ongoing development of Lake's projects. Lake Resources N.L. disclaims any intent or obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise. The words "believe", "expect", "anticipate", "indicate", "contemplate", "target", "plan", "intends", "continue", "budget", "estimate", "may", "will", "schedule" and similar expressions identify forward-looking statements. All forward-looking statements made in this 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.

Without limiting the paragraph above, certain forward-looking statements in this presentation, including, without limitation, to future potential production capacity, upside potential, additional phases, total potential production capacity and related future forecast financial information based on these forward-looking statements have been prepared for internal management purposes only, and such information is therefore insufficiently definite to warrant public disclosure. As such information has only been prepared for internal management purposes only, it has not been verified or prepared in accordance with the JORC Code or the ASX Listing Rules. Such information is being disclosed in this presentation pursuant to strict confidentiality obligations pursuant to a non-disclosure agreement; and no recipient of this presentation should put any reliance on such information as it is inherently uncertain, contains matters of supposition, and is insufficiently definite to warrant public disclosure.

Compliance Statement

The information contained in this presentation relating to financial forecasts, production targets, exploration results, Measured, Indicated and Inferred resource estimates, project execution, infrastructure and testing work, has been derived from the information in Lake's Kachi Project Phase One Definitive Feasibility Study Results and Lake's Ore Reserve Statement both announced on ASX on 19 December 2023 and mineral resource update announced on ASX on 22 November 2023. Lake confirms that it is not aware of any information that materially affects the information included in Lake's Kachi Project Phase One Definitive Feasibility Study Results and Lake's Ore Reserve Statement both announced on ASX on 19 December 2023 and mineral resource update announced on ASX on 22 November 2023 and all material assumptions contained in that announcement continue to apply and have not materially changed. On this basis, Lake confirms that the Competent Person's findings in Lake's Kachi Project Phase One Definitive Feasibility Study Results and Lake's Ore Reserve Statement both announced on ASX on 19 December 2023 and, in respect of Lake's mineral resource, in the mineral resource update announced on ASX on 22 November 2023, have not changed nor been modified in any material respects since those announcements.

Key Highlights



1 World Class 25ktpa Battery Grade Lithium Project; Globally Significant 10.6Mt LCE Resource; Strategically Important to Argentina

2 Proven Ion-Exchange DLE Technology Increases Process Efficiency and Reduces Environmental Footprint; Recent Technology Updates Yield 90% Lithium Recovery and Lower Operating Costs

3 Power Solution for Kachi in Progress with YPF Luz; LOI Signed for the FEED of the Power Delivery System

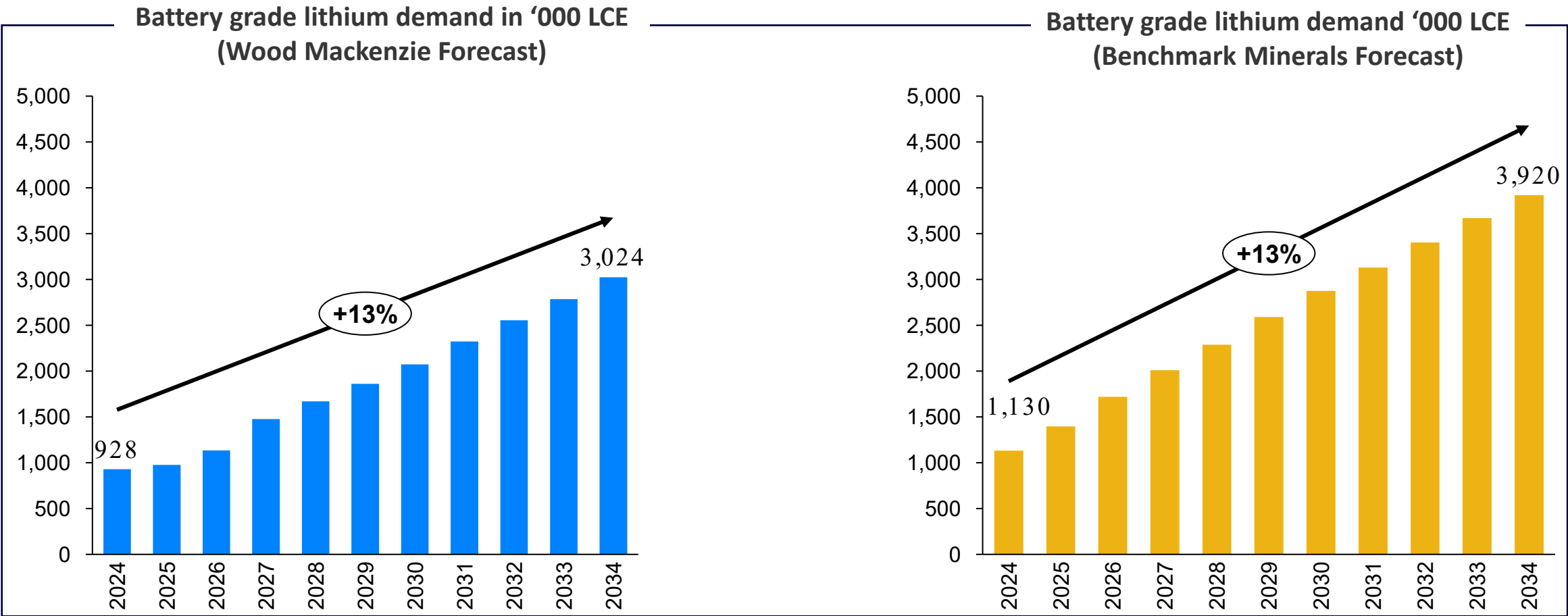
4 Advanced Technical Work Proven Out in December 2023 DFS

5 Strategic Partnering Process Broadens the Menu of Available Funding Opportunities and Enables Kachi to Better Optimise Offtake Economics

Market Update

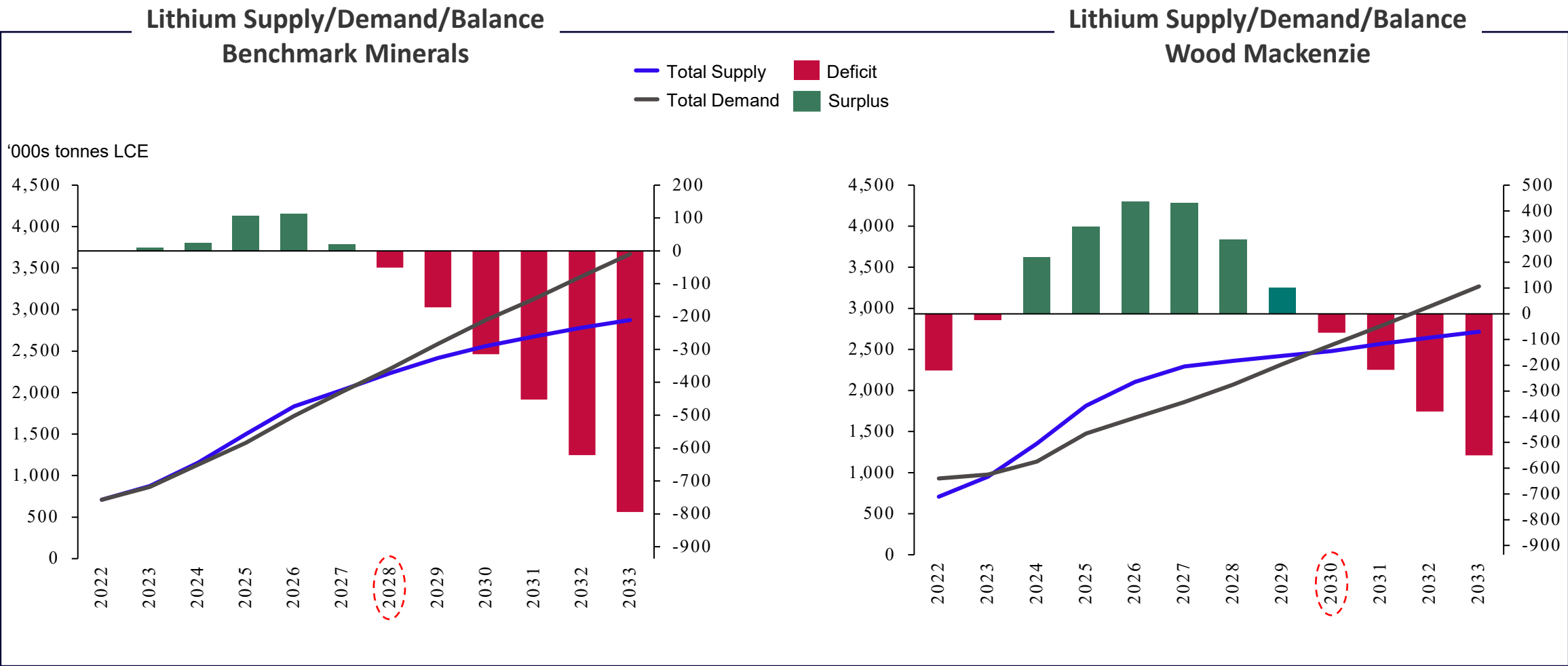


Long term outlook for lithium demand remains positive



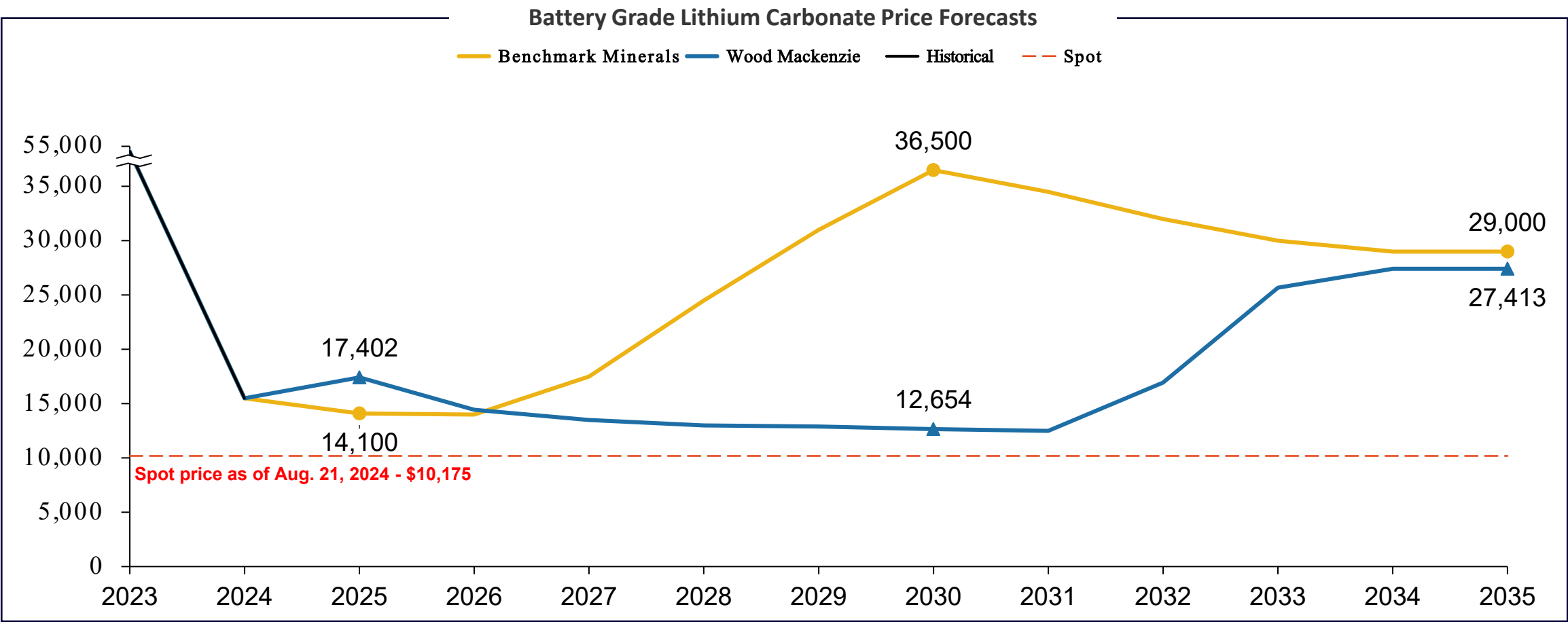
Lithium market currently oversupplied

However, market deficit expected to kick in between 2028 and 2030



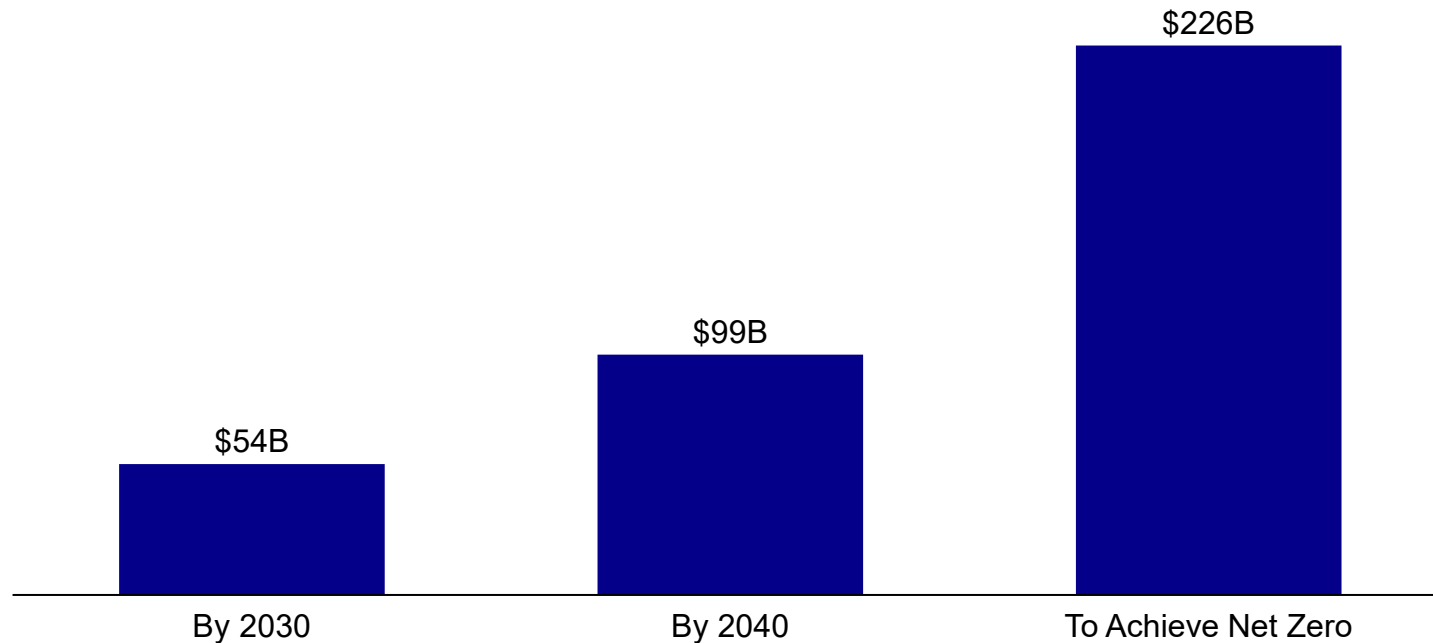
Lithium prices expected to be “lower for longer”

Short term supply surpluses, high interest rates and current price environment will tighten access to project funding but sow seeds for a new price cycle



The lithium industry is estimated to need ~\$54B in total capex between now and 2030, which translates to roughly six Kachi-sized projects every year over the next six years

Estimated Lithium Capital Requirements

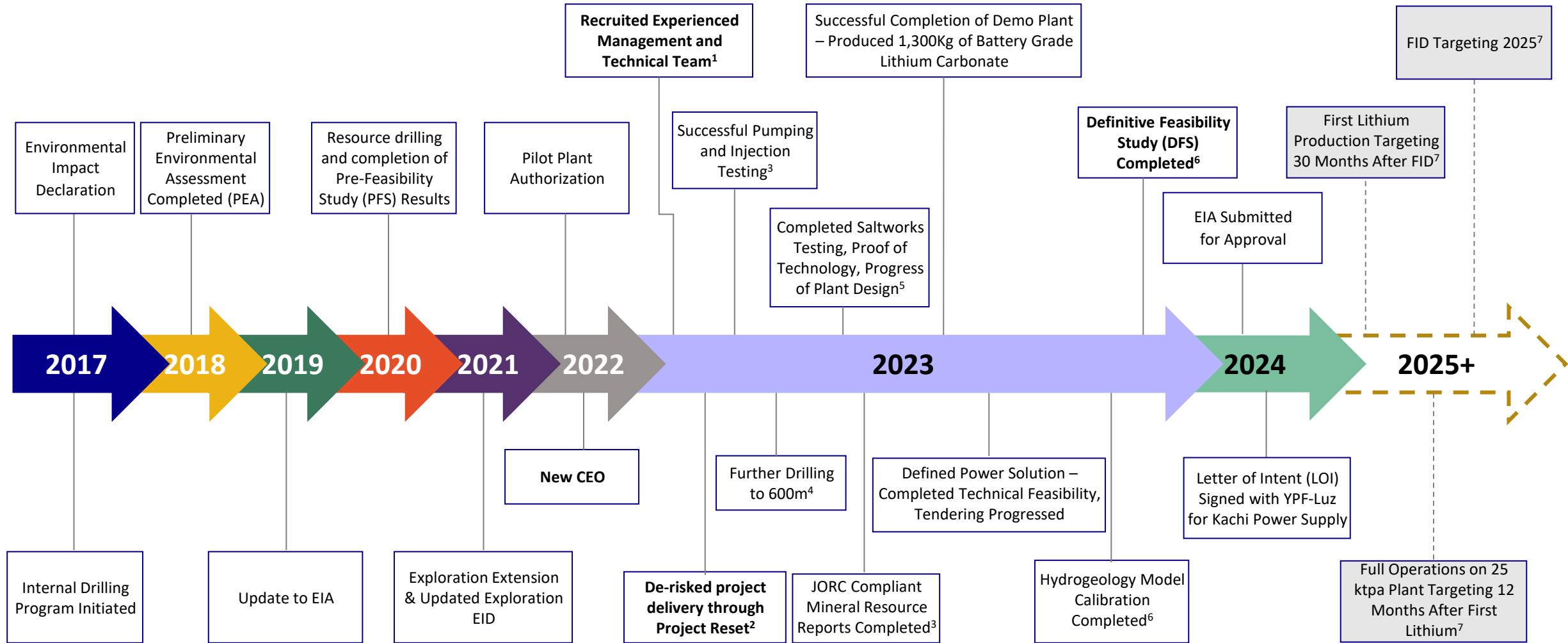


- Estimates may be understated
- New lithium sources are more costly to extract and refine, so cost curve must rise
- Capital intensity will reach a point where growing output will be challenging without increased prices

Operational Update



Kachi Project Timeline



¹ Refer to ASX announcement dated 12 January 2023. ² Refer to ASX announcement dated 19 June 2023. ³ Refer to ASX announcements dated 15 June 2023, 16 August 2023, 26 September 2023, 4 October 2023 and 12 February 2024. ⁴ Refer to ASX announcement dated 22 August 2023. ⁵ Refer to ASX announcement dated 26 September 2023. ⁶ Refer to ASX announcement dated 19 December 2023.

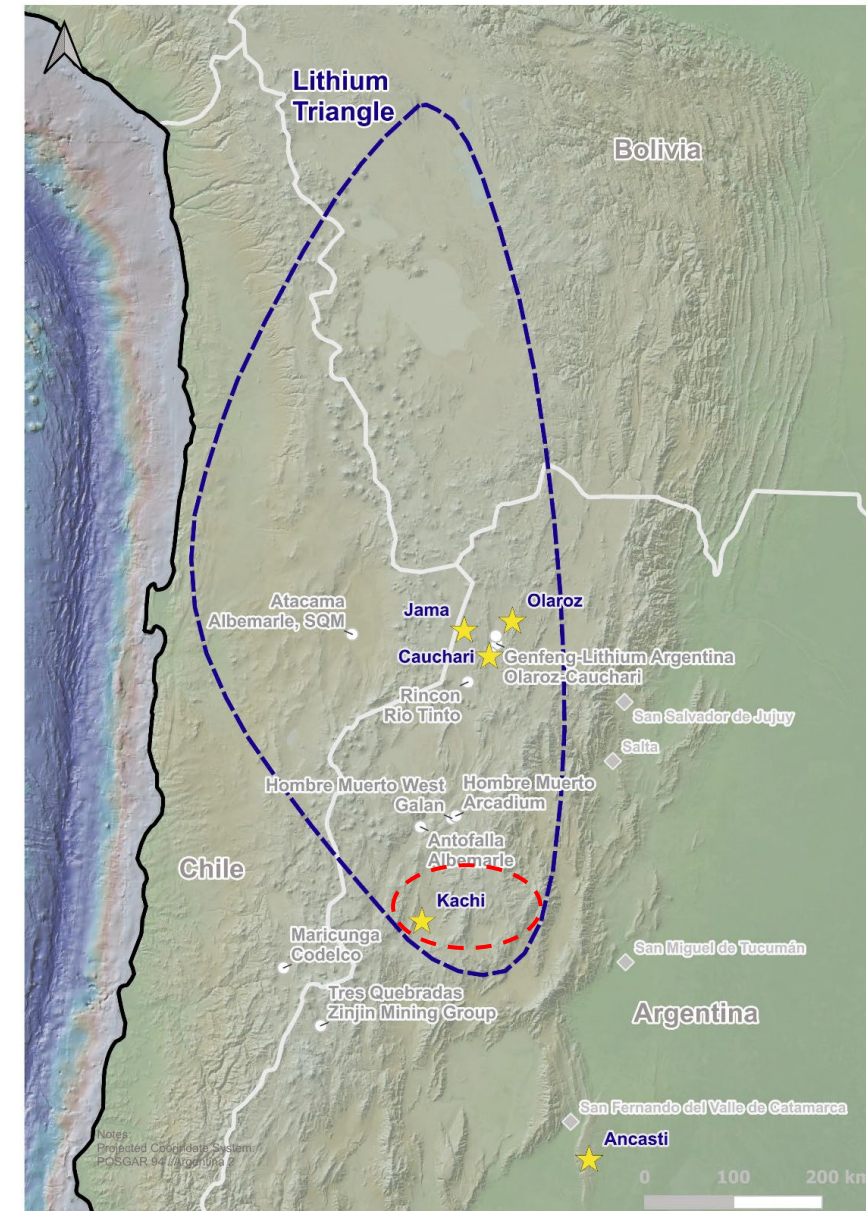
⁷ Timing is indicative only and subject to change. This timeline has been prepared solely on the basis of information that has been released to the market and no other information.

Kachi Overview

Kachi scale and expansion potential underpin its strategic attractiveness











Project Highlights

Location	Catamarca Province, Argentina
Project Stage	<ul style="list-style-type: none"> ■ Phase 1 DFS completed in December 2023 ■ Near “shovel ready”
Products	Battery Grade Lithium Carbonate (>99.5% purity)
Resources	<p>10.6 Mt LCE</p> <ul style="list-style-type: none"> ■ Measured and Indicated: 7.3 Mt LCE — Ore Reserves: 0.6 Mt LCE ■ Inferred: 3.3 Mt LCE
Project Execution Approach	<ul style="list-style-type: none"> ■ Phase 1 – 25 ktpa plant capacity ■ Potential Phase 2 – construction of second plant with additional total capacity of 25 ktpa. Additional expansion in subsequent phases a possibility
Mine Life	25 years



Kachi vs. Selected Lithium Carbonate Assets in Lithium Triangle

Total Resources (Mt LCE)

	15.1	11.8	11.1	10.6	6.6	6.0	4.9	1.9	1.2
Asset	Centenario Ratones (Phase 1 Only)	Rincón	Pozuelos-Pastos Grandes	Kachi ¹	Hombre Muerto West	Cauchari	Pastos Grandes	Maricunga	Laguna Verde
Owner	 								
Annual Production Target Capacity (ktpa)	24	50 ²	50	25+	21	25	24	20	20
Mine Life	40	40	NA	25	40	30	40	20	30
Capex (\$ M)	870	NA	NA	1,376	429	659	448	1,200	384
Grade (mg/L)	407	352	NA	205 ¹	879	475	427	953	246
Cash Operating Cost (\$ / tonne)	4,500 – 5,000	4,322	NA	6,047 ³	6,305	7,879	3,388	6,674	3,875
Extraction	DLE	DLE	Evaporation	DLE	Evaporation Pond	Evaporation Pond	Evaporation Pond	Evaporation Pond	DLE
Development Stage	Definitive Feasibility Study (DFS)	Definitive Feasibility Study (DFS) ²	Pilot Plant	Definitive Feasibility Study (DFS)	In Construction	Pre-Feasibility Study (PFS)	Feasibility (FS)	Definitive Feasibility Study (DFS)	Scoping (SS)

Sources: Wood Mackenzie, company presentations and technical reports. The company does not verify the accuracy of information derived from Wood Mackenzie or from other company presentations and reports
Notes: Resource based on M&I and Inferred Resources. ¹ Basis of design lithium grade is based on information in Lakes DFS. Refer to ASX announcement on 19 December 2023. ² Rincon's annual production target capacity of 50 ktpa is post-DFS but it's DLE "starter" plant under construction is 3 ktpa. ³ Cash Costs include facility wide costs, direct extraction package, reagents, lithium chemical plant, general and administrative expenses, transportation, and power. All dollar figures in USD.

2024 Highlights

- **Achieved critical milestones for Kachi** – (i) submitted Kachi’s Production Environmental Impact Assessment (“EIA”)¹ in March 2024 with an expected approval in 1H2025 and (ii) signed a non-binding Letter of Intent (“LOI”) with YPF Luz, a leading power generation company in Argentina to evaluate and negotiate agreements with regard to a high voltage line and delivery of the power supply for Kachi; YPF Luz will continue to progress FEED through the remainder of 2024²
- **Strategic Partnering Process** – led by Lake’s financial advisor, Goldman Sachs, and the Lake management team, launched a robust Strategic Partner Process for Kachi Project engaging key global parties interested in securing long-term supply of battery grade lithium carbonate; discussions are ongoing with a select group of interested parties³
- **Significantly reduced “cash burn”**³ – materially reduced our monthly cash expenditure through (i) an approximate 70% reduction in global headcount and (ii) additional rationalization of and decrease in general and administrative expenses
- **Raised significant capital** – Successfully extended financial runway by adding approximately A\$19 million in liquidity via (i) A\$15 million Equity Placement⁴, (ii) A\$1.5 million from the Shareholder Purchase Plan (“SPP”)⁵ and (iii) A\$2.5 million from the Company’s At-the-Market facility (“ATM”)⁶
- **Launched Investor Hub** – a dedicated platform for Lake investors to learn more about the Company and our latest activities⁷

1. Refer to ASX announcement dated 26 March 2024

2. Refer to ASX announcement dated 6 May 2024

3. Refer to ASX announcement dated 1 July 2024

4. Refer to ASX announcement dated 12 March 2024

5. Refer to ASX announcement dated 23 April 2024

6. Refer to ASX announcement dated 25 July 2024

7. Refer to ASX announcement dated 1 May 2024

2023 Kachi Achievements

- ✓ **De-risked project delivery through Project Reset¹**
- ✓ **Successful pumping and Injection Testing²**
- ✓ **Further drilling to 600m³**
- ✓ **Completed Saltworks Testing, Proof of Technology, Progress of Plant Design⁴**
- ✓ **JORC Compliant Mineral Resource Reports Completed²**
- ✓ **Successful Completion of Demo Plant – Produced 1,300Kg of Battery Grade Lithium Carbonate**
- ✓ **Defined Power Solution – Completed Technical Feasibility, Tendering Progressed**
- ✓ **Hydrogeology Model Calibration Completed⁵**
- ✓ **Definition Feasibility Study (DFS) Completed⁵**

1. Refer to ASX announcement dated 19 June 2023

2. Refer to ASX announcements dated 15 June 2023, 16 August 2023, 26 September 2023, 4 October 2023, and 12 February 2024

3. Refer to ASX announcement dated 22 August 2023

4. Refer to ASX announcement dated 26 September 2023

5. Refer to ASX announcement dated 19 December 2023

Argentine Congress approved an incentive regime for large investments (Régimen de Incentivo para Grandes Inversiones or RIGI)

- RIGI applies to projects across multiple industries including lithium mining. Capital investment of at least US\$200 million required to qualify under RIGI
- Summary of incentives provided under the RIGI include:
 - **Removes the effects of the exchange controls** that Argentina currently has in force or implements from time to time
 - Provides multiple beneficial tax-related changes, including **setting the corporate income tax rate at 25%** with the benefit of accelerated depreciation
 - **Provides an improved VAT regime** as well as an improved import and export framework
 - **Provides customs incentives** including exemptions from import and export duties
- Importantly, the tax and customs incentives and the special foreign exchange regulations **cannot be modified by more burdensome legislation during the 30 years following** the approval / commitment of any project under RIGI

US and Argentina signed an MOU to Strengthen Cooperation on Critical Minerals

- The MOU signifies the desire of both governments to strengthen cooperation on critical mineral supply chains and to promote trade and investment in critical mineral resource exploration, extraction, processing, refining, recycling, and recovery
 - The minerals agreement will make it easier for Argentina to work with countries in the **Minerals Security Partnership**, a US-led group that includes 14 countries and the European Union

Financial Update



Cash Position and Finance Update¹

- **Liquidity Position** - Lake held cash of A\$22.902 million (US\$15.276 million) at 30 June 2024 (including currencies in AUD, USD and Argentine Pesos) with no debt; importantly, the Company added an additional A\$2.5 million (inclusive of costs) from its ATM post 30 June 2024 quarter end¹
- **Non-Core Asset Sale** – to further sharpen the focus on Kachi and lengthen Lake’s liquidity runway, the Company launched a self-advised process for the potential sale of non-core assets and lithium tenements located in Jujuy and Catamarca Provinces; this process is active and ongoing
- **Material Expenditure Reductions** – during the 30 June 2024 quarter, Lake achieved the lowest quarterly cash expenditures in over two years with an approximate 50% reduction in cash expenditures, compared to the 31 March 2024 quarter; this material out-performance reflects the significant cost take-out achieved this year and the financial benefit of the Company’s active working capital management
- **2H2024 Expenditure Reduction** - the Company anticipates cash expenditures in the second half of calendar year 2024 to be reduced by an additional 10% - 20% compared to the first half of calendar year 2024;² fiscal year 2025 cash expenditures expected to include the payment of (i) accrued severance to former employees, and (ii) short-term incentive obligations, among other cash expenditures

¹ Refer to ASX announcement dated 29 July 2024

² Excluding impact of foreign exchange

Key Takeaways



Near term priorities

Strategically deliver Kachi

- Complete Strategic Partnership process
 - Complete FEED study for high voltage power supply with YPF-Luz
 - Obtain EIA approval
-

Provide sufficient liquidity runway

- Complete sale of non-core assets
 - Undertake further cost optimization
 - Additional capital raising as needed
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Why Invest in Lake Resources?

Positioned to Endure Current Market Headwinds to Benefit from Compelling Market Fundamentals

- Strategic actions taken to preserve shareholder capital, extend financial runway and pursue advancement of value-add initiatives
- At current lithium prices, there are not enough projects moving to FID to fill the supply gap, which will cause prolonged deficit of lithium supply towards end of decade
- Recent Critical Minerals MOU between US and Argentina expected to drive foreign investment in Argentina

Globally Significant Resource and Proven, Sustainable 25Ktpa Project

- Mine Plan represents approximately 10% of Measured and Indicated Resource over the 25-year Life of Mine
- Rigorous testing yields consistent results of high purity, battery grade lithium carbonate
- Environmental impact considerably more favourable than other processes

Compelling Project Economics with Opportunities for Further Optimization

- Opportunities for Capex and Opex efficiencies between now and start of production
- Optimization opportunities already identified, including reductions in DLE operating costs



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Mineral Resource Estimate Table

Measured November 2023 (to 400 m depth)

Unit	Sediment Volume m ³	Specific Yield %	Brine Volume m ³	Liters	Li mg/l	Li grams	Li Tonnes	Tonnes LCE
A	11,001,000,000	0.078	858,078,000	858,078,000,000	210	179,783,644,000	180,000	956,000
B	4,366,100,000	0.081	352,090,000	352,090,162,000	229	80,628,647,000	81,000	429,000
C	8,007,400,000	0.068	544,503,000	544,503,200,000	230	125,427,401,000	125,000	667,000
Fan West	8,833,000,000	0.095	839,135,000	839,135,000,000	220	184,609,700,000	185,000	982,000
Total	32,207,500,000	-	2,593,806,000	2,593,806,362,000	-	570,449,393,000	570,000	3,035,000

Indicated November 2023 to 600 m

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	278,924,452,000	181	50,485,326,000	50,000	269,000
B (South)	1,489,000,000	0.075	111,543,000	111,543,670,000	179	19,959,624,000	20,000	106,000
C (South)	4,382,400,000	0.067	294,407,000	294,407,879,000	182	53,582,234,000	54,000	285,000
A (North)	3,075,200,000	0.095	292,144,000	292,144,000,000	232	67,891,052,000	68,000	361,000
B (North)	4,294,400,000	0.095	407,968,000	407,968,000,000	241	98,166,484,000	98,000	522,000
C (North)	9,188,400,000	0.092	845,333,000	845,332,800,000	182	206,021,447,000	206,000	1,096,000
400 – 600m Under Salar	12,230,170,000	0.066	806,922,000	806,922,156,000	242	195,275,162,000	195,000	1,039,000
400 – 600m West Fan Deep	4,858,200,000	0.092	446,954,000	446,954,400,000	244	109,056,874,000	109,000	580,000
Total	43,212,070,000		3,484,197,000	3,484,197,358,000		800,438,203,000	800,000	4,258,000

Combined Measured + Indicated

	75,419,570,000		6,078,004,000	6,078,003,721,000		1,370,887,596,000	1,370,000	7,293,000
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Inferred November 2023

Unit	Sediment Volume m ³	Specific Yield %	Brine Volume m ³	Liters	Li mg/l	Li grams	Li Tonnes	Tonnes LCE
A	4,756,500,000	0.080	378,325,000	378,325,351,000	185	69,975,435,000	70,000	372,000
B	1,671,300,000	0.079	131,198,000	131,197,886,000	191	25,101,960,000	25,000	134,000
C	5,287,600,000	0.074	393,746,000	393,746,422,000	218	85,950,119,000	86,000	457,000
Fan North	8,895,490,000	0.081	716,324,000	716,324,455,000	232	166,081,974,000	166,000	884,000
Fan South	12,248,490,000	0.064	781,249,000	781,249,112,000	239	186,718,538,000	187,000	993,000
Under volcano	6,718,700,000	0.074	500,471,000	500,471,260,000	192	96,334,211,000	96,000	512,000
Total	39,578,080,000		2,901,314,000	2,901,314,485,000		630,162,237,000	630,000	3,352,000

Note: This table has been directly extracted from the JORC update announced on 22 November 2023. Lake Resources N.L. confirms that it is not aware of any information that materially affects the information included in Lake's JORC update announced on ASX on 22 November 2023 and all material assumptions contained in that announcement continue to apply and have not materially changed.