

## ASX ANNOUNCEMENT

4 August 2025

# Updated Lithium Ore Reserve for Flagship Kachi Project

***Optimized mine plan delivers 25,000 tpa operation with fewer wells, higher lithium grades and higher lithium recovery rates***

- Higher direct lithium extraction recovery rates associated with Lilac's Generation 4 media results in significant decrease in the number of production and injection wells.
- Updated 25,000 tpa<sup>1</sup> operational mine plan of 11 production wells and 14 injection wells has **a lithium grade of 268 mg/L over the 25-year Life-of-Mine<sup>2</sup>**.
- Ore Reserve is constrained by currently planned plant capacity 25,141 tpa, not pumping and injection capacities.
- Revised wellfield development plan with average brine grades of 268mg/L utilizes advanced oilfield drilling and completion technologies to reduce execution time and costs. This results in ~\$49.3M in estimated CAPEX savings and ~\$6.7M in annual estimated OPEX savings compared with wellfield development plan in the 2023 Kachi Phase One Definitive Feasibility Study ("Original DFS"), which had a design basis of 205 mg/L.
- Relative to the 2025 updated Kachi Phase One DFS Addendum ("DFS Addendum")<sup>3</sup> with a 249 mg/L design basis, the updated wellfield plan described in this updated Ore Reserve has the potential to further reduce CAPEX and OPEX estimates on a per well basis beyond what is described in the DFS Addendum.
- Kachi wellfield layout optimised using the Numerical Hydrogeologic Model ("Model") to maximise lithium grade recovered, maximise Proved Ore Reserve and minimise environmental impacts.
- 98% of the 25-year LOM production is derived from Measured Resources.

Lake Resources N.L. (ASX: LKE; OTC: LLKKF) ("Lake" or "the Company") is pleased to provide an updated Ore Reserve estimate for the Kachi lithium brine project ("Kachi" or the "Project") in Catamarca Province, Argentina.

---

<sup>1</sup> Abbreviations summary: Tonnes per annum (tpa), Million Tonnes (Mt), Lithium Carbonate Equivalent (LCE), meters (m), square kilometers (km<sup>2</sup>), milligrams per liter (mg/L), Life-of-Mine (LOM)

<sup>2</sup> Refer to ASX announcement dated 19 December 2023 for each reference to the 25-year Life-if-Mine or LOM in this announcement

<sup>3</sup> Refer to ASX announcement dated 4 August 2025 - "Kachi Phase One Definitive Feasibility Study Addendum"

The basis for this Ore Reserve estimate is further development of the Model since the Maiden Ore Reserve<sup>4</sup>. The Model has been updated with the most recent Mineral Resource Estimate<sup>5</sup> and wellfield development plan and used to evaluate lithium recovery rates at the planned wellfield through time. To remain consistent with the environmental permitting, the well locations have not been moved. Wells with lower lithium grades that are no longer needed as a result of higher direct lithium extraction (“DLE”) recovery rates were disabled (turned off), as were some of the injection wells that are also no longer necessary as a result of pumping less brine. The updated DLE recovery rate has driven an iterative wellfield optimisation program resulting in the updated wellfield presented.

The Ore Reserve demonstrates that the mine plan is capable of delivering sufficient lithium brine to the plant for a 25,000 tpa operation over a 25-year LOM.

“The improved recovery rates achieved with Lilac’s updated technology have allowed us to strategically concentrate production in higher-grade lithium zones, resulting in significantly enhanced outcomes for the Project,” said Jonah Smith, Vice President of Operations. “Updated modelling indicates an average feed grade of 268 mg/L, and by operating fewer wells, we are also reducing the Project’s environmental footprint.”

## OTHER HIGHLIGHTS

- The updated wellfield development plan consists of 11 production wells and 14 injection wells in the configuration shown in **Figure 1**, significantly less than the Original DFS<sup>6</sup> which required 16 production wells and 21 injection wells. The decrease in the number of wells resulted from:
  - Higher overall DLE recovery rates of Lilac’s Gen 4 media, which results in less brine flow required in the system to produce the same mass of LCE; and
  - Lower concentration wells were eliminated which increased the overall lithium concentration in the plant feed, further decreasing the required brine flow.
- The wellfield development plan produces 692,900 t LCE, which represents less than 9% of the Measured and Indicated Mineral Resource<sup>7</sup>. Reducing the simulated LCE production to the expected plant throughput (25,141 tpa battery grade LCE) results in a Proved and Probable Ore Reserve of 626,760 t LCE (see **Table 1**).
- The Proved Ore Reserve derived from Measured Resources is constrained to the first 7 years of operation, equalling 174,230 t LCE.
- Ore reserves estimate from Measured Resources in Years 8 to 25 are conservatively categorised as Probable Ore Reserves with the expectation that these will convert to Proved Reserve as the predictive reliability of the Model increases with additional data collection.
- The defined injection strategy maintains higher brine aquifer pressures and minimises potential environmental impacts.
- Elimination of the western-most production wells, which were closest to the western injection wells, further reduced dilution in feed grade to the plant. Dilution in lithium grade is predicted to be less than 3% over the LOM.

---

<sup>4</sup> Refer to ASX Announcement dated 19 December 2023 - “Maiden Ore Reserve Defined Lake Resources Flagship Kachi Project”

<sup>5</sup> Refer to ASX Announcement dated 3 June 2025

<sup>6</sup> Refer to ASX Announcement dated 19 December 2023 - “Kachi Phase One Definitive Feasibility Study”

<sup>7</sup> Refer to ASX Announcement dated 3 June 2025

- Consistent with approach of the Maiden Ore Reserve, all of the Ore Reserve in this update for the first 7 years of operations is in the Proved category and is 100% derived from Measured Resources.
  - More than 98% of the lithium brine continues to be derived from the Measured Resource through the LOM.
  - Continued data collection and Model updates will most likely result in further upgrades to Proved Ore Reserve, given the favourable conditions.
  - The Model reproduces historical data to a high degree of accuracy which improves the predictive reliability of the Model simulations related to lithium recovery and injection.

A variable density groundwater flow and solute transport Model was developed using the Groundwater Vistas interface and MODFLOW-USG<sup>8</sup> code to evaluate the extraction of lithium enriched brine and injection of spent brine after DLE from the wells during the 25-year LOM. The Model was constructed based on the geologic framework model developed for the Mineral Resource estimate<sup>9</sup>. The Model incorporates the water balance studies<sup>10</sup>, local scale evapotranspiration studies<sup>11</sup>, and hydraulic testing work as described in detail in the Maiden Ore Reserve statement<sup>12</sup>. To demonstrate the Model's ability to reproduce measured conditions in the basin, it was calibrated to historical observations of lake stage (water level surface) at the "laguna" from 2000 to 2023, evapotranspiration fluxes determined from studies, historical groundwater and brine levels, changes in brine levels during extraction and injection testing, lithium concentrations during extraction tests, and to a lesser extent, the total dissolved solids concentrations.

This Ore Reserve estimate considers the Modifying Factors of converting Mineral Resources to Ore Reserves, including the production and injection wellfield designs and efficiency (e.g., location, drilling and well construction details, pumping requirements, etc.), environmental considerations (e.g., changes at key environmental receptors), lithium recovery rates, and plant capacity – see the 'Modifying Factors' section of this announcement. The mine plan produces wellfield flow rates and concentrations in excess of plant requirements, which provides an additional factor-of-safety that the production schedule can be achieved, even if small changes in ramp-up and ramp-down schedules are implemented. As a result, plant capacity is the limiting factor for the Ore Reserve based on the mine plan presented in this announcement.

The Ore Reserve was classified into Proved and Probable Reserves based on industry standards<sup>13</sup> for lithium brine projects, the Competent Person's ("CP") experience, and the confidence in the quality and quantity of both data and Model performance. A majority of the extracted mass is sourced from Measured Resources; nonetheless, Proved Reserves were specified by the CP for the first 7 years, given the level of Model calibration and yearly production goals (see **Table 1**). Probable Reserves were conservatively assigned for the last 18 years of the LOM, considering that the Model will be continually

---

<sup>8</sup> Panday, S. 2023. MODFLOW-USG-Transport (v2.2.1). GSI. Available at: <http://www.gsi-net.com/en/software/free-software/USG-Transport.html>

<sup>9</sup> Refer to ASX Announcement dated 3 June 2025

<sup>10</sup> Lithium Solutions, 2023. Hydrophysical Water Budget Assessment and Hydrogeochemical and Isotopic Tracing of Water Source and Transit in Carachi Pampa Basin, Argentina

<sup>11</sup> Atacama Water, 2022. Kachi Project - Soil evaporation measurements, wet season 2022. April, 2022

<sup>12</sup> Refer to ASX Announcement dated 19 December 2023 - "Maiden Ore Reserve Defined Lake Resources Flagship Kachi Project"

<sup>13</sup> Association of Mining and Exploration Companies, 2020. Guidelines for Resource and Reserve Estimation for Brines. [https://www.jorc.org/docs/Brine\\_Guideline\\_final.pdf](https://www.jorc.org/docs/Brine_Guideline_final.pdf)

improved and recalibrated in the future, including additional extraction and injection testing, initial operations, and measurements of dilution, among other factors.

The extraction is focused on the core of the salar where lithium concentration has been consistently high and where three long-term pumping tests (12 to 31-days in length) were completed. Injection wells are located in the coarse-grained alluvial fan materials in the west and along the eastern margin of the central resource area. The injection configuration provides pressure maintenance in the production horizon and near springs along the western margin of the volcano, while keeping dilution resulting from spent brine injection to a minimum.

In accordance with ASX Listing Rule 5.9.1, below is a fair and balanced representation of the information contained in the separate report prepared in accordance with ASX Listing Rule 5.9.2 (Appendix 1), including a summary of all information material to understanding the reported estimates of ore reserves in relation to the following matters:

### **Material assumptions**

The material assumptions used in preparation of this Ore Reserve are as follows:

- Consistency with the Mineral Resource estimate update<sup>14</sup>.
- Modifying factors and project design principals are detailed in the DFS Addendum, released concurrently with this Ore Reserve update<sup>15</sup>.
- No material changes to metallurgical recoveries are expected.
- Lithium carbonate price assumptions used in the financial estimation include is ~\$20,500/t, in line with long-term Benchmark Mineral Intelligence (BMI) forecast lithium pricing as at Q2 2025.

### **Criteria used for classification**

In the view of the Competent Person, the resource classification for mineral resources is believed to adequately reflect the available data and is consistent with the suggestions of Houston et. al., 2011 with specific criteria for Measured, Indicated, and Inferred Resource categories. The estimated Ore Reserve was classified into Proved and Probable Reserves based on industry standards of brine projects, the CP's experience, certain modifying factors, and the confidence in the quality and quantity of both data and Model performance. Please refer to Sections 3 and 4 of Appendix 1.

### **Mining methods**

Please refer to Section 3 of Appendix 1 for the mining method selected and other mining assumptions, including recovery factors and mining dilution factors.

### **Processing methods**

The metallurgical process proposed for extraction of lithium from the resource feed brine is DLE using ion exchange. This processing method and other processing assumptions, including cut-off grade(s), recovery factors, and mining dilution factors are outlined in Section 4 of Appendix 1.

### **Production Profile**

The Kachi Project is estimated to produce approximately 25 ktpa of battery grade lithium carbonate over the LOM. Production (as compared with the Original DFS) ramps up after the first year of

---

<sup>14</sup> Refer to ASX Announcement dated 3 June 2025

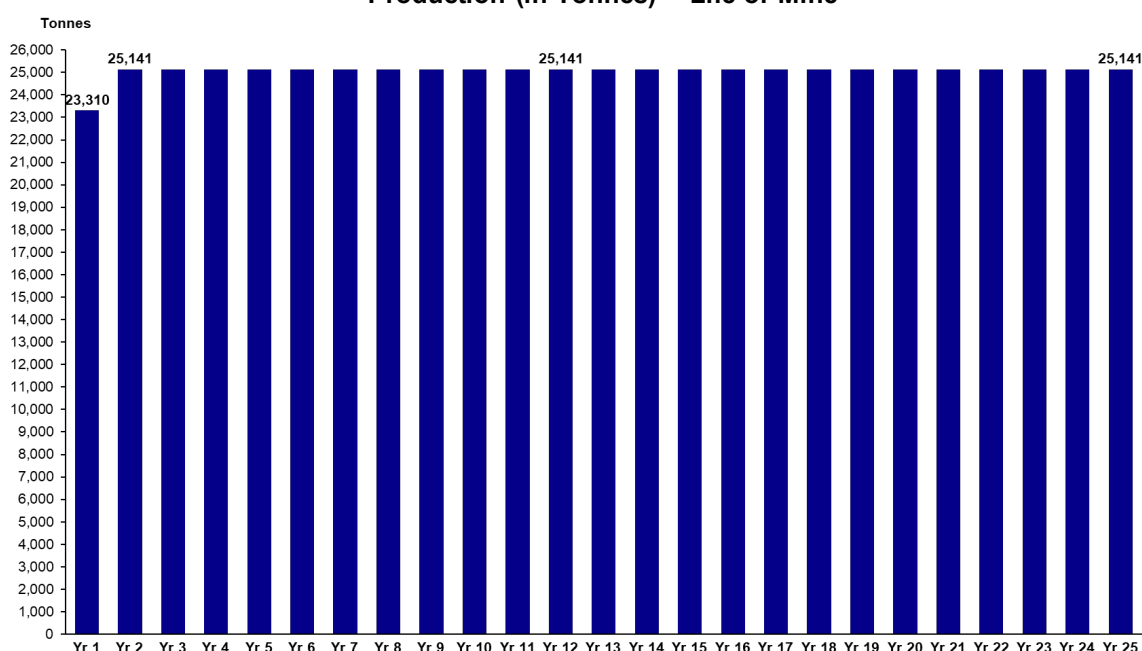
<sup>15</sup> Refer to ASX Announcement dated 4 August 2025 – "Kachi Phase One Definitive Feasibility Study Addendum"

production as shown in the three figures below (**Introduction Figure 1, Introduction Figure 2 and Introduction Figure 3**).

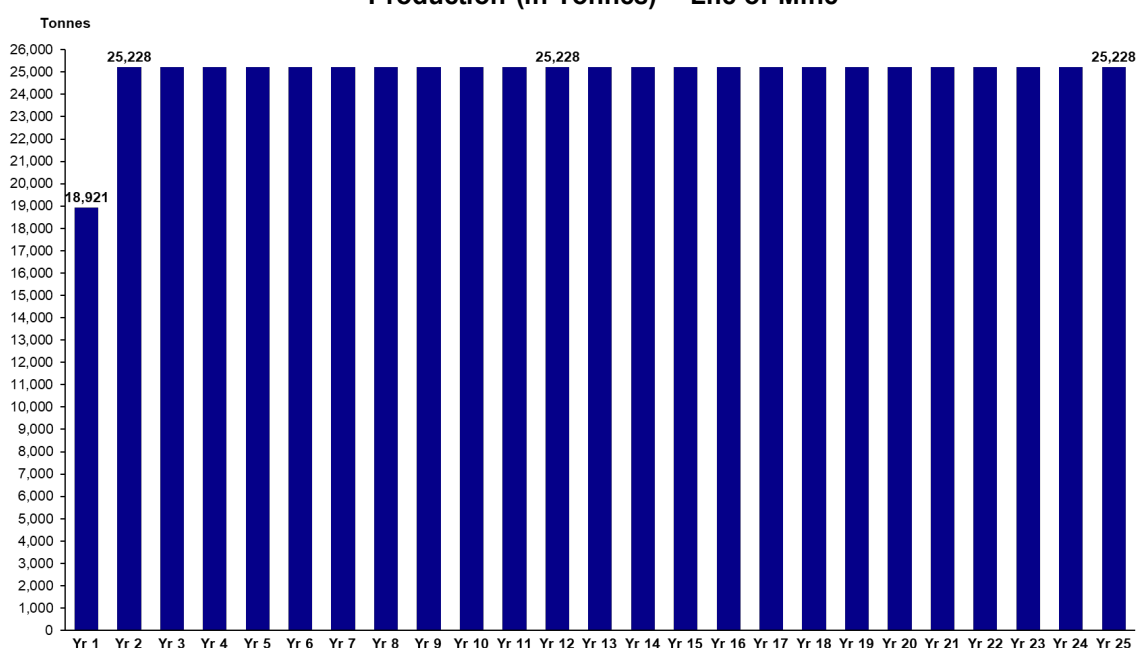
**Introduction Figure 1. Estimated Production Ramp-up**

	Year 1	Year 2+
DFS Addendum	93%	100%
Original DFS	75%	100%

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



**Introduction Figure 3. Original DFS Annual Lithium Carbonate Production (in Tonnes) – Life of Mine**

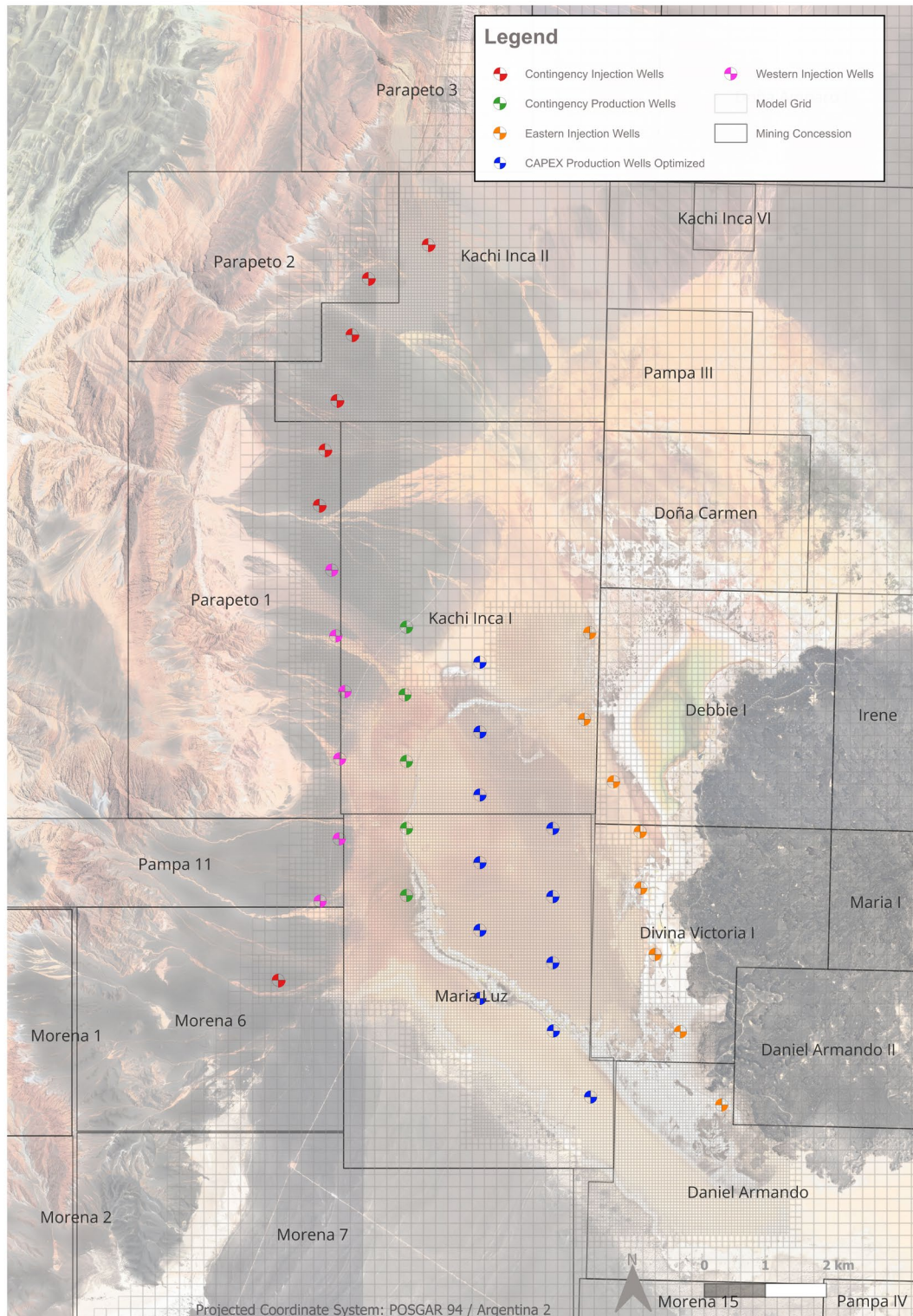


### Estimation methodology

The Ore Reserve estimate is based on extraction of the brine that is transmitted in the subsurface in response to wellfield pumping. As a result, a calibrated Model, simulating flow and solute transport, is standard practice to estimate the lithium brine reserves through time. The Ore Reserves have been classified based on their Mineral Resource classification within the pit design, with only Measured Mineral Resources converted to Probable Ore Reserves. Ore Reserves are reported as LCE (Lithium



Carbonate Equivalent) where the lithium ion is converted to the molecular equivalent of lithium carbonate ( $\text{Li}_2\text{CO}_3$ ) using a conversion factor of 5.32.



**Figure 1. Updated Wellfield Layout – Contingency wells from the Original DFS shown in violet (injection wells) and light green (production)**

**Table 1. 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
<b>Total</b>	<b>1-25</b>	<b>117,810</b>	<b>626,760</b>	

Notes to the Reserve Estimate:

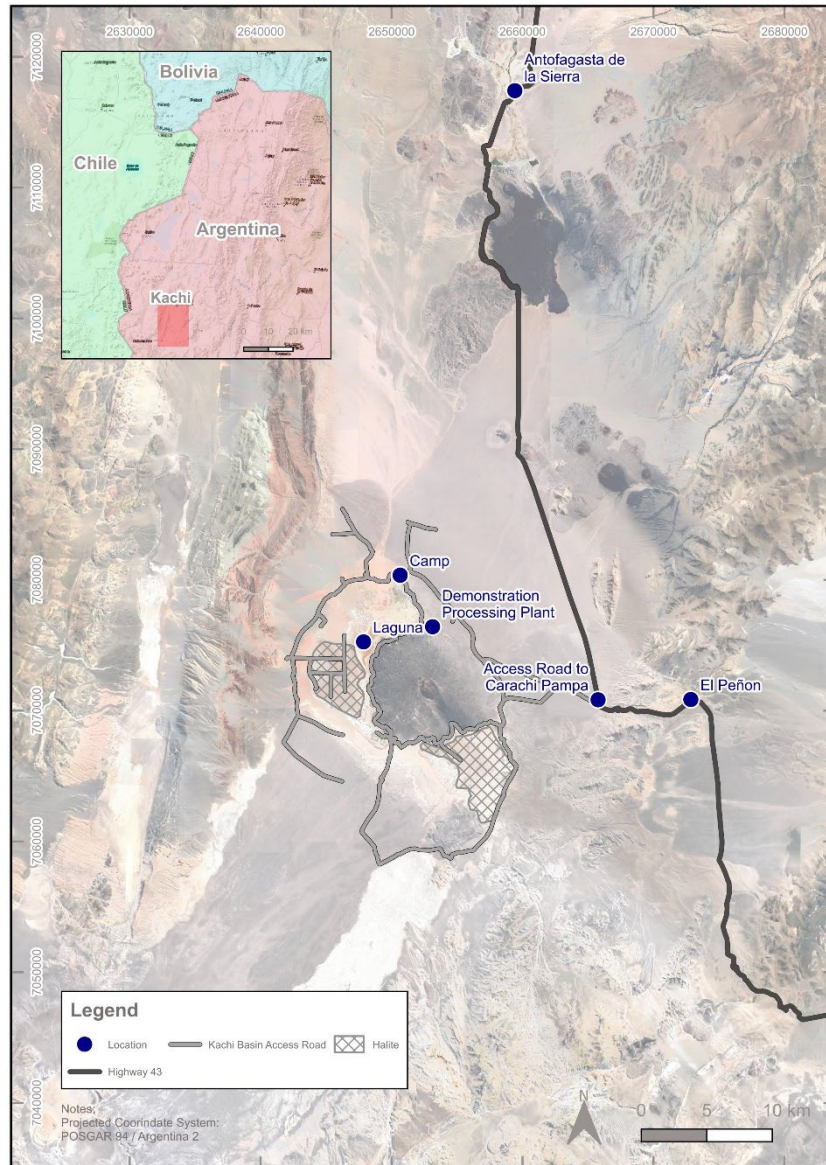
- Lithium is converted to lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>) equivalent with a conversion factor of 5.32.
- The effective date for the Ore Reserve Estimate is based on the Mineral Resource Estimate update from 3 June 2025.
- The reserve above includes processing losses in the plant and 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.

Summaries of the Project Background, Mineral Resource and Ore Reserve analysis are provided in subsequent sections.



## PROJECT BACKGROUND

The Kachi Project is located on the Carachi Pampa basin at the south end of the Puna geographical region, Argentina (**Figure 2**). The modern-day Puna Region is the southern continuation of the Bolivian Altiplano with an average elevation of 4,400 meters above mean sea level (“amsl”) although Project elevations are considerably lower, about 3010 amsl, which provides considerable advantages from a climate and operations perspective.

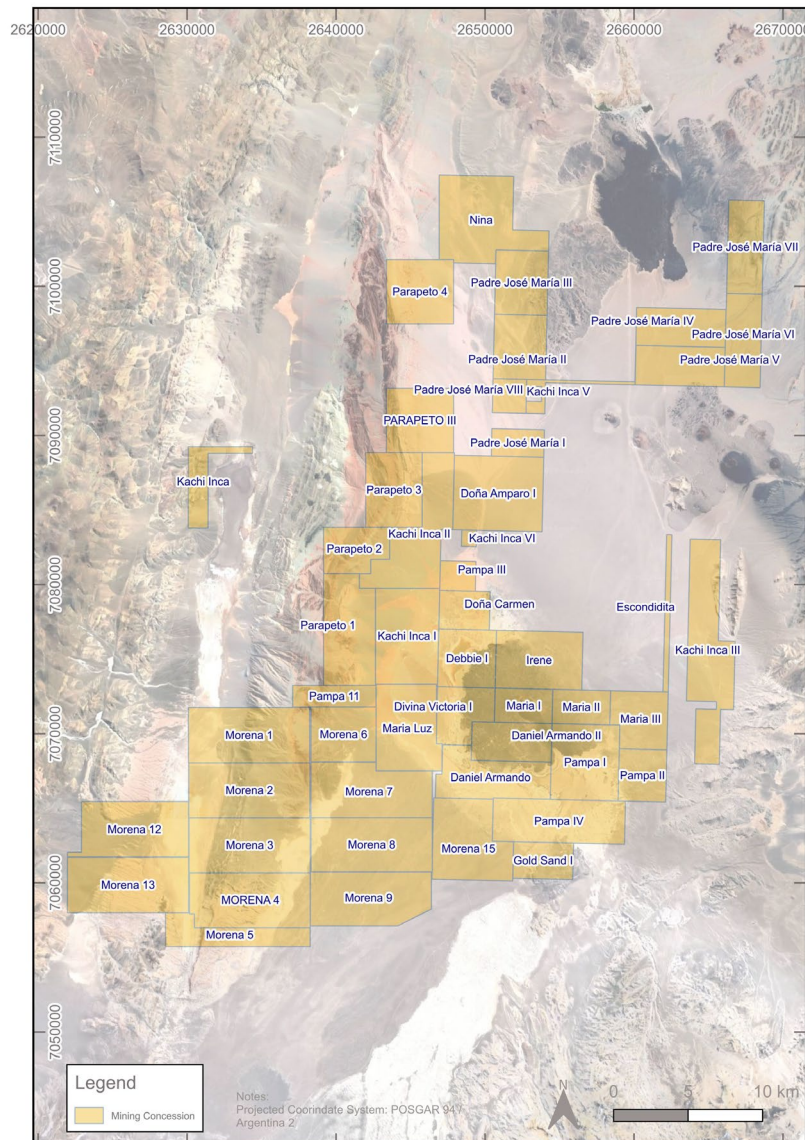


**Figure 2. Kachi Project Location and Layout**

## PROPERTY HOLDINGS

Lake holds 53 mineral leases (minas), including one lease (Morena 10 – 2712.9 Ha) with a pending application in the Basin covering the surface of the salar and surrounding areas (**Figure 3**). The mineral leases are summarized in **Table 7** below (following the text), with the property names, file numbers, and details of the approvals related to each of the concessions.

All information regarding the legal status of the properties was provided by the members of the Legal Department of Morena del Valle Minerals S.A. (“MVM”), Lake’s local subsidiary in the Province of Catamarca. The status of properties has not been independently verified by the Competent Person, who takes no responsibility for the legal status of the properties.



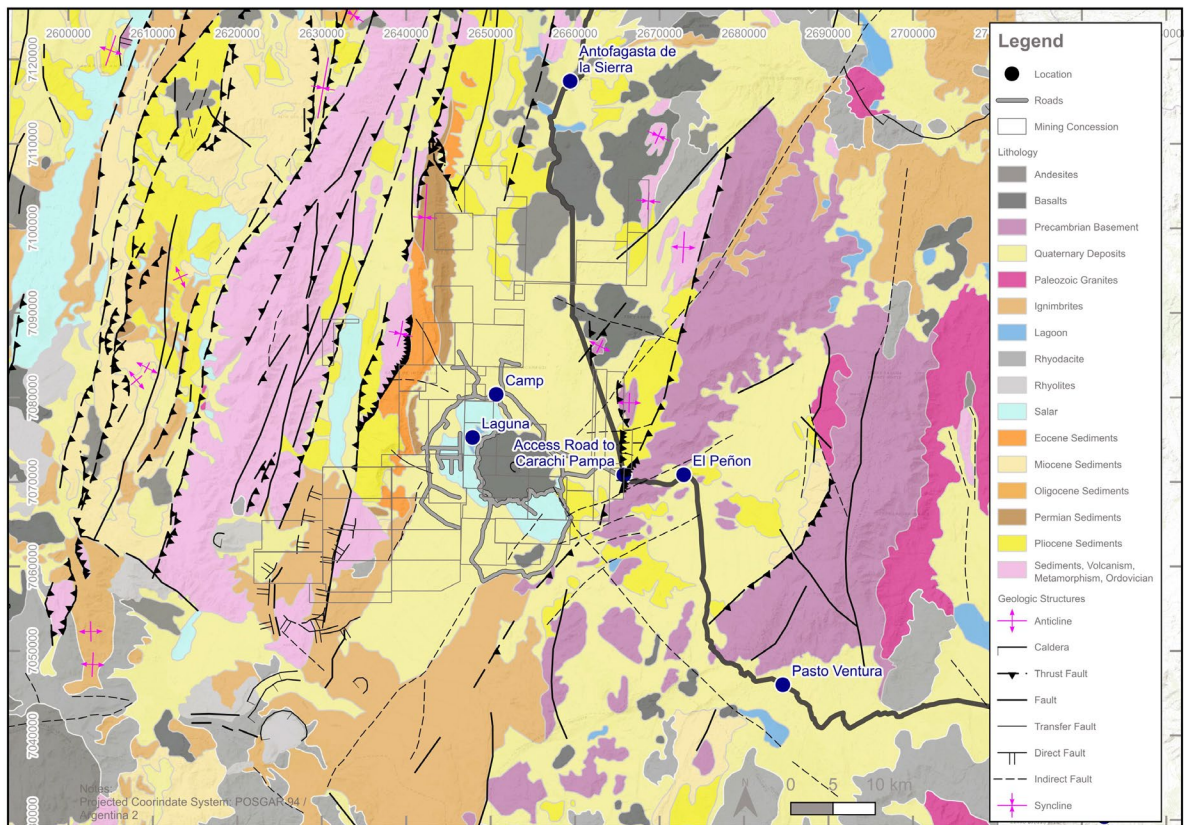
**Figure 3. Kachi Project Mineral Concessions**

## GEOLOGY AND GEOLOGICAL INTERPRETATION

The Carachi Pampa basin is an arid, closed basin comprised of interbedded lacustrine and alluvial



sediments of gravels, sands, silts, and clays, with episodic volcanic deposits of ignimbrites, tuffs, and basalts (**Figure 4**). The basin is bounded to the east and west by north-south trending mountain ranges formed by thrust faulting exposing basement sequences in outcrops that rise to an elevation of about 5,100 m amsl. The Cerro Blanco pyroclastic complex is located on the south of the basin and is the primary source of the pyroclastic flows that deposited the ignimbrites and tuffs, while the Antofagasta de la Sierra and the Cerro Galan volcanic complex form the highlands in the north and northeast borders of the basin. The ranges to the east are composed of crystalline pre-Cambrian basement that gently slopes down to the basin floor. Red bedded sandstone and claystone sequences of the Geste and Patqia de la Cuesta Formations outcrop in the Los Colorados Range along the western edge of the basin. Extensive alluvial fan deposits form to the north, south, east and west of the central salar as coarse-grain, high energy sediments were shed from the nearby steep terrains. Altogether the basin drains a watershed area of 9,494 km<sup>2</sup>.

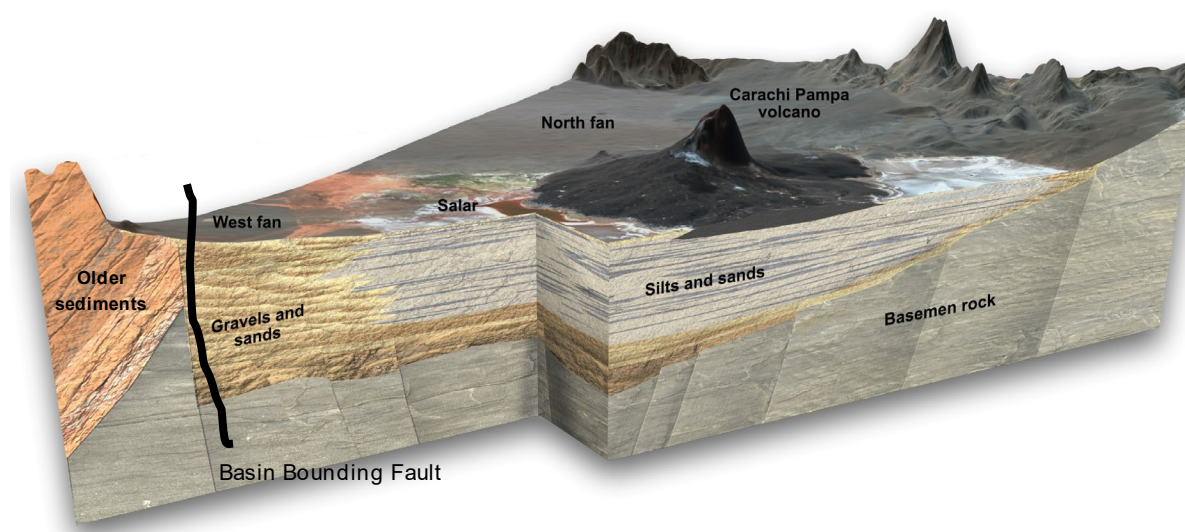


**Figure 4. Geology of the Kachi Project Area**

The centre of the basin is dominated by the Quaternary basalt flows and the cinder-cone of the Carachi Pampa Volcano. The volcano penetrates basin sediments to the east of the salar, with flow and air fall basalts creating a veneer over the lacustrine sediments. The volcano has a northwest-southeast striking fissure vent that is interpreted to be underlain by a northwest-southeast aligned intrusive dyke or plug of much smaller dimensions than the basalt cone has at the surface.

Salars occur in closed basins with no external drainage in dry desert regions where evaporation rates exceed surface and groundwater recharge rates. Evapo-concentration of surface water and groundwater in these basins results in the concentration of dissolved salts that eventually develop saline brines. Two types of salars are classified by Houston et al. (2011)<sup>16</sup>: 1) mature, halite dominant and 2) immature, clastic dominant. Kachi appears to be transitioning from an immature, clastic dominated salar, to a more mature system with the beginning formation of a surficial salt layer with halite that extends to several meters depth.

The salar sediments are predominantly intercalated sands and clayey silts (**Figure 5**), which constitute a leaky aquifer, with the entire sequence of sediments potentially contributing brine flow to wells. Higher brine flows are obtained from intervals with high sand content and higher permeability, with the brine grades generally comparable between geological units. The salar is surrounded by alluvial and aeolian fans of varying dimensions and significance. Most important are the Western Fan Complex and South Fan (see West Fan on **Figure 5**) which have intercepted coarse-grained lithium bearing brines. The North Fan is also important as coarse-grained lithium bearing brines have also been intercepted in this sector and the sector is host to a substantial freshwater aquifer or wedge, that overlies the lithium bearing brines.



**Figure 5. Conceptual hydrogeologic section through the Kachi Project, looking towards the northeast.**

<sup>16</sup> Houston, J., Butcher, A., Ehren, P., Evans, K., and L. Godfrey. The Evaluation of Brine Prospects and the Requirement for Modifications to Filing Standards. Economic Geology, v. 106, pp. 1225–1239

Pumping and injection tests completed in August 2023<sup>17</sup> on two different test wells indicate that the fine-grained sand reservoir of the central resource area is permeable, with measured hydraulic conductivity values in the range of 2 to 4 m/d. The testing indicates that appropriately designed production wells with 200-m well screens could produce more than 65 litres per second (L/s). The testing also provides a proof-of-concept for the operation of injection wells in the central resource area.

## MINERAL RESOURCE

Lake announced a substantial increase in its lithium resource base, as detailed in the latest Mineral Resource Estimate (“MRE”) update from 3 June 2025<sup>18</sup>. The Measured Resource increased over 1.1 Mt LCE, reaching 4.2 Mt LCE, marking a growth of more than 25%. The Measured Resource is defined to a depth of 600 meters across 83 square kilometres. The Measured and Indicated Resource grew by approximately 0.9 Mt LCE, a 10% increase, totalling 8.2 Mt LCE. The total resource now stands at an estimated 11.1 Mt LCE, covering an area of 275 square kilometres. The MRE update incorporated data from drillhole K25D44, the second in the southern sector of the salar to extend beyond 600 meters below ground surface (“m bgs”). Sample results from K25D44, within the planned production interval of 200 to 400 m bgs as outlined in the Original DFS, averaged 274 mg/L lithium. Results from drillholes K24D41 and K25D44 in the southern sector indicate the presence of a higher-grade lithium zone. The changes were, in part, vertical in nature, defining a Measured Resource in the salar core from 400 m bgs to 600 m bgs. This was based on additional deep drilling results not received prior to the 2023 Mineral Resource update.

A summary of the Mineral Resource is provided in **Table 2** and details of the Mineral Resource classifications are presented in **Table 3**. A plan view map of the Mineral Resource classifications is provided for 0 to 400 m bgs (**Figure 6**) and 400 to 600 m bgs (**Figure 7**).

**Table 2. Kachi Project Mineral Resource Summary<sup>19</sup>**

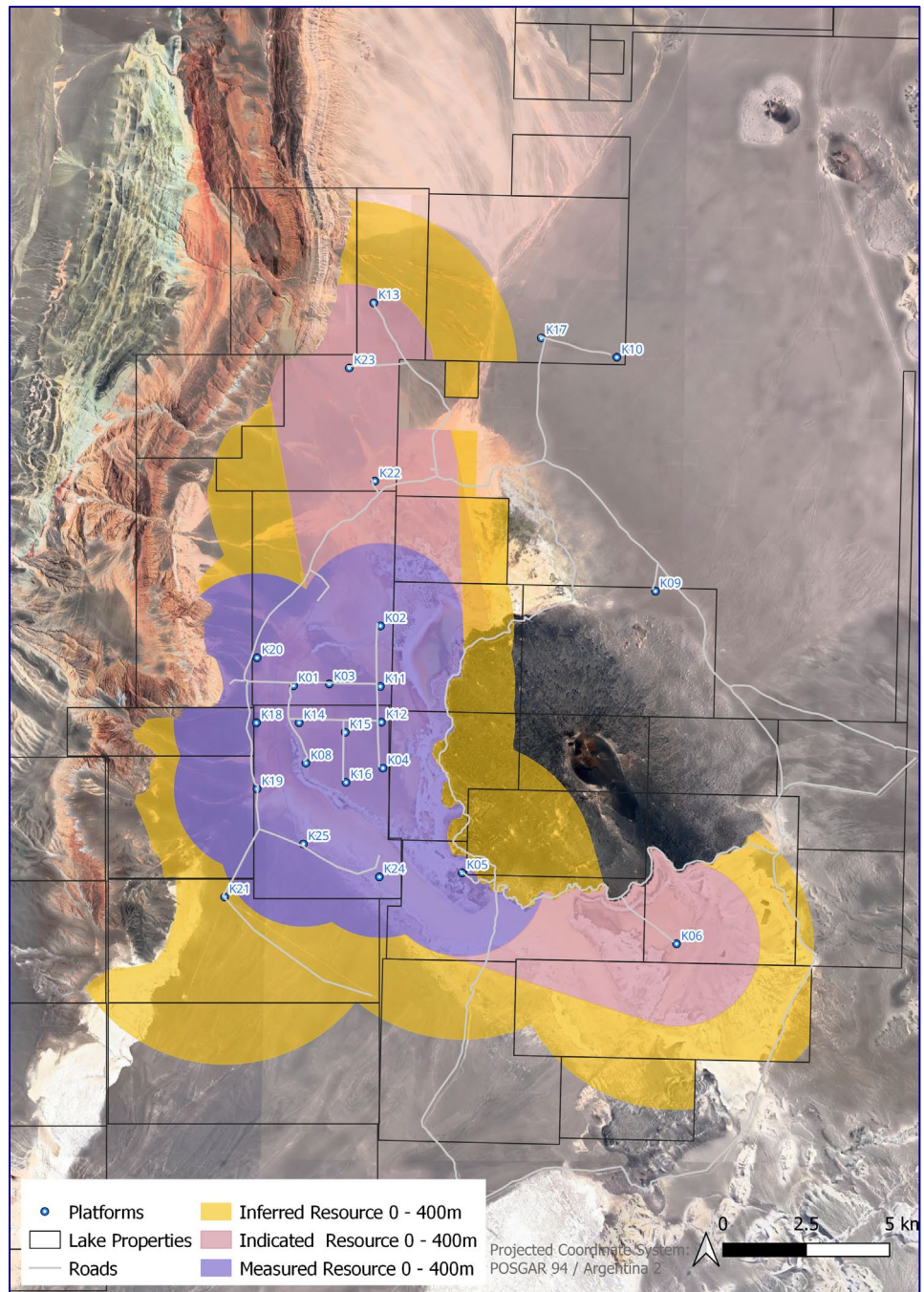
Resource Category	Lithium (Tonnes)	LCE (Tonnes)
Measured (M)	788,000	4,191,000
Indicated (I)	751,000	3,998,000
M & I	1,539,000	8,189,000
Inferred	542,000	2,885,000
<b>Total Resource</b>	<b>2,082,000</b>	<b>11,074,000</b>

<sup>17</sup> Refer to ASX announcement dated 16 August 2023

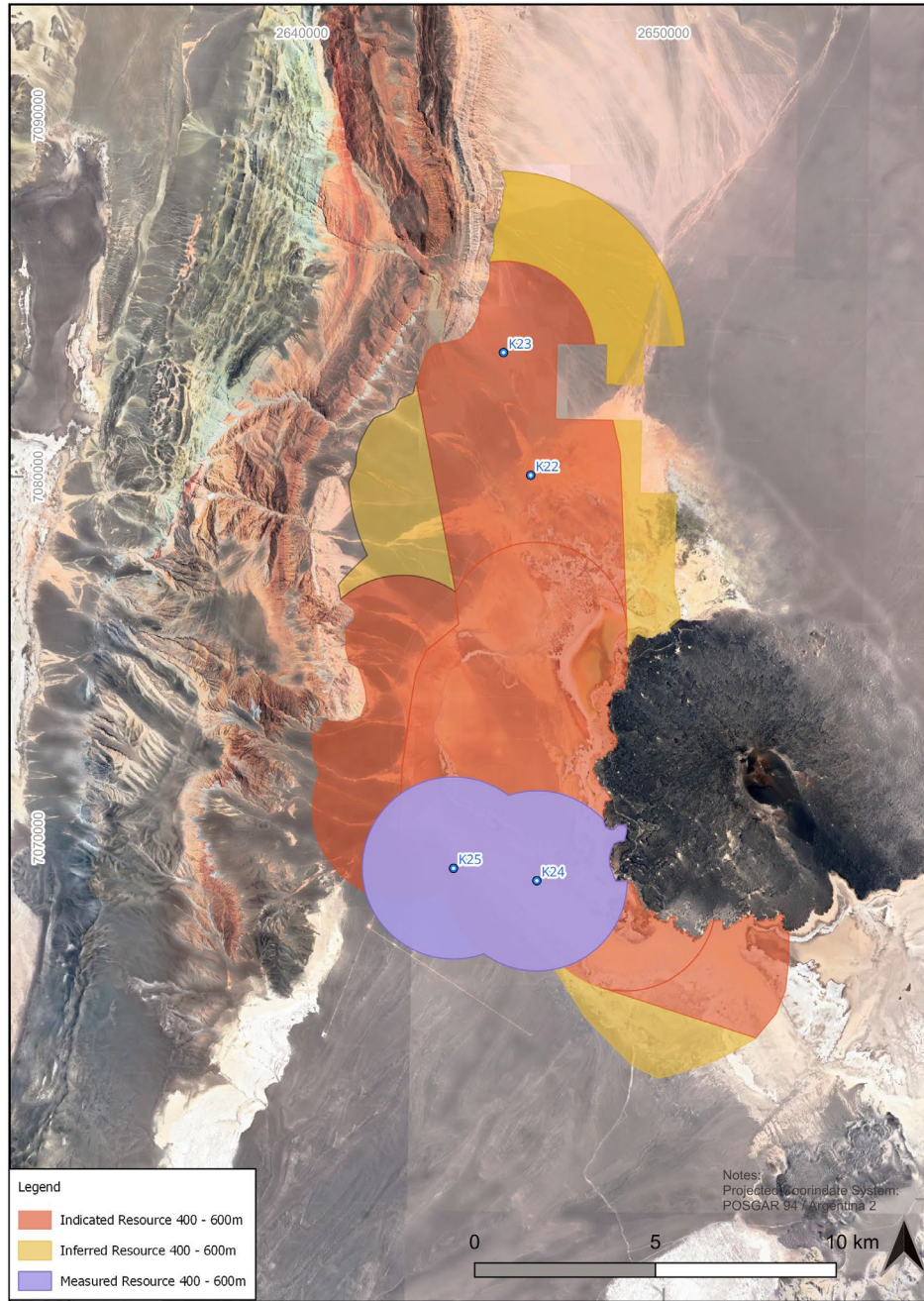
<sup>18</sup> Refer to ASX announcement dated 3 June 2025

<sup>19</sup> Consider notes and details in Table 3 Updated Resource Estimate of Contained Lithium





**Figure 6. Diagram showing the Measured (purple) and Indicated Resources (pink), with the surrounding area of Inferred Resource (orange) for 0 to 400m.**



**Figure 7. Plan view map of the Indicated Resources (red), with the surrounding area of Inferred Resource (orange) at a depth of 400 – 600m**



**Table 3. Updated resource estimate of contained lithium**

<b>Measured Mineral Resource May 2025 (to 600 m depth)</b>								
Unit	Sediment Volume m <sup>3</sup>	Specific Yield %	Brine volume m <sup>3</sup>	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
<b>Total</b>	<b>41,118,500,000</b>		<b>3,479,955,000</b>	<b>3,479,955,248,000</b>		<b>787,825,682,000</b>	<b>788,000</b>	<b>4,191,000</b>
<b>Indicated Mineral Resource May 2025 (to 600 m depth)</b>								
Unit	Sediment Volume m <sup>3</sup>	Specific Yield %	Brine volume m <sup>3</sup>	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
<b>Total</b>	<b>45,709,292,000</b>		<b>3,637,524,000</b>	<b>3,637,523,614,000</b>	<b>0</b>	<b>751,473,605,000</b>	<b>751,000</b>	<b>3,998,000</b>
<b>Combined Measured and Indicated</b>								
	<b>86,827,792,000</b>	<b>-</b>	<b>7,117,478,861</b>	<b>7,117,478,861,140</b>	<b>-</b>	<b>1,539,299,286,959</b>	<b>1,539,299</b>	<b>8,189,000</b>

Inferred May 2025								
Unit	Sediment	Specific	Brine volume	Liters	Li mg/L	Li grams	Li Tonnes	Tonnes LCE
	Volume m <sup>3</sup>	Yield %	m <sup>3</sup>					
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
<b>Total</b>	<b>29,482,240,000</b>	<b>-</b>	<b>2,522,621,000</b>	<b>2,522,620,663,000</b>	<b>-</b>	<b>542,294,093,000</b>	<b>542,000</b>	<b>2,885,000</b>

- 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 (Li<sub>2</sub>CO<sub>3</sub>) 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.

## ORE RESERVE ESTIMATION

An Ore Reserve is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.<sup>20</sup>

The methodology used to develop estimates of the Mineral Resource is different from the method used to develop estimates of the brine Ore Reserve. The geologic block model, developed in Leapfrog Geo, considers static conditions as used in estimating the Mineral Resource. However, the block model cannot simulate the lithium brine reserve, as that requires dynamic simulation of the lithium brine in the subsurface. The Ore Reserve estimate is based on extraction of the brine that is transmitted in the

<sup>20</sup> The JORC Code 2012 Edition. Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Effective 20 December 2012. Prepared by the Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC)

subsurface in response to wellfield pumping. As a result, a calibrated Model (simulating flow and solute transport) is standard practice to estimate the lithium brine reserves through time.

### Hydrogeological Model Development

The Model was developed by a collaboration between consultants (Watershed HydroGeo and GES) and the Lake technical team. The Model is a fundamental tool for understanding the hydrogeological system, simulating the brine extraction, and providing quantified estimates of hydrogeological system behaviour as a result of that extraction. Additionally, given that DLE is proposed at Kachi, the spent brine will be returned to the hydrogeologic system in approximately the same proportions that the brine is pumped out of the system. This dynamic interaction of lithium brine extraction with concurrent injection of spent brine is simulated in the Model.

The Model used in the Ore Reserve update is unchanged from the Maiden Ore Reserve statement. Only the project stresses applied to the Model to simulate the project were modified. In this case, the modified stresses were to the pumping and reinjection rates<sup>21</sup>.

This update has included an iterative project optimisation process where only the project simulation stresses have been modified to the calibrated groundwater Models. Because the calibration Models have not changed, they are not reiterated in this summary, but rather the focus is on the changes to the Model used to simulate the planned mine operation.

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 in the west-northwest were eliminated from the Model, consistent with the updated wellfield development plan.
- Five injection wells were eliminated from the Model, consistent with the updated wellfield development plan.
- Injection rates in the western injection field were adjusted slightly to match the new lower lithium brine flow rates.
- The spent brine lithium concentration is simulated as 19.1 mg/L based on updated recovery rates associated with Lilac Gen 4 media, and an updated mass balance analysis for the spent brine.

No additional changes to the predictive Model were made to the Maiden Ore Reserve Model.

### Simulation of Mine Operations

This section summarises the predictive modelling carried out with the Model to simulate the updated wellfield development plan. The wellfield is designed to:

- Maintain the pressure in the subsurface as close as possible to baseline conditions in the laguna and springs east of the extraction area.
- Minimise the potential for dilution of the lithium brine resource during operations, and as much as possible to potential future operations.
- Create hydraulic gradients that facilitate the flow of lithium rich brine to the extraction wells.
- Maintain pressure in the extraction horizon to maintain high flow rates, minimize drawdown, and minimize subsidence and consolidation risks.

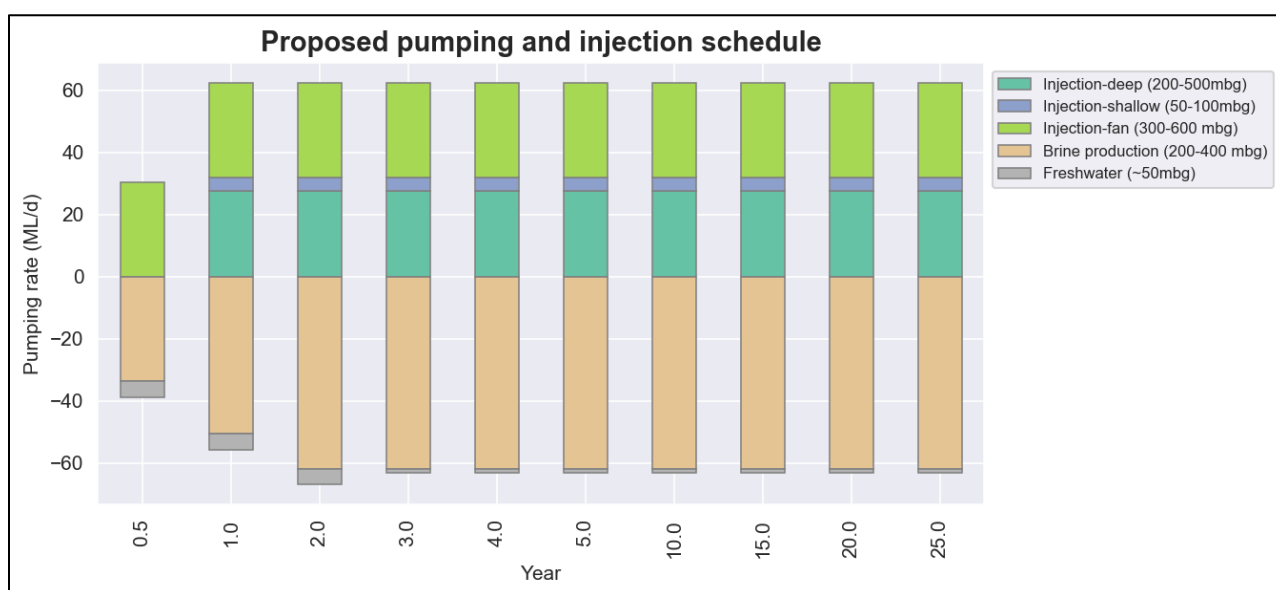
---

<sup>21</sup> Refer to ASX Announcement dated 19 December 2023 - "Maiden Ore Reserve Defined Lake Resources Flagship Kachi Project"

### Updated Wellfield Development Plan

The updated wellfield development plan consists of a planned pumping schedule (**Figure 8**) and the wellfield layout shown on **Figure 1**, with the following key elements:

- 11 brine extraction (production) wells, screened at approximately 200-400 m bgs.
- 14 injection wells, 8 of which are multilevel, are simulated wells in the Model as follows:
  - 8 eastern injectors are screened at depth, from approximately 50-100 m bgs and 200-500 m bgs (or potentially separate shallow and deep wells); and,
  - 6 injection wells in the West Fan, screened at approximately 300-600 m bgs.
- Three freshwater wells in the North Fan provide raw water to the plant.



**Figure 8. Schedule of pumping rates through time**

Total pumping from the extraction wellfield Years 2 through 25 is proposed to be 715 L/sec or 61.8 ML/d (across 11 production wells) with 715 L/sec (61.8 ML/d) of injection. Year 1 of the simulation represents the last 12-months of the 18-month ramp up period and only 9 of 11 wells are pumped in the Model during this period to represent lower overall production rates associated with later stages of ramp up.

Freshwater use is higher in Years 1-3, 60 L/sec after which it declines to 15 L/sec as a result of commissioning a zero liquid discharge recycling system.

The design presented is optimised to recover brine from within the Measured & Indicated Resource footprint<sup>22</sup> while minimising potential environmental effects. Freshwater will be extracted for operational purposes at three wells located 5-8 km north-northeast of the salar.

### Model configuration

The predictive Model uses one stress period to simulate a run-up to Project commencement and then ten stress periods to simulate the 25-year LOM. Early stress periods for the first five years of production

<sup>22</sup> Refer to ASX announcement dated 3 June 2025

consist of 6 semi-annual and annual schedules, followed by four 5-year stress periods. This is then followed by a further four stress periods to simulate a 25-year post-closure period.

Model results are expected to be more reliable in the short-term (e.g., 5 to 7-year horizons), and less accurate in the longer-term. As new data is gathered and the Model is refined, reliability of longer-term forecasts will improve.

### *Sensitivity analysis*

A series of deterministic scenarios were developed of modifying (increasing and decreasing) individual hydraulic or solute transport properties in the Model within realistic ranges. These parameters are horizontal hydraulic conductivity (Kh) of the pumping horizon, the vertical hydraulic conductivity (Kv) of the aquitard above the pumping horizon, specific yield (Sy) of the pumping horizon, Kh of the alluvial fans, and dispersivity of the pumping horizon. This was used to understand the potential range of pumping rates during lithium production, changes in lithium concentration to the plant through time, groundwater drawdown, and changes in environmentally sensitive areas related to parameter uncertainty.

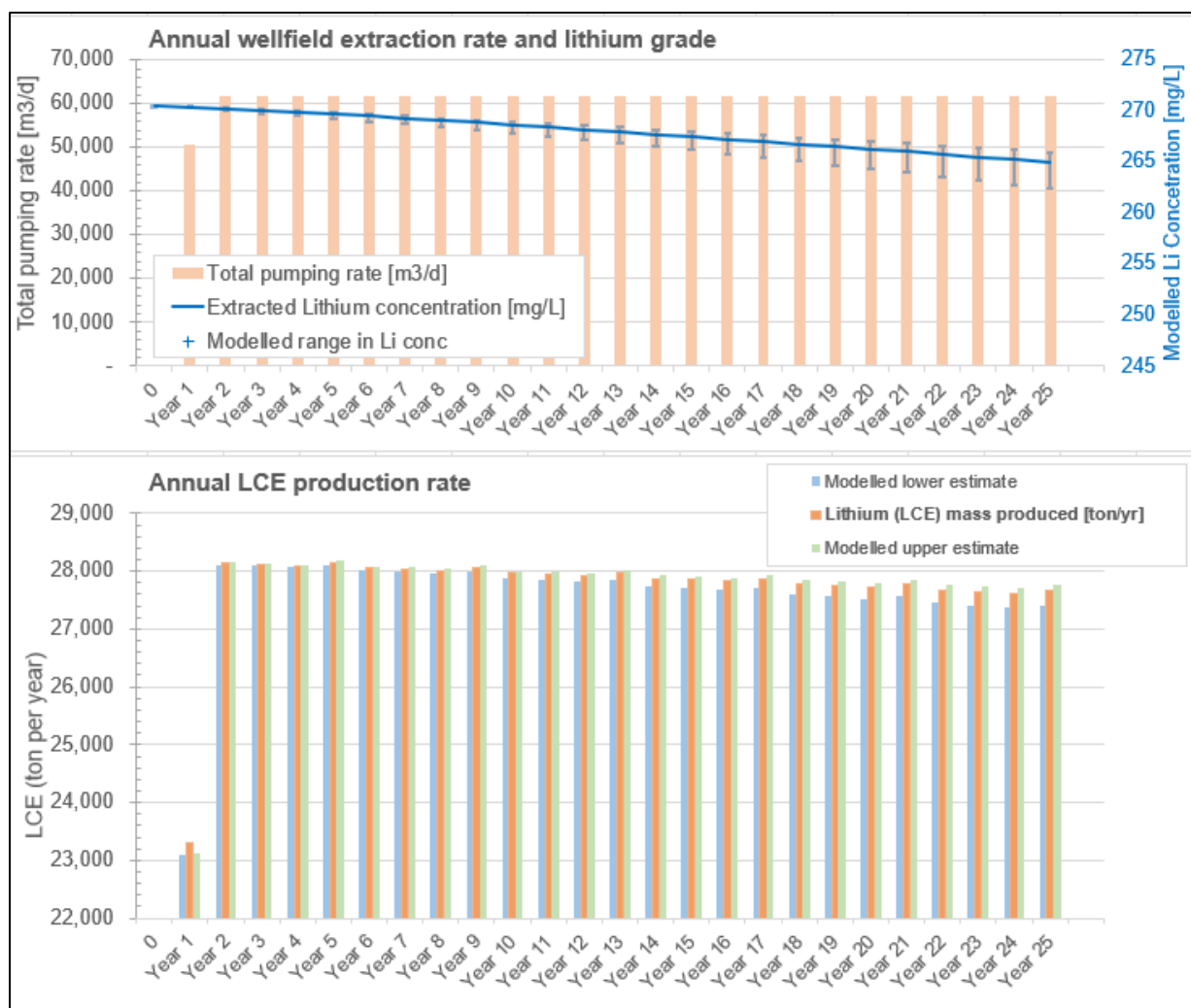
### *Lithium Extraction and LCE production*

Based on the simulated flow rates and lithium concentrations, the wellfield development plan produces in excess of the target production capacity of 25,000 tpa to account for plant downtime and a factor-of-safety in the modelling predictions.

As presented in **Figure 8**, during ramp up in Year 1 (i.e, lower assumed average annual pumping rate) the LCE production is 23,310 tpa after which it ramps up to between 28,140 tpa (Year 2) and 27,670 tpa (Year 25).

Predicted average lithium concentration is 270 mg/L in Year 1 and 265 mg/L in Year 25, representing less than a 2-percent decline (**Figure 9**).

**Figure 9. Predicted lithium extraction and theoretical annual LCE production from wellfield development plan**



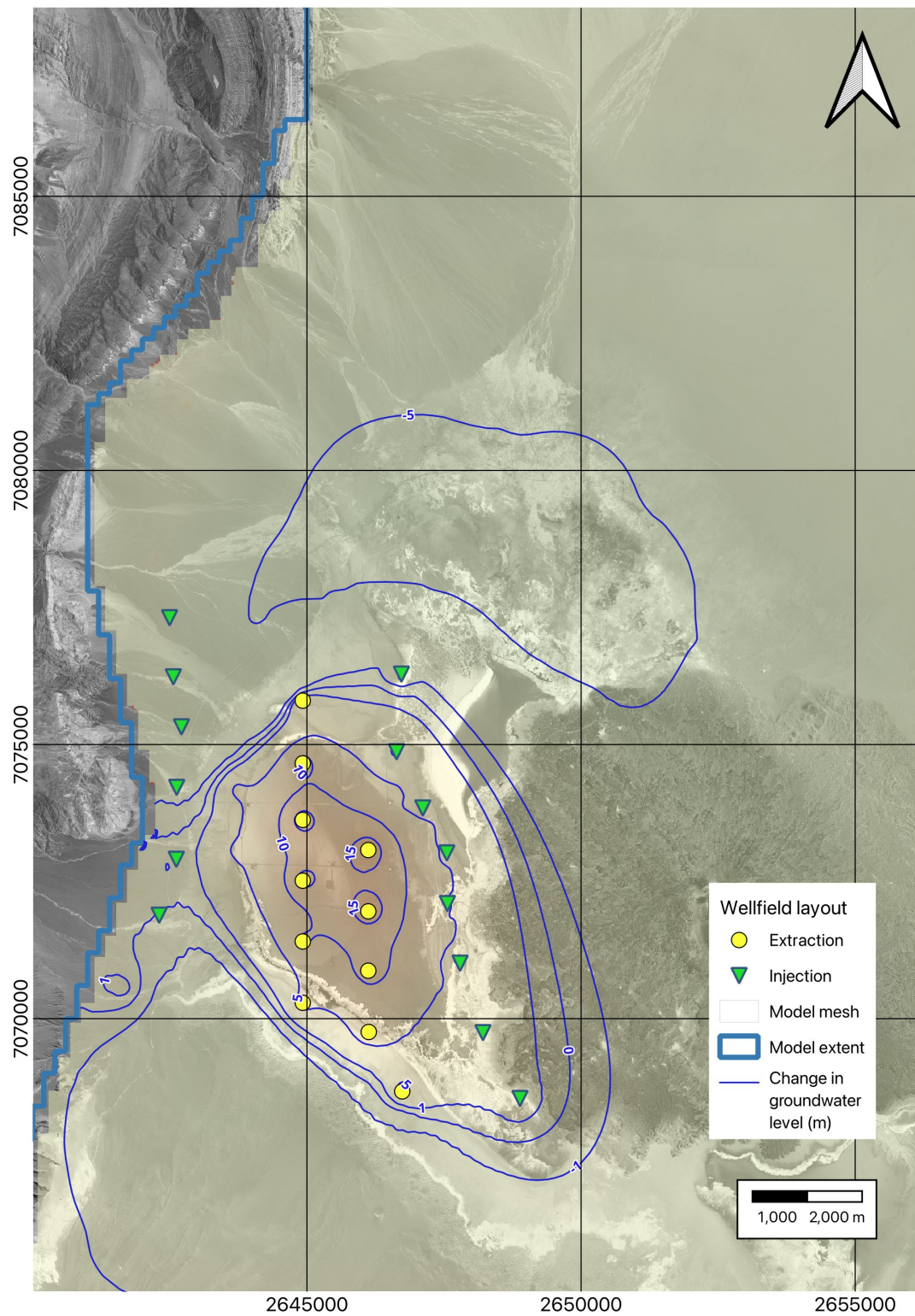
Freshwater aquifer results are unchanged from the originally reported Model results.

The hydrogeologic impact analysis results are largely unchanged from previous results. However, compared to the Maiden Ore Reserve statement, the updated wellfield results in less groundwater drawdown in the production zone (i.e., 200 to 400 m bgs in Unit B), as a result of fewer wells and a lower overall pumping rate (**Figure 10**). Changes in the predicted water table after 25-years of mining are consistent with previous results, with generally less than 0.25 m of water level change predicted in ecologically sensitive areas around the laguna, and a slight increase of about 0.5 m in the area of the vegas (**Figure 11**).

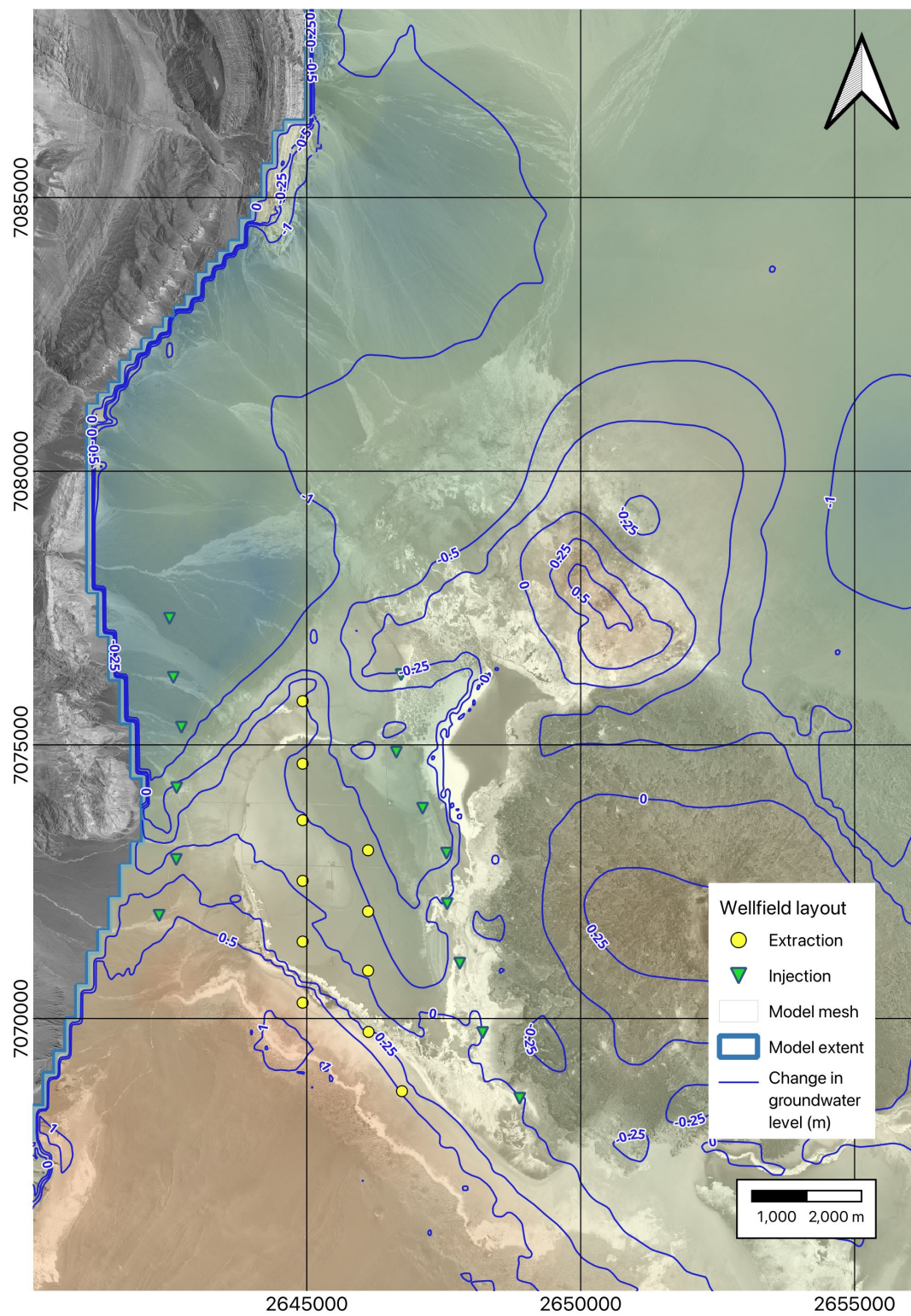
Recovery is expected within 5-10 years across most of the wellfield, which includes residual mounding from injection simulated by the Model.

Modelling suggests the injection should be effective at mitigating phreatic surface drawdown and the scope for the injection rates will be managed in response to monitored water levels. The Data Management System will ensure real-time monitoring at key locations with adjustments to operations as necessary to mitigate potential impacts to sensitive areas.





**Figure 10. Simulated drawdown in the pumping horizon (Layer 9) after 25 years**



**Figure 11. Simulated drawdown in the phreatic surface after 25 years**

## Ore Reserve

### Ore Reserve Estimate

The Ore Reserve was classified into Proved and Probable Reserves based on industry standards<sup>23</sup> of brine projects, the CP's experience, and the confidence in the quality and quantity of both data and Model performance. A high degree of confidence is afforded given the conservative manner of hydraulic and geochemical properties in the geologic model. A majority of the extracted mass is sourced from Measured Resources. However, Proved Reserves were specified by the CP for the first 7 years.

Grades are largely consistent with the two long-term extraction tests in Unit B (production zone) located in the central salar at 262 mg/L (K12R34) and 263.2 mg/L (K11R29). However, the resources and reserves also account for the higher lithium concentrations in the southern portion of the salar that have not yet been tested.

The Probable Reserves were conservatively assigned for the last 18 years of the LOM, considering that the Model will be continually improved and recalibrated in the future.

The simulated wellfield development plan and pumping rates (i.e., mine plan) results in theoretical LCE production rates that are greater than the plant throughput. **Table 4** provides potential unconstrained potential for LCE production from the current mine plan. The excess in wellfield design yield is aimed at accounting for required contingencies that would include pump or well outages, routine maintenance, or potential lithium grades below Model predicted values.

**Table 4. Simulated Mine Plan Theoretical - LCE Production Rates**

Years	Average Li Grade	Lithium Extraction (Tonnes)	LCE Production (Tonnes)
1-7	270	36,700	191,920
8-25	265	95,790	500,970
1-25	268	132,490	692,890

Note to Table 4: Lithium and LCE tonnes reported are based on the mine plan (i.e., pumping rates well layouts) and consider the key modifying factor of process recovery rate. As such "raw" values from the Model have been reduced by 13.2% to account for the overall 86.8% lithium recovery rate. Tonnes rounded to nearest 10, lithium concentration to nearest whole number. Numbers may not add due to rounding.

Given the excess potential for the wellfield to supply feed to the plant, the constraint for LCE production is the plant design capacity (**Table 5**). Proved reserves are delineated in Year 1 where a lower production rate is planned due to the processing ramp-up and production schedule. This would include construction and commissioning of the processing facility and would make up a large part of the time required.

Ore Reserve estimates are based on the anticipated lithium production schedule with a cut-off grade of 100 mg/L lithium, 86.8% average recovery, and assumed modifying factors discussed in the Modifying Factors section.

---

<sup>23</sup> Houston, J., Butcher, A., Ehren, P., Evans, K., and L. Godfrey. The Evaluation of Brine Prospects and the Requirement for Modifications to Filing Standards. *Economic Geology*, v. 106, pp. 1225–1239 and Association of Mining and Exploration Companies, 2020. Guidelines for Resource and Reserve Estimation for Brines. [https://www.jorc.org/docs/Brine\\_Guideline\\_final.pdf](https://www.jorc.org/docs/Brine_Guideline_final.pdf)



**Table 5. 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
<b>Total</b>	<b>1-25</b>	<b>117,810</b>	<b>626,760</b>	

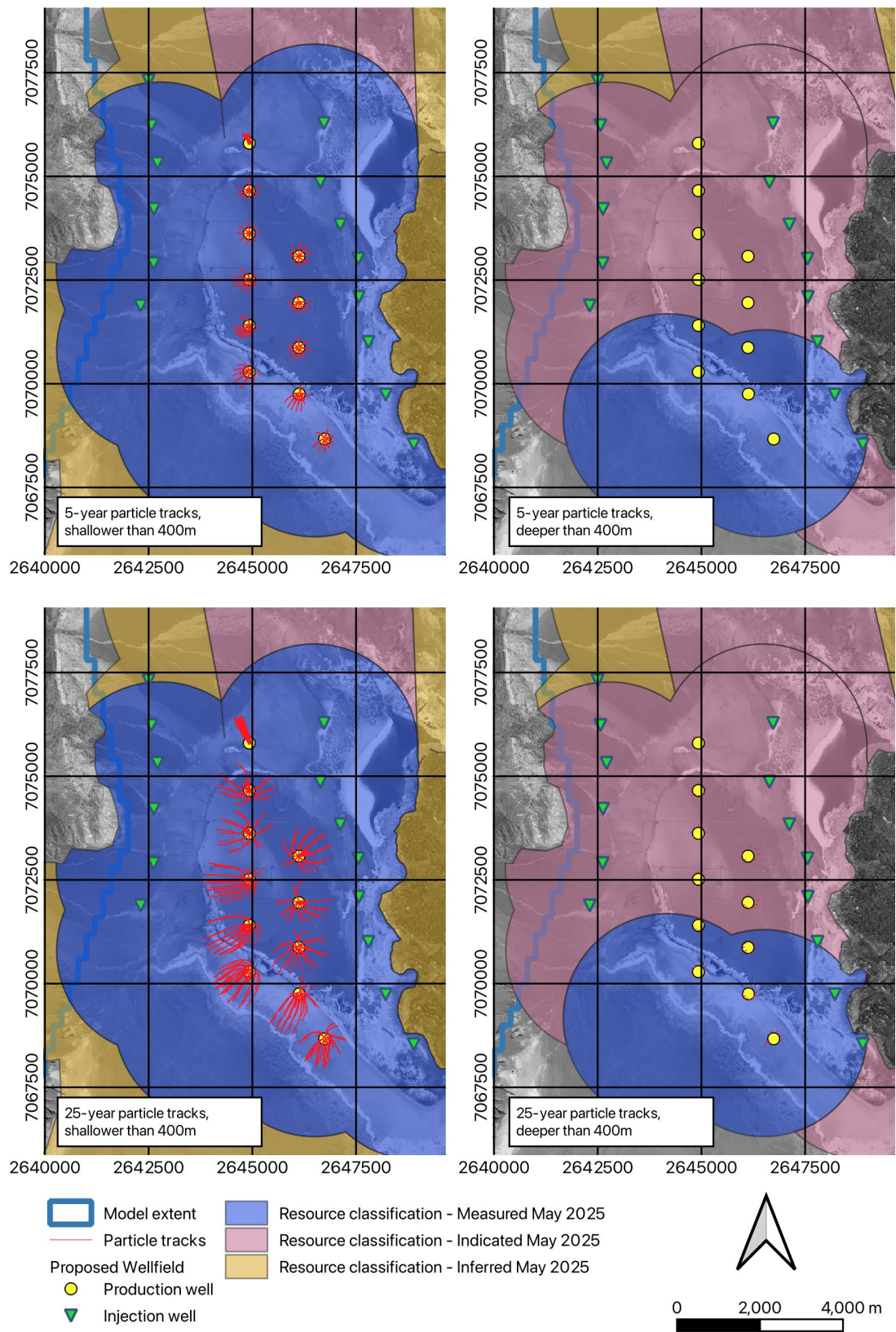
Notes to the Ore Reserve Estimate:

- Lithium is converted to lithium carbonate ( $\text{Li}_2\text{CO}_3$ ) 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.

**Particle Tracking**

Model particle tracking using mod-PATH3DU<sup>24</sup> was conducted on the results of the predictive Model to assess the source of the extracted lithium in relation to the Mineral Resource classifications. This is summarized in **Table 6** and predicts that approximately 98% of the extracted lithium will originate from within the Measured Resource in the production horizon with small contributions from the 400-600 m bgs Indicated Resource zone towards the end of the mine life (<2%), as shown in **Figure 12**.

<sup>24</sup> S.S. Papadopoulos and Associates (SSPA). Inc. 2022. mod-PATH3DU: A groundwater path and travel-time simulator. October, 2022.



**Figure 12. Particle Tracking to 5 and 25 Years overlain on Resource Zones**

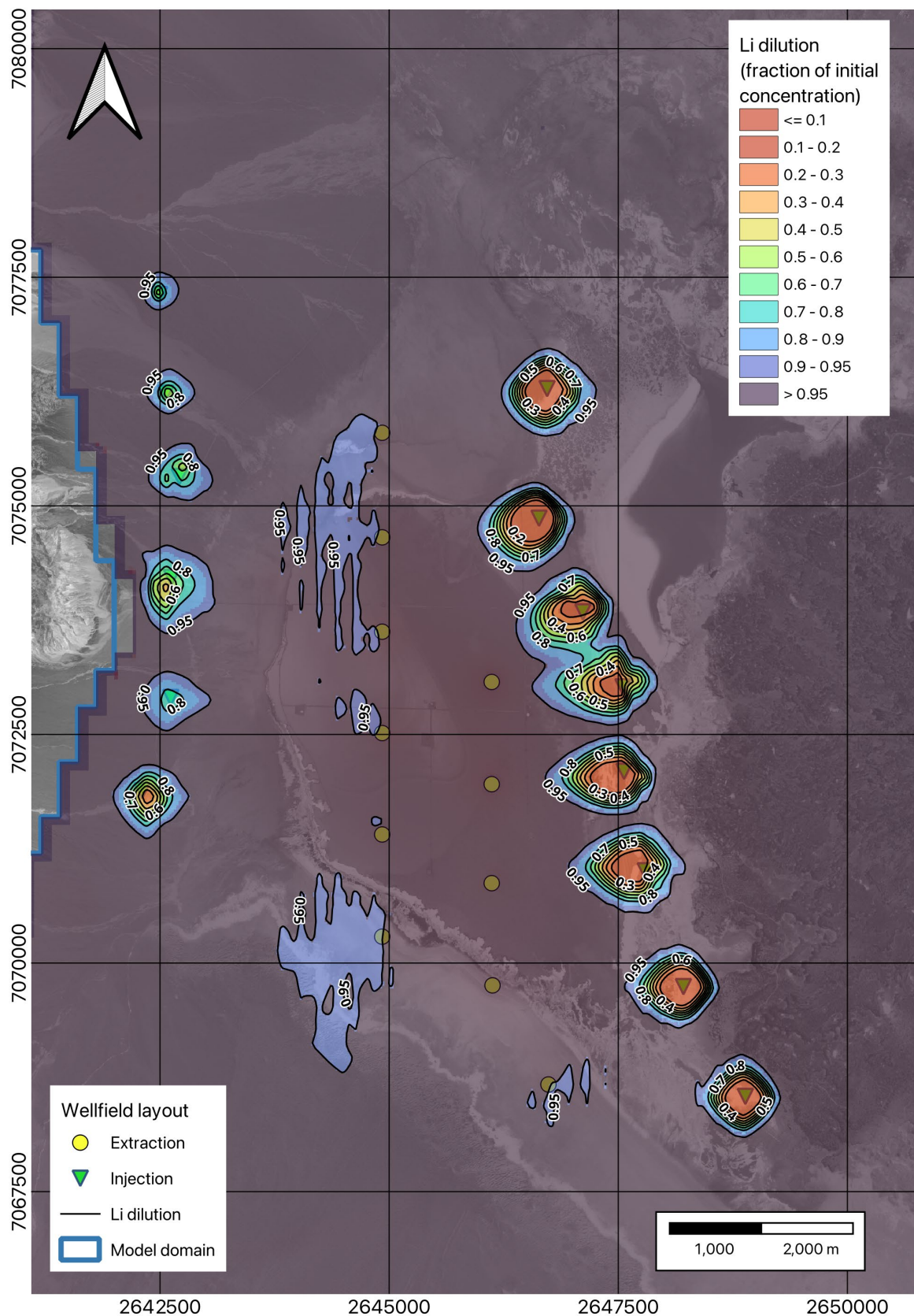
**Table 6. Lithium source by Resource Classification**

Resource Zone		% sourced from zone after 5 years	% sourced from zone after 7 years	% sourced from zone after 25 years
Shallower than 400m	Measured	100%	100 %	96 %
	Indicated	0%	0 %	0 %
Deeper than 400m	Measured	0%	0 %	2 %
	Indicated	0%	0 %	2 %

#### *Potential for resource dilution*

The Model was used to estimate dilution of the brine resource as a result of the injection of spent brine following the DLE process which is expected to extract at least 90% of the lithium. Additional losses in the production cycle are estimated to be 3.2%. Updated materials balance analysis indicates a concentration of about 19 mg/L in the spent brine injection stream. Other possible dilution to the lithium concentrations includes any leakage from overlying layers or lateral inflows of less mineralized fluids.

The Model indicates that lithium grades would decline by approximately 3% over 25 years. This is improved over the Maiden Ore Reserve because of the elimination of the westernmost production wells that are closest to the western injection wells. Overall, drawdown in the production horizon is significantly less as a result of the lower pumping rates, which reduced hydraulic gradients and decreased dilution across the field. Dilution results vary across the Model layers but is greatest in the production horizons (Unit B), such as Model layer 9 presented in **Figure 13**, but does not exceed 5%.



**Figure 13. Simulated lithium dilution in Model layer 9 (Unit B) after 25 years**



## ORE RESERVE SUMMARY

The Model developed for the Maiden Ore Reserve was updated with the lithium concentrations from the Mineral Resource estimate update announced to ASX on 3 June 2025 and the updated wellfield development plan. The Model encompasses the geologic, hydrogeological and hydrogeochemical understanding of the basin and was calibrated to extensive historical data sets to reliably reproduce brine and water levels, lake levels, hydraulic responses, and lithium concentrations during pumping and injection tests. The Model was used to predict future conditions during mine operations using the wellfield development plan.

The Model predicts that the updated wellfield is capable of producing in excess of 27,900 tpa after the ramp-up period in year 1 at an average of 268 mg/L. Higher lithium recovery rates and elimination of lower grade wells allowed for LCE production in excess of the plant capacity at 32-percent lower flow rates relative to the DFS Addendum. In all years except for year 1 which includes the lower flow rate ramp-up, the wellfield development plan modelled results in LCE production rates is well above the plant nameplate capacity of 25,141 t LCE. 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 Resource. Here, drillhole density provides a high degree of confidence in the resource estimate. Excess capacity is considered a factor-of-safety to account for changes in mine plans related to ramp-up or ramp-down, potential heterogeneity in the system that could impact well production rates, rates of dilution from injection, and plant downtime.

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, 2% of which is from the Indicated Resource category. Proved Ore Reserves are capped at 7-years despite the very high production from the Measured Resource. The rationale is that Model uncertainty increases with time of simulation and Probable Ore Reserves are expected to be moved to Proven Ore Reserves as large scale operational hydraulic stresses and lithium grades are incorporated into future versions of the Model.

## MODIFYING FACTORS

Below provides a summary of the modifying factors considered in the Ore Reserve update. The focus of the discussion is on the key engineering, environmental and economic changes since the Original DFS.

## CUT-OFF GRADES

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. This is based on the mining factors provided below and engineering described in the Original DFS and DFS Addendum.

The proposed DLE technology has been demonstrated to operate cost-effectively at lower lithium concentrations (e.g., less than 75 mg/L) although only a few brine samples with lithium concentrations below 100 mg/L have been collected at Kachi. The opportunity exists for incorporation of lower grade resources should they be discovered or otherwise evolve at the planned extraction wells. In this instance, the cut-off grade could be revised lower based on operating costs for the lithium grade considered.

## PROJECT ECONOMICS

The DFS Addendum, containing an updated detailed economic model based on this Ore Reserve update and the Mineral Resource update announced to ASX on 3 June 2025, has been released concurrently with this updated Ore Reserve<sup>25</sup>. The updated detailed economic model contained in the DFS Addendum collates an array of engineering inputs that have matured since the Original DFS was published in 2023, takes into consideration an improved lithium concentration of 249 mg/L in the Kachi brines as well as improvements to Lilac's Gen 4 technology, among other factors. Although this updated Ore Reserve has determined an average lithium grade of 268 mg/L, the work to produce the DFS Addendum and this updated Ore Reserve ran in parallel. The higher lithium content expressed in this document provides opportunity for further capital and operating cost reductions to those expressed in the DFS Addendum.

The inputs considered in the updated economic model include the Kachi brine production forecast from the mine plan, and updated estimated capital and operating costs derived from a combination of sources which are summarised in the DFS Addendum. Lake provided the wellfield costs, Hatch led the estimations for the carbonation plant, reagent generation, and general infrastructure, and Lilac provided the costs and process data associated with the Ion Exchange (IX) technology. Electric power costs were estimated from preliminary estimates provided by YPF-Luz – a potential independent power provider for Kachi power supply. The updated project costs will be released as a Class III AACE estimate (+/-15%).

The updated economics of the Kachi Project are and have been evaluated using a non-escalated real after-tax discounted cashflow (DCF) model with a 100% unlevered equity basis. 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, after the Final Investment Decision and to the end of life of the mine. All future cashflows are reported in real US dollars.

The cash flow analysis was used to estimate the economics of processing Kachi brine to produce an average of ~25,000 tpa of battery grade lithium carbonate for total production volume of 626,760 tonnes over the life of the project. As shown in the DFS Addendum, operating expenditures ("OPEX") for the plant are estimated to be USD5,895 / tonne of LCE which results in a significant margin to the anticipated selling price of battery grade lithium carbonate.

Allowances are as follows:

- An Argentine export tax of 0% on gross revenue<sup>26</sup>
- A royalty of 3.5% of 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.

The Kachi project economic forecast utilizes a forward price projection provided in Benchmark Mineral Intelligence's Lithium Forecast for Q2 2025. Demand for Lithium Carbonate is primarily driven by the transition to Electric Vehicles. Prices for lithium carbonate considered in the economic evaluation correspond to CIF Asia contract prices in real 2023 terms. The average sales price analysed is \$20,500 / tonne LCE over the LOM. Additionally, a sensitivity analysis was completed using various cases from the DFS Addendum with ranges of forward price projections. This results in a positive Net Present Value (NPV).

---

<sup>25</sup> See ASX announcement dated 4 August 2025 – "Kachi Phase One Definitive Feasibility Study Addendum"

<sup>26</sup> 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

Reporting is currently at the Feasibility level which is based on the data and information presented in this update, as well as previous JORC reports for the Project<sup>27</sup>. The multi-disciplinary team of geologists, hydrogeologists, and chemical and civil engineers with relevant experience in brine processing and direct lithium extraction technologies, are in collective agreement that the project meets the reasonable prospective criteria for economic extraction of lithium from the brine.

## MINING AND METALLURGICAL METHODS AND PARAMETERS

The current mine plan includes the construction of a Phase 1 plant with a targeted capacity of approximately 25,000 tpa of battery grade lithium carbonate. Therefore, the reserve estimate is based on a production rate of approximately 25,000 tpa of battery-grade lithium carbonate, which is consistent with the planned capacity of the Phase 1 facility. The brine will be extracted from the saturated sediments using vertical wells initially focused on the central resource area and the brine will be pumped to the DLE plant. An increase in average brine grade relative to the DFS Addendum results in enhanced lithium recovery, reduction of brine demand per tonne of product, and improved overall process efficiency.

Spent brine will be reinjected into the subsurface via dedicated wells and with the potential use of rapid-infiltration basins.

Extracted brine is routed through a feed pond that provides surge capacity before pre-treatment and delivery to the processing plant. Pre-treatment includes filtering to remove suspended solids and impurities. The DLE step employs Lilac Solutions' Generation 4 IX system, which uses hydrochloric acid as a stripping agent. The system was validated through extensive field and laboratory testing and is designed to deliver high lithium recovery and robust impurity rejection. The resulting eluate is concentrated, treated for impurities, and further processed through evaporation, polishing, and precipitation steps to produce battery-grade lithium carbonate.

The precipitated lithium carbonate is washed through two stages of centrifuging and a stage of repulp washing to achieve the final high purity product which is dried and then packaged for sale. Residual lithium is recovered via a crystallization circuit.

The updated DFS Addendum designs incorporate a modular IX configuration that simplifies operations while maintaining high Li recovery and impurity rejection.

### *Recovery Factor Comparison – Original DFS vs DFS Addendum*

Overall lithium recovery has been updated in the DFS Addendum to reflect improvements in the DLE stage enabled by Lilac's Generation 4 IX technology. DLE recovery was improved from 80.0% to 90.0% with net process recovery from 75.3% to 86.8% which has a material impact on the reserve estimate.

Parameter	Original DFS Value	DFS Addendum Value
DLE Recovery Factor	80.0%	90.0%
Net Process Recovery Factor	75.3%	86.8%

### *Drilling and Well Construction*

The updated wellfield development plan includes Direct Mud Rotary Drilling as the primary drilling method for extraction and injection wells. It was selected for its superior performance, speed, and cost-effectiveness in salar sediments, as compared to previously considered dual air rotary techniques. By leveraging oilfield drilling technologies and innovative well completion systems developed in collaboration with Johnson Screens, the program will be designed to expedite drilling activities by a

<sup>27</sup> Refer to ASX Announcements on 16 August 2023 and 22 November 2023

factor of three, enabling accelerated commissioning timelines and delivering projected cost savings of \$56 million, or 32% greater cost efficiency over traditional methods.

A Super Single drilling rig type was selected as it offers significant advantages over conventional mud rotary mine-style rigs, particularly in terms of automation, efficiency, and environmental performance. These rigs are highly automated, enhancing both safety and operational consistency by reducing manual handling and exposure to high-risk tasks. One of the key performance features is the use of 13-meter drill pipe joints, which dramatically reduces the frequency of pipe connections, minimizing downtime and improving overall drilling efficiency. Super Single rigs are also equipped with advanced variable-speed rig pumps that enhance hole cleaning by optimizing flow rates in real time. Their larger and more sophisticated mud systems provide superior drilling fluid control, which minimizes formation damage and maintains borehole integrity. Overall, Super Single rigs deliver a safer, faster, and more technically controlled drilling operation compared to traditional mud rotary rigs.

Drilling operations will employ a 1,230 kg/m<sup>3</sup> polymer-based mud system, with carefully managed penetration rates of 80–100 m/hr to optimise hole cleaning, minimise deviation (<1°), and ensure borehole integrity. Surface casing (508 mm) will be set and cemented to 5 m depth, followed by 316 stainless steel intermediate casing (406 mm) set to 200–230 m bgs. This casing design will provide isolation from freshwater aquifers and structural integrity for subsequent completions.

Extraction wells will target depths of approximately 400 m bgs while injection wells will extend to between 500 m and 600 m bgs, utilizing high-strength, dual-layer prepacked screen assemblies from Johnson Screens. These screens will incorporate glass bead filtration media that improves hydraulic performance and reduces potential biofouling. Extraction wells will use 25-slot #16–20 screens, and injection wells will use 40-slot #12–16 screens. All screens will be deployed with mechanical packers to ensure proper zonal isolation and long-term well performance.

Extraction wells will be completed with 25.7 cm (10.1 in) 300 horsepower (HP) Electric Submersible Pumps (ESPs) landed at approximately 182 m on 15.2 cm (6 in) stainless steel drop pipe. These high-efficiency ESPs will feature Inconel shafts, tungsten carbide bearings, erosion and scale protection, and real-time telemetry for monitoring intake pressure, temperature, flow, and power consumption via satellite, fibre optic cable, or Wi-Fi. Injection wells will use 8.9 cm (3.5 in) fiberglass drop pipe systems designed to reduce air entrainment and allow ESP retrofit for future development cycles.

Standardized wellhead systems will include 38.1 x 17.8 cm (16 x 7 in) 3,000 pounds per square inch (psi) ESP trees with dual-sealed 17.8 cm (7 in) hangers, ANSI 300-rated master and ESD valves, and Tri-Lock penetrators for ESP power transmission. Pressure integrity will be verified throughout construction with nitrogen and cement pressure testing.

The updated wellfield plan will significantly reduce drilling schedules and costs, leverage local expertise from the oil sector, and enable rapid rig deployment. While the approach will carry some risks associated with borehole stability and effective mud cake removal, these will be mitigated through innovative fluid management and robust wellbore hydraulics. The integration of oilfield-grade systems and proprietary screen technology will ensure the drilling campaign is technically resilient, environmentally compliant, and financially optimized for large-scale lithium brine production.

## **ENVIRONMENT, SOCIAL AND GOVERNANCE (ESG)**

Salt lakes/salars are a form of wetland, which are inhospitable except to adapted flora and fauna. Salars have been successfully developed as lithium operations in both Argentina and Chile that co-exist with these native flora and fauna. Argentina is signatory to the Ramsar Convention under the auspices of UNESCO under the Convention on Wetlands (Ramsar, 1971). Ramsar site 1865 “Lagunas Altoandinas y Puneñas de Catamarca” was established in February of 2009 under an agreement between the Ramsar Convention Organization and the government of Argentina which is represented by the Environmental Secretariat of the Catamarca Province. In 2021, the provincial government approved lithium extraction and mine development at the nearby Tres Quebradas lithium brine Project, located in a similar wetland zone to the Kachi Project.

The Kachi Project environmental area is concluding a socio-environmental baseline study with two years of sampling that included all biophysical components in the environmental area of influence within the Carachi Pampa basin. A specific study was carried out to project climate change in the period up to 2050. A thorough biodiversity and ecosystem services baseline study was compiled covering the desert and salt flat, with emphasis on the wetlands and lake close to the Carachi Pampa volcano. Special emphasis was placed on migratory wetland birds given the localization of the project within a Ramsar site. There are national and provincial protected areas some distance from the production project, which may be affected by external infrastructure and logistics activities. Environmental and social management plans and procedures were developed for minimizing risks in all sensitive areas. Cultural heritage, paleontological, and landscape assessments were completed to satisfy requirements of the "Equator Principles".

A social baseline was constructed from surveys of land use, communities, and public perceptions in nearby El Peñon and Carachi Pampa. This was supported by two surveys with numerous interviews and multiple community consultation meetings.

The environmental management system will address fresh water and brine management, energy efficiency, alternative energies, and reduction of the environmental footprint associated with the innovative process of ion-exchange lithium recovery. The process will not produce effluent discharges and the airborne emissions of gases and particulate matter will be within national standards. Hazardous materials and solid wastes will be managed according to good international industry practices (GIIP in the IFC terminology).

A permitting plan was developed with emphasis initially on the Environmental Impact Assessment (EIA) submitted to the Mining Ministry of Catamarca (March, 2024) and 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.

The ongoing governance of the Kachi Project will address government relations, community relations, and internal controls for compliance, with obligations and commitments in the social, environmental, and normative matters. It will also address community sustainability initiatives to promote long-term benefits from the Kachi Project.

### **Competent Person's Statement – Kachi Lithium Brine Project**

*The information contained in this ASX release relating to Exploration Results, Production Targets, Mineral Resources and Ore Reserves (for the avoidance of doubt, including those which underpin a production target), 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 Resources NL. Mr. Fulton consents to the inclusion in this announcement of 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.*

**Table 7. Property Details and Mineral Title Status**

<b>Tenement</b>	<b>Number-- Gde</b>	<b>Title Owner</b>	<b>Title Acq.</b>	<b>Reg.</b>	<b>Tenure Type</b>	<b>Status</b>	<b>Mining Con.</b>	<b>Minerals</b>	<b>Area (Ha)</b>	<b>Claims</b>	<b>EIA Approval Status</b>	<b>Royalty</b>
<b>MARIA I</b>	EX-- 2021-- 00362285-- - CAT (140/2018)	MVM / Lake	43419	yes	Exp, Con.	Granted	N/A	Lithium Salts	1260.1	12	Pending	No
<b>MARIA II</b>	EX-- 2021-- 00373528-- - CAT (14/2016)	MVM / Lake	42971	yes	Exp, Con.	Granted	N/A	Lithium Salts	546.9	5	Pending	No
<b>MARIA III</b>	EX-- 2021-- 00293511 - CAT (15/2016)	MVM / Lake	42971	yes	Exp, Con.	Granted	N/A	Lithium Salts	834.8	9	Pending	No
<b>KACHI INCA</b>	EX-- 2021-- 00361579-- - CAT (13/2016)	MVM / Lake	42971	yes	Exp, Con.	Granted	N/A	Lithium Salts	857.7	9	Pending	No
<b>KACHI INCA I</b>	EX-- 2021-- 00432837 - CAT (16/2016)	MVM / Lake	42971	yes	Exp, Con.	Granted	N/A	Lithium Salts	2880.4	29	Pending	No
<b>KACHI INCA II</b>	EX-- 2021-- 00221521 - CAT (17/2016)	MVM / Lake	42971	yes	Exp, Con.	Granted	N/A	Lithium Salts	2822.7	29	Pending	No
<b>KACHI INCA III</b>	EX-- 2121-- 00321200 - CAT (47/2016)	MVM / Lake	42606	yes	Exp, Con.	Granted	N/A	Lithium Salts	3355.4	34	Pending	No
<b>KACHI INCA V</b>	EX-- 2021-- 00208240 - CAT (45/2016)	MVM / Lake	43018	yes	Exp, Con.	Granted	N/A	Lithium Salts	307.0	4	Not yet submitted	No
<b>KACHI INCA VI</b>	EX-- 2021-- 00294250 - CAT (44/2016)	MVM / Lake	42606	yes	Exp, Con.	Granted	N/A	Lithium Salts	109.8	2	Pending	No
<b>DANIEL ARMANDO</b>	EX-- 2021-- 00208733-- - CAT (23/2016)	MVM / Lake	42971	yes	Exp, Con.	Granted	N/A	Lithium Salts	2116.0	32	Pending	No
<b>DANIEL ARMANDO II</b>	EX-- 2021-- 00331263-- CAT (97/2016)	MVM / Lake	42650	yes	Exp, Con.	Granted	N/A	Lithium Salts	1589.7	16	Pending	No
<b>MORENA 1</b>	EX-- 2021-- 00328638 - CAT (72/2016)	MVM / Lake	42650	yes	Exp, Con.	Granted	N/A	Lithium Salts	3339.0	31	Pending	No
<b>MORENA 2</b>	EX-- 2021-- 00390312 - CAT (73/2016)	MVM / Lake	42650	yes	Exp, Con.	Granted	N/A	Lithium Salts	2989.4	30	Pending	No
<b>MORENA 3</b>	EX-- 2021-- 00361695 - CAT (74/2016)	MVM / Lake	42650	yes	Exp, Con.	Granted	N/A	Lithium Salts	3175.0	31	Pending	No



<b>MORENA 4</b>	EX— 2021— 00293790 – CAT (29/2019)	MVM / Lake	44092	yes	Exp, Con.	Granted	N/A	Lithium Salts	2930.0	30	Pending	No
<b>MORENA 5</b>	EX— 2021— 00221381 – CAT (97/2017)	MVM / Lake	43798	yes	Exp, Con.	Granted	N/A	Lithium Salts	2214.0	15	Pending	No
<b>MORENA 6</b>	EX— 2021— 00208283 –CAT (75/2016)	MVM / Lake	42650	yes	Exp, Con.	Granted	N/A	Lithium Salts	1606.1	17	Pending	No
<b>MORENA 7</b>	EX— 2021— 00259078 – CAT (76/2016)	MVM / Lake	42650	yes	Exp, Con.	Granted	N/A	Lithium Salts	2805.0	29	Pending	No
<b>MORENA 8</b>	EX— 2021— 00294310– - CAT (77/2016)	MVM / Lake	42650	yes	Exp, Con.	Granted	N/A	Lithium Salts	2961.0	30	Pending	No
<b>MORENA 9</b>	EX— 2021— 00368898 – CAT (30/2019)	MVM / Lake	43798	yes	Exp, Con.	Granted	N/A	Lithium Salts	2821.6	29	Pending	No
<b>MORENA 10</b>	EX— 2022— 00508476– - CAT	MVM / Lake	Pending	yes	Exp, Con.	Not Granted	N/A	Lithium Salts	2712.9	28	Pending	No
<b>MORENA 12</b>	EX— 2021— 00259022 – CAT (78/2016)	MVM / Lake	42650	yes	Exp, Con.	Granted	N/A	Lithium Salts	2443.0	28	Pending	No
<b>MORENA 13</b>	EX— 2021— 00258895 – CAT (79/2016)	MVM / Lake	42650	yes	Exp, Con.	Granted	N/A	Lithium Salts	3286.0	31	Pending	No
<b>MORENA 15</b>	EX— 2021— 00360876 – CAT (162/2017)	MVM / Lake	43342	yes	Exp, Con.	Granted	N/A	Lithium Salts	2559.1	26	Pending	No
<b>PAMPA I</b>	EX— 2021— 00233741 – CAT (129/2013)	MVM / Lake	42774	yes	Exp, Con.	Granted	N/A	Lithium Salts	690.0	7	Pending	No
<b>PAMPA II</b>	EX— 2021— 00430058 -CAT (128/2013)	MVM / Lake	42774	yes	Exp, Con.	Granted	N/A	Lithium Salts	1053.2	11	Pending	No
<b>PAMPA 11</b>	EX— 2021— 00372498 – CAT (201/2018)	MVM / Lake	43868	yes	Exp, Con.	Granted	N/A	Lithium Salts	815.0	9	Pending	No
<b>PAMPA IV</b>	EX— 2021— 00322433 – CAT (78/2017)	MVM / Lake	43181	yes	Exp, Con.	Granted	N/A	Lithium Salts	2156.0	26	Pending	No
<b>IRENE</b>	EX— 2021— 00212993 – CAT (28/2018)	MVM / Lake	43349	yes	Exp, Con.	Granted	N/A	Lithium Salts	2052.3	21	Pending	No
<b>PARAPETO 1</b>	EX— 2021— 01648141	MVM / Lake	43367	yes	Exp, Con.	Granted	N/A	Lithium Salts	2504.0	23	Pending	No

	– CAT (133/2018)											
<b>PARAPETO 2</b>	EX— 2021— 00235750 – CAT (134/2018)	MVM / Lake	43367	yes	Exp, Con.	Granted	N/A	Lithium Salts	1729.7	18	Pending	No
<b>PARAPETO 3</b>	EX— 2121— 00261195 – CAT (132/2018)	MVM / Lake	43432	yes	Exp, Con.	Granted	N/A	Lithium Salts	3266.0	19	Pending	No
<b>PARAPETO III</b>	EX— 2021— 00854749 – CAT	MVM / Lake	44796	yes	Exp, Con.	Granted	N/A	Lithium Salts	1949.1	20	Pending	No
<b>GOLD SAND I</b>	EX— 2021— 00376209 – CAT (238/2018)	MVM / Lake	43579	yes	Exp, Con.	Granted	N/A	Lithium Salts	853.6	9	Pending	No
<b>TORNADO VII</b>	EX— 2021— 00208328 – CAT (48/2016)	MVM / Lake	42698	yes	Exp, Con.	Granted	N/A	Lithium Salts	6628.8	67	Pending	No
<b>DEBBIE I</b>	EX— 2021— 00196977 – CAT (21/2016)	MVM / Lake	42971	yes	Exp, Con.	Granted	N/A	Lithium Salts	1742.9	18	Pending	No
<b>DOÑA CARMEN</b>	EX— 2021— 00321876 – CAT (24/2016)	MVM / Lake	42971	yes	Exp, Con.	Granted	N/A	Lithium Salts	873.1	9	Pending	No
<b>DIVINA VICTORIA I</b>	EX— 2021— 00368383 – CAT (25/2016)	MVM / Lake	42971	yes	Exp, Con.	Granted	N/A	Lithium Salts	2420.1	25	Pending	No
<b>DOÑA AMPARO I</b>	EX— 2021— 00294138 – CAT (22/2016)	MVM / Lake	42971	yes	Exp, Con.	Granted	N/A	Lithium Salts	2695.3	27	Pending	No
<b>ESCONDIDITA</b>	EX— 2021— 00143141 – CAT (131/2018)	MVM / Lake	43367	yes	Exp, Con.	Granted	N/A	Lithium Salts	373.4	4	Pending	No
<b>GALAN OESTE</b>	EX— 2021— 00153718 – CAT (43/2016)	MVM / Lake	42657	yes	Exp, Con.	Granted	N/A	Lithium Salts	3166.9	32	Pending	No
<b>MARIA LUZ</b>	EX— 2021— 00153678 – CAT (34/2017)	MVM / Lake	43181	yes	Exp, Con.	Granted	N/A	Lithium Salts	2425.0	25	Pending	No
<b>NINA</b>	EX— 2021— 00360751 – CAT (106/2020)	MVM / Lake	44834	yes	Exp, Con.	Granted	N/A	Lithium Salts	3125.1	32	Not yet submitted	No
<b>PADRE JOSE MARIA I</b>	EX— 2021— 00432843 – CAT (95/2012)	MVM / Lake	45630	yes	Exp, Con.	Granted	N/A	Lithium Salts	650.0	7	Pending	No
<b>PADRE JOSE MARIA II</b>	EX— 2021— 00432950 – CAT (96/2012)	MVM / Lake	45630	yes	Exp, Con.	Granted	N/A	Lithium Salts	1523.1	16	Not yet submitted	No

<b>PADRE JOSE MARIA III</b>	EX— 2021— 00433095 — CAT (94/2012)	MVM / Lake	45630	yes	Exp, Con.	Granted	N/A	Lithium Salts	1523.1	16	Not yet submitted	No
<b>PADRE JOSE MARIA IV</b>	EX— 2021— 00433149 — CAT (93/2012)	MVM / Lake	45630	yes	Exp, Con.	Granted	N/A	Lithium Salts	1528.7	16	Not yet submitted	No
<b>PADRE JOSE MARIA V</b>	EX— 2021— 00647090 — CAT (92/2012)	MVM / Lake	45479	yes	Exp, Con.	Granted	N/A	Lithium Salts	1584.3	16	Not yet submitted	No
<b>PADRE JOSE MARIA VI</b>	EX— 2021— 00647273 — CAT (91/2012)	MVM / Lake	45630	yes	Exp, Con.	Granted	N/A	Lithium Salts	1507.3	16	Not yet submitted	No
<b>PADRE JOSE MARIA VII</b>	EX— 2021— 00647377 — CAT (90/2012)	MVM / Lake	45600	yes	Exp, Con.	Granted	N/A	Lithium Salts	1499.8	15	Not yet submitted	No
<b>PADRE JOSE MARIA VIII</b>	EX— 2021— 00647631 — CAT (89/2012)	MVM / Lake	45400	yes	Exp, Con.	Granted	N/A	Lithium Salts	515.0	6	Not yet submitted	No
<b>PAMPA III</b>	EX - 2021 - 00429001 — CAT (130/2012)	MVM / Lake	42774	yes	Exp, Con.	Granted	N/A	Lithium Salts	600.0	6	Pending	No
<b>PARAPETO 4</b>	EX— 2021— 01651926 —CAT (187/2020)	MVM / Lake	43335	yes	Exp, Con.	Granted	N/A	Lithium Salts	1980.0	20	Not yet submitted	No

**Abbreviations:**

Title Acq. = Titel Acquisition

Reg. = Registered

Exp, Con.: Exploration Concession

Mining Con. = Mining Concession

Ha = Hectare (rounded to 1 significant digit)

Table 8. Resource Drillhole Collars

Hole ID	Easting	Northing	Elevation mASL	Total Depth (m)	Drilling Method	Hole Diameter (cm)	From	To	Resource Unit	Li (mg/L)	Mg (mg/L)	K (mg/L)	Sample Type
K02D13	2646493	7075690	3006.3	404	Diamond HQ	6.4	58.5	59.5	A	217.0	3557.5	4437.7	Drive point
							64	108	A	181.7	2884.5	3620.3	Simple packer
							138	190.5	A	144.4	1589.9	3077.9	Simple packer
							269	298.4	B	203.5	2163.1	4099.7	Simple packer
							301	319	C	200.4	2172.6	4182.7	Simple packer
							313	343	C	251.7	1411.2	4987.2	Simple packer
							346	388	C	206.2	1814.6	4380.9	Simple packer
K02P01	2646499	7075676	3005.6	35	Rotary	21.6	7	10	A	93.7	1378.3	1778.3	Airlift
K02P02	2646565	7075674	3005.5	unknown	Rotary	21.6	31	35	A	175.7	2525.1	3762.2	Airlift
K03R03	2644936	7073943	3004.6	242	Rotary	21.6	213.1	236.1	B	287.5	1243.4	5880.5	Airlift
K03R12	2644942	7073926	3004.8	400	Rotary	21.6	349.2	391.4	C	275.7	1140.0	5403.6	Pumping test
K04P01	2646565	7071419	3004.8	35	Rotary	21.6	13	16	A	200.7	3854.5	4320.7	Airlift
							16	28	A	198.6	4169.7	4144.7	Airlift
							30	35	A	183.9	3127.0	4212.0	Airlift
							31	34	A	184.9	3154.2	4329.1	Airlift
K04R15	2646513	7071387	3005.0	360	Rotary	21.6	295	343	C	242.2	1240.7	5336.8	Pumping test
K05D09	2648943	7068270	3006.9	unknown	Diamond HQ	6.4	61	62	A	76.6	1202.6	1257.1	Drive point
							107.5	108.5	A	213.1	1301.1	4163.5	Drive point
							156	157.5	A	95.2	1460.0	1926.0	Artesian
							188	190	B	215.3	919.0	3596.0	Double packer
							200	201	B	204.0	919.7	3669.5	Double packer
							242	243	C	176.0	889.6	3115.8	Double packer
K05D11	2648950	7068270	3006.0	335	Diamond HQ	6.4	288	289	C	142.9	1088.0	2251.0	Artesian
							299	300.5	C	116.3	1035.0	1782.0	Artesian
							291	334.5	C	286.4	1164.0	4084.0	Simple packer
K06D04	2655328	7066144	3005.2	unknown	Rotary	unknown	95	113	A	187.0	879.1	3294.2	Airlift
K06D08	2655338	7066149	3005.1	unknown	Diamond HQ	6.4	69	70	A	187.6	999.4	3241.0	Drive point
							120	121	A	181.9	933.4	3301.0	Drive point
							165	166	A	170.0	880.0	3650.0	Drive point

							205	206	B	164.0	891.0	3575.0	Drive point
							258	259	C	189.0	962.0	4120.0	Drive point
							354	405	R	161.5	911.0	3415.0	Simple packer
<b>K06R10</b>	2655398	7066156	3005.2	189.5	Rotary	21.6	150	173.5	B	191.9	1119.0	3420.8	Artesian
<b>K08R14</b>	2644275	7071546	3004.8	364	Rotary	21.6	300	360	C	326.5	1231.9	6038.5	Airlift
<b>K08P01</b>	2644254	7071571	3004.7	50.5	Rotary	21.6	40	43	A	181.4	2385.4	3836.9	Airlift
							41.5	47.5	A	175.6	2193.9	3514.0	Airlift
<b>K08P02</b>	2644261	7071562	3004.8	11	Rotary	21.6	7	10	A	185.1	4352.6	3545.4	Airlift
<b>K08R17</b>	2644263	7071556	3004.7	204	Rotary	21.6	141.33	195.33	A	224.2	3818.9	4738.2	Pumping test
<b>K11D20</b>	2646488	7073873	3004.8	400.5	Diamond HQ	6.4	83	130	A	187.8	2651.2	4039.8	Simple packer
							117	165	A	215.9	1838.2	4840.5	Simple packer
							214	215	B	211.8	1571.0	4693.6	Double packer
							248	325	B	190.1	2677.4	4394.9	Simple packer
							356	357	C	218.4	1148.7	4486.3	Double packer
							364	380	C	222.3	831.7	4525.7	Airlift
							377	400	C	197.9	1004.7	4244.4	Simple packer
							10	13	A	181.5	2896.9	4242.6	Airlift
							25	28	A	174.8	2434.7	3790.7	Airlift
<b>K11R29</b>	2646548	7073949	3005.2	255	Rotary	25.4	200	255	B	287.3	1653.5	5426.3	Pumping test
<b>K11P01</b>	2646522	7073067	3004.8	36	Rotary	21.6	31	34	A	183.6	2736.5	4202.5	Airlift
<b>K12P01</b>	2646522	7072770	3004.9	36	Rotary	21.6	13	16	A	150.8	2520.1	3781.6	Airlift
							25	28	A	178.4	2918.1	4338.2	Airlift
							26.2	29.1	A	173.7	2636.0	3896.0	Airlift
<b>K12D21</b>	2646520	7072801	3004.7	217	Diamond HQ	21.6	55	73	A	176.6	2641.9	3863.1	Bailer
							73	84	A	168.2	2584.8	3741.7	Bailer
							94	109	A	219.2	1508.6	4254.9	Bailer
							109	124	A	172.4	2329.9	3912.6	Bailer
							124	139	A	224.5	1418.1	4721.8	Bailer
							144	154	A	223.2	1486.2	4579.6	Bailer
							156	169	A	232.2	1347.4	4827.0	Bailer
							171	184	A	233.5	1353.0	4992.0	Bailer
							195	199	B	223.6	1383.6	4521.1	Bailer

							202	211	C	221.2	1408.5	4036.4	Airlift
K14D23	2644072	7072780	3005.0	375	Diam ond HQ	21.6	7	16	A	167.6	3135.4	3373.7	Bailer
							15	28	A	177.2	2747.7	3739.8	Airlift
							31	40	A	153.9	2687.3	3578.5	Bailer
							43	46	A	152.1	2683.2	3462.5	Bailer
							46	55	A	139.8	2630.5	3333.7	Airlift
							66	75	A	145.4	2004.6	4525.9	Bailer
							75	86.5	A	227.5	1923.7	4796.9	Bailer
							87	100	A	247.7	2230.0	4731.1	Bailer
							100	115	A	266.5	2191.2	4737.7	Bailer
							115	130	A	249.6	2722.3	4884.8	Bailer
							130	145	A	217.8	2087.3	4110.3	Bailer
							159	175	A	217.7	1196.7	4448.9	Bailer
							250	295	B	294.1	1695.1	5472.9	Airlift
K14D24	2644050	7072783	3004.7	410	Diam ond HQ	6.4	70.3	71.3	A	231.4	2273.8	4624.7	Double packer
							88.3	89.3	A	208.0	2773.6	3796.7	Double packer
							124.3	125.3	A	249.3	2507.4	4284.5	Double packer
							145.3	146.3	A	195.4	2212.8	3917.4	Double packer
							181	182	A	254.4	1414.1	4711.7	Double packer
							221	222	B	277.5	1302.1	5254.5	Double packer
							273	274	B	312.5	1365.9	6192.3	Double packer
							330	331	C	281.1	988.2	4995.6	Double packer
							364	365	C	280.4	864.9	4861.8	Double packer
							396.3	397.3	C	201.0	1839.1	4241.8	Double packer
K14R37	2644113	7072780	3005.2	410	Rotar y	25.4	350	373.5	C	300.8	955.8	4965.7	Pumpin g test
							350	373.5	C	325.0	1022.5	5446.0	Airlift
K15D25	2645438	7072482	3004.7	405	Diam ond HQ	6.4	175	176	A	230.5	2115.5	5500.2	Double packer
							199	200	B	241.6	1563.8	5777.2	Double packer
							267	268	B	283.5	2047.6	5313.2	Double packer
							280	281	B	322.8	1421.1	5459.7	Double packer
							301	302	C	323.1	1230.0	5480.0	Double packer

							358	359 .5	C	287.4	946.2	4981 .8	Double packer
							374 .5	405	C	230.4	1047. 7	4591 .3	Simple packer
<b>K14P01</b>	2644059	7072767	3005.0	36	Rotar y	21.6	31. 9	35. 9	A	200.6	2764. 2	3806 .4	Airlift
<b>K15P01</b>	2645434	7072497	3004.7	36	Rotar y	21.6	30. 9	33. 9	A	164.4	2268. 5	3744 .2	Airlift
<b>K15R36</b>	2645456	7072403	3005.1	408	Rotar y	25.4	350	400 .5	C	306.8	677.1	5075 .6	Pumpin g test
<b>K16D28</b>	2645457	7070992	3004.9	410	Diam ond HQ	6.4	56. 3	57. 3	A	231.9	2562. 0	4425 .0	Double packer
							82. 3	83. 3	A	211.8	2564. 5	4404 .0	Double packer
							121 .3	122 .3	A	207.1	2337. 0	4353 .0	Double packer
							166 .3	167 .3	A	207.7	2545. 5	4426 .0	Double packer
							208 .3	209 .3	B	223.3	2488. 0	4543 .0	Double packer
							221 .3	222 .3	B	300.1	1469. 0	6085 .0	Double packer
							265 .3	266 .3	B	204.3	2459. 5	4376 .0	Double packer
							322 .3	323 .3	C	295.6	1166. 0	5361 .0	Double packer
							377 .3	378 .3	C	260.2	855.0	4720 .0	Double packer
<b>K18D32</b>	2642714	7071991	3008.8	417	Diam ond HQ	6.4	387 .3	388	C	265.6	886.5	4821 .0	Double packer
							73	74	A	221.0	3506. 0	4150 .0	Double packer
							124	125	A	218.0	3456. 0	4239 .0	Double packer
							167 .5	169 .5	A	219.0	3424. 0	4163 .0	Double packer
							193	195	A	215.5	3360. 0	4220 .5	Double packer
							298	300	B	231.0	1749. 5	4364 .0	Double packer
							323	325	C	254.0	1514. 0	4613 .5	Double packer
							362	364	C	333.0	950.0	5542 .0	Double packer
							397	399	C	241.0	1464. 5	4460 .0	Double packer
<b>K19R33</b>	2642787	7070796	3008.5	410	Diam ond HQ	6.4	382	383	C	251.5	1535. 5	4314 .5	Double packer
							31	37	A	203.0	3163. 0	3984 .7	Airlift
							58	59	A	216.0	3922. 0	4154 .0	Double packer
							112	114	A	197.0	3266. 0	3866 .0	Double packer
							202	203	A	162.0	2461. 0	3186 .0	Double packer
							323	324	C	171.5	20.4	3081 .5	Double packer
							373	374	C	218.0	1286. 0	4251 .0	Double packer

K20R35	2642787	7074735	3012.4	411	Diam ond HQ	6.4	43	45	A	133.0	2251. 0	2368 .0	Double packer
							67	69	A	137.0	2260. 0	2377 .0	Double packer
							86	88	A	161.0	2836. 0	2800 .0	Double packer
							124	126	A	171.0	2926. 0	3406 .0	Double packer
							178	180	A	187.0	2607. 5	4278 .5	Double packer
							277	279	C	204.0	2198. 0	3808 .5	Double packer
							361	363	C	266.5	708.0	4893 .0	Double packer
							393	411	C	273.0	781.0	4814 .0	Double packer
							205	217	B	196.5	2253. 0	3596 .0	Airlift
K21D38	2641814	7067547	3014.3	430	Diam ond HQ	6.4	175	177	A	155.0	1490. 0	3102 .0	Double packer
							202	204	A	155.5	1629. 0	3006 .0	Double packer
							295	430	C	176.6	1758. 3	3676 .0	Simple packer
							395	407	C	229.0	1426. 0	4911 .0	Airlift
K22R39	2646323	7080044	3014.6	425	Diam ond HQ	6.4	350	424	C*	253.0	1126. 0	4365 .0	Simple packer
							385	403	C	271.0	1140. 0	4650 .0	Airlift
K23D40	2645574	7083439	3069.9	611	Diam ond HQ	6.4	288	322	C	254.0	1011. 5	4601 .0	Simple packer
							350	360	C	213.0	893.0	4150 .0	Simple packer
							360	390	C*	210.0	922.5	4116 .5	Simple packer
							409	420	D	228.0	1053. 5	3817 .0	Simple packer
							436	445	D	243.0	944.0	4401 .0	Simple packer
							461	470 .5	D	240.0	947.5	4456 .0	Simple packer
							485	496	D	241.0	962.0	4478 .0	Simple packer
							521	530 .5	D	229.0	901.0	4116 .5	Simple packer
							538	550	D	235.0	937.5	4282 .0	Simple packer
							566	575 .5	D	229.0	917.5	4233 .5	Simple packer
							587	601	D	224.0	911.0	4146 .5	Simple packer
							602	610	D	209.0	907.5	3893 .5	Simple packer
							371 .96	383 .76	C	212.0	982.5	4280 .5	Airlift
K24D41	2646495	7068815	3007.5	610	Diam ond HQ	6.4	166	175	A	271.0	895.0	6259 .0	Simple packer
							191	200	A	266.0	941.5	6762 .5	Simple packer



							215	226	B	309.5	1165.5	6750.5	Simple packer
							242	250	B	348.0	1170.5	6803.0	Simple packer
							265	277	B	346.0	710.5	5738.0	Simple packer
							289	300	C	278.5	718.0	4864.0	Simple packer
							315	325	C	269.0	680.0	4884.5	Simple packer
							341	350	C	260.5	606.5	4844.5	Simple packer
							379	391	C	273.0	654.0	4835.5	Simple packer
							389	400	C	276.0	595.0	4801.5	Simple packer
							415	426	D	325.0	566.0	4939.0	Simple packer
							440	450	D	275.0	568.5	4718.5	Simple packer
							466	475	D	237.0	835.0	4483.0	Simple packer
							490	500	D	231.0	811.5	4496.5	Simple packer
							518	526	D	217.5	806.5	4679.0	Simple packer
							539	550	D	205.0	812.0	4419.0	Simple packer
							565	575	D	234.5	813.0	4610.5	Simple packer
							599	610	D**	211.5	957.0	4427.0	Simple packer
							395	410	C	385.0	709.0	5249.0	Airlift
K25D42 (40 to 250 m), K25D44 (330 m to 622 m)	2644190	7069157	3024.5	280, 622	Diam ond HQ	6.4, then 21.6	65	75	A	113.5	1638.0	3190.0	Simple packer
							89	100	A	129.0	2732.5	3525.5	Simple packer
							115	125	A	159.5	2765.5	4486.5	Simple packer
							140.5	151.5	A	176.0	1947.5	4682.5	Simple packer
							192.5	203.5	A	192.5	1388.5	4770.0	Simple packer
							215	226	A	243.5	929.5	5773.0	Simple packer
							239	250	B	302.0	907.5	6197.5	Simple packer
							330	331	B	269.0	727.5	5105.0	Double packer
							380	381	B	280.5	739.0	5175.0	Double packer
							418	430	B*	261.5	871.0	4737.0	Airlift

							424	430	B	263.5	712.5	4823.5	Simple packer
							444	455	C	269.0	750.5	4879.5	Simple packer
							461	475	C	262.0	759.0	4785.0	Simple packer
							486	500	C	260.5	638.0	4707.5	Simple packer
							530	541	C	253.0	477.5	4576.0	Simple packer
							542	553	C	243.5	437.0	4504.0	Simple packer
							561	575	C	235.0	558.5	4393.5	Simple packer
							587	601	C	235.5	681.0	4646.0	Simple packer
							605	622	C	229.5	776.0	4626.5	Simple packer

Notes:

- 1) Easting and northing are provided in Posgar 94 / Argentina 2;
- 2) Elevation mASL refers to the ground surface elevation at the well or borehole location;
- 3) Where sample results are available from the primary and check laboratories, the values are averaged;
- 4) Samples from pumping tests are averaged for the various times;
- 5) \*Samples not included in resource estimate due to overlapped sample intervals;
- 6) \*Sample K25D44 418-430 included in the resource model as 418 – 424 to remove overlap;
- 7) Previously reported samples from 40 to 50 m in K25D42 was removed because of chemistry indicative of a non-representative sample;
- 8) All boreholes have a dip of 90 degrees, as such azimuth is not applicable.

## **APPENDIX 1**

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

### **SECTION 1**

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

Criteria	Section 1 – Sampling Techniques and Data	
Sampling techniques	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>▪ Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>▪ 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</li> </ul>	<ul style="list-style-type: none"> <li>▪ Brine samples were collected using multiple sampling methods from diamond core and rotary drilling including:</li> <li>▪ Bottom of hole spear point during HQ diamond core drilling advance</li> <li>▪ 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.</li> <li>▪ Installed standpipes with discrete screening intervals.</li> <li>▪ Bailer sampling during advance, removing significant brine volumes to draw formation fluids into the base of the drill stem.</li> <li>▪ Development of test wells and during pumping test of varying durations.</li> <li>▪ 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.</li> <li>▪ Drill core in the hole was recovered in 1.5 m length core runs in core lexan tubes to minimise sample disturbance.</li> <li>▪ Drill core was collected in Lexan Tubes for minimal disturbance to obtain representative samples of the sediments that host brine.</li> </ul>

	detailed information.	
Drilling techniques	<ul style="list-style-type: none"> <li>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 oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drilling with an internal (triple) tube was used for drilling. The drilling produced cores with variable core recovery associated with unconsolidated material in particularly sandy intervals. Recovery of these more friable sediments is more difficult with diamond drilling, as this material can be washed from the core barrel during drilling.</li> <li>Rotary drilling used 21.6 cm (8.5 in) or 25.4 cm (10 in) tricone bits which produced drill chips that were subsequently logged. Holes were also geophysically logged.</li> <li>Brine has been used as drilling fluid for lubrication during drilling, for mixing of additives and muds.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Additives and muds were used to maintain hole stability and minimise sediment samples from washing away from the triple tube.</li> <li>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.</li> <li>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 conservative values were chosen from the BMR tool.</li> </ul> <p>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</p>



		<p>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 reiterate, where there may be sample anomalies, Lake chose the conservative values in every case.</p>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Logging is both qualitative and quantitative in nature. The relative proportions of different lithologies which have a direct bearing on the overall porosity, contained and potentially extractable brine are noted, as are more qualitative characteristics such as the sedimentary facies and their relationships. Cores are photographed for reference, prior to storage.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> <li>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</li> </ul>

	<p>duplicate/second-half sampling.</p> <ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p>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.</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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 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.</li> <li>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.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Duplicate samples in the analysis chain were submitted to Alex Stewart or SGS laboratories as unique samples (blind duplicates) during the process.</li> <li>Stable blank samples (distilled water) were used to evaluate potential sample and cross contamination.</li> <li>Field parameters were measured on site using a hand-held Hanna pH and electrical conductivity (EC) multiprobe meter.</li> <li>Routine field equipment calibration was done using standards and buffers.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>The properties are located at the junction of the Argentine</li> </ul>

	<p>in Mineral Resource estimation.</p> <ul style="list-style-type: none"> <li>▪ Specification of the grid system used.</li> <li>▪ Quality and adequacy of topographic control.</li> </ul>	<p>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.</p>
Data spacing and distribution	<ul style="list-style-type: none"> <li>▪ Data spacing for reporting of Exploration Results.</li> <li>▪ Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>▪ Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ Brine samples were generally collected over various intervals using straddle packers, single packers, spear points, and discrete screen intervals from installed 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.</li> <li>▪ 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.</li> <li>▪ Sufficiency of spacing and distribution for estimation procedures and classifications were applied. Lake followed guidance offered by AMEC and Houston (2011).</li> <li>▪ 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:</li> <li>▪ 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</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> </ul>
Orientation of data in relation	<ul style="list-style-type: none"> <li>▪ Whether the orientation of sampling achieves</li> </ul>	<ul style="list-style-type: none"> <li>▪ The salt lake (salar) deposits that contain lithium-bearing brines generally have horizontal to sub-horizontal beds and</li> </ul>

to geological structure	<p>unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <ul style="list-style-type: none"> <li>▪ 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 reported if material.</li> </ul>	<p>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.</p> <ul style="list-style-type: none"> <li>▪ Geological structures are important for the formation of salar basins, but not as a host for brine mineralization.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>▪ The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ The samples were moved from the drillhole sample site to secure storage at the camp on a daily basis. All brine sample bottles sent to the laboratory are marked with a unique label.</li> </ul>
Review (and Audit)	<ul style="list-style-type: none"> <li>▪ The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>

(Criteria in this section apply to all succeeding sections)

## **SECTION 2**

### **Reporting of Exploration Results**

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



Criteria	Section 2 – Reporting of Exploration Results	
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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 <b>Table 7 - Properties Details</b>.</li> <li>The tenements are believed to be in good standing, with statutory payments completed to relevant government departments.</li> </ul>
Exploration by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other Parties.</li> </ul>	<ul style="list-style-type: none"> <li>Marifil Mines Ltd conducted sparse surface pit sampling in 2009 of groundwater at depths less than 1m.</li> <li>Samples were taken from each hole and analysed at Alex Stewart laboratories in Mendoza Argentina.</li> <li>Results were reported in an NI 43-101 report by J. Ebisch in December 2009 for Marifil Mines Ltd.</li> <li>NRG Metals Inc commenced exploration in adjacent leases under option. Two diamond 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.</li> <li>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.</li> <li>No other exploration results were located.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Geology was recorded during the diamond drilling and from chip samples in rotary drill holes.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the</li> </ul>	<ul style="list-style-type: none"> <li>Refer to Table 8 above.</li> <li>Lithological data was collected from the holes as they were drilled and drill cores or chip samples were retrieved. Detailed</li> </ul>

	<p>exploration results including a tabulation of the following information for all Material drill holes:</p> <ul style="list-style-type: none"> <li>▪ easting and northing of the drill hole collar</li> <li>▪ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>▪ dip and azimuth of the hole</li> <li>▪ down hole width and depth (length and interception depth)</li> <li>▪ end of hole (hole length).</li> <li>▪ 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.</li> </ul>	<p>geological logging of cores is ongoing.</p> <ul style="list-style-type: none"> <li>▪ All drill holes are vertical, (dip -90, azimuth 0 degrees).</li> <li>▪ 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.</li> <li>▪ Assay results are provided in Table 8.</li> <li>▪ Drill hole information is shown in included plans.</li> <li>▪ Refer to previous ASX announcements for detailed lithological descriptions (e.g., October 4, 2023; August 22, 2023; November 22, 2023.)</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ Lithium samples are by nature composites of brine over intervals of metres, due to the fluid nature of brine.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>▪ These relationships are particularly important in the reporting of Exploration Results.</li> <li>▪ If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mineralisation is interpreted to be horizontally lying 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.</li> <li>▪ 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</li> </ul>

	<p>be reported.</p> <ul style="list-style-type: none"> <li>▪ 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').</li> </ul>	<p>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.</p>
Diagrams	<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>	<ul style="list-style-type: none"> <li>▪ A drill hole location plan is provided showing the locations of the drill platforms (Figure 6 and others with regards to the Model)</li> <li>▪ Drill hole information is shown in plans included.</li> <li>▪ Refer to October 4, 2023, August 22, 2023 and June 15, 2023 ASX announcement for recent detailed lithological descriptions.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Brine assays are available from 39 resource drill holes reported in Table 8. Additional information will be provided as it becomes available.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Positive extraction and injection test results were reported in the 16 August 2023 ASX announcement.</li> <li>▪ 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"</li> </ul>
Further work	<ul style="list-style-type: none"> <li>▪ The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>▪ Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The Company has drilled over 13,000 m of diamond and rotary drilling.</li> <li>▪ 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.</li> </ul>

## SECTION 3

### Estimation and Reporting of Mineral Resources

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

Criteria		Section 3– Estimation and Reporting of Mineral Resources
Database integrity	<ul style="list-style-type: none"> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>Data was transferred directly from laboratory spreadsheets to the database.</li> <li>Data was checked for transcription errors when in the database, to ensure coordinates, assay values, and lithological codes were correct.</li> <li>Data was plotted to check the spatial location and relationship to adjoining sample points.</li> <li>Duplicates and Standards were used in the assay process.</li> <li>Brine assays and porosity test work were analysed and compared with other publicly available information for reasonableness.</li> <li>BMR geophysical log data has been compared with laboratory porosity values and provides a more continuous but more conservative estimate of drainable porosity (Sy).</li> <li>Comparisons of original and current datasets were made to ensure data integrity.</li> <li>A detailed statistical analysis of the resource data set was completed and presented in the Appendix of the 22 November 2023 ASX announcement.</li> </ul>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person visited the site multiple times during the drilling and sampling program.</li> <li>Procedures have been modified throughout the project that are aimed at improving data and sample recovery, working closely with the drilling superintendent.</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral resource estimation.</li> <li>The factors affecting continuity</li> </ul>	<ul style="list-style-type: none"> <li>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, silts clays and minor gravel.</li> <li>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.</li> <li>Data used in the interpretation includes rotary and diamond drilling methods.</li> </ul>

	both of grade and geology	<ul style="list-style-type: none"> <li>Drilling depths and geology encountered has been used to conceptualise hydro-stratigraphy and build the model units.</li> <li>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.</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul style="list-style-type: none"> <li>The lateral extent of the resource has been defined by the boundary of the Company's properties, the 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 km<sup>2</sup>.</li> <li>The top of the model coincides with the topography obtained from the Shuttle Radar Topography Mission (SRTM). The original elevations were locally adjusted for each borehole collar with the most accurate coordinates available. The base of the resource is limited to a 600 m depth. The basement rocks underlying the salt lake sediments were intersected in drilling from the SE of the salar.</li> <li>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.</li> </ul>
Estimation and modelling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>No grade cutting or capping was applied to the model.</li> </ul>



	<p>significance (e.g. sulphur for acid mine drainage characterisation).</p> <ul style="list-style-type: none"> <li>▪ In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>▪ Any assumptions behind modelling of selective mining units.</li> <li>▪ Any assumptions about correlation between variables.</li> <li>▪ Description of how the geological interpretation was used to control the resource estimates.</li> <li>▪ Discussion of basis for using or not using grade cutting or capping.</li> <li>▪ The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ No assumptions were made about correlation between variables or recovery of by-products. Lithium is the value proposition of the project.</li> <li>▪ 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.</li> <li>▪ Model blocks are defined as 200 by 200 m blocks in an east and north direction and 10 m in the vertical direction.</li> <li>▪ Extraction of brine allows for limited control of selective mining and selective mining units are not considered, as the resource is relatively homogeneous.</li> <li>▪ The development of the inner three-layer model and outer homogeneous layer in the alluvial gravels/fans, with essentially horizontal layers, was used to define the search ellipses to control the resource estimation.</li> <li>▪ 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.</li> </ul>
Moisture	<ul style="list-style-type: none"> <li>▪ Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ Tonnages are estimated as metallic lithium dissolved in brine.</li> <li>▪ 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 <math>\text{Li}_2\text{CO}_3</math>, compared to metallic lithium, or simply the element Li.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>▪ The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>▪ A 100 mg/L external cut-off grade was applied to the large and uniform resource.</li> <li>▪ The proposed DLE technology demonstrated to operate cost-effectively at much lower Li concentrations (e.g., less than 75 mg/L).</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>▪ Assumptions made regarding possible mining methods, minimum mining dimensions and</li> </ul>	<ul style="list-style-type: none"> <li>▪ The resource was quoted in terms of brine volume, concentration of dissolved elements, contained lithium, and lithium carbonate.</li> </ul>

	<p>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.</p>	<ul style="list-style-type: none"> <li>■ 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).</li> <li>■ 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.</li> <li>■ 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 10 m, 0.1 m and 0.01 m for longitudinal, transverse and vertical expressions, respectively.</li> <li>■ 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.</li> <li>■ After lithium extraction, spent brine will be injected back into the aquifer.</li> <li>■ 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.</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>■ 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.</li> </ul>	<ul style="list-style-type: none"> <li>■ 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.</li> <li>■ Lithium chloride eluate (LiCl) produced from the DLE system is purified and concentrated using conventional Reverse Osmosis (RO), Evaporation, and impurity precipitation technology.</li> <li>■ The purified and concentrated LiCl solution is converted to lithium carbonate via conventional carbonation process using sodium carbonate reagent to precipitate lithium carbonate.</li> <li>■ 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</li> </ul>

		<p>litres of brine and produced over 200,000 litres (200m<sup>3</sup>) of concentrated lithium chloride product.</p> <ul style="list-style-type: none"> <li>▪ The Kachi demonstration plant campaign validated the IX system under site-representative conditions, confirming consistent performance and the robustness of its modular design.</li> <li>▪ The Generation 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> </ul>
Environmental factors or assumptions	<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>	<ul style="list-style-type: none"> <li>▪ A high degree of consideration was given to field development planning that will minimise impact on sensitive environmental areas.</li> <li>▪ Process water recovery early in the project will minimise freshwater resource impacts.</li> <li>▪ The production / exploitation environmental impact assessment is well advanced and has been undertaken in parallel with the Resource and Reserve estimation process.</li> <li>▪ Lake Resources is taking the initiative with regards to the permitting process early and ensuring environmental protection requirements are considered in the project design.</li> <li>▪ 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.</li> <li>▪ 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 November of 2022. An extension was requested to extend the duration of the permit until the Mining Ministry approves the permits for the exploitation</li> </ul>

		<p>stage. Additionally, the Kachi Project holds other sectoral permits including for fuel tanks, freshwater use, hazardous waste, quarry, and a local industrial permit.</p> <ul style="list-style-type: none"> <li>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.</li> <li>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 m<sup>3</sup> per day. Activity is underway to secure the definitive permit for future phases</li> <li>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 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.</li> </ul>
Bulk density	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Density measurements were taken as part of the drill core assessment. This included determining dry density and particle density as well as field measurements of brine density.</li> <li>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.</li> <li>No bulk density was applied to the estimates because resources are defined by volume, rather than by tonnage.</li> </ul>
Classification	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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,</li> </ul>	<ul style="list-style-type: none"> <li>The resource was classified into resource categories based on confidence in the estimation.</li> <li>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</li> </ul>

	<p>quality, quantity and distribution of the data).</p> <ul style="list-style-type: none"> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<p>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.</p> <ul style="list-style-type: none"> <li>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.</li> <li>The Inferred resource surrounding the Measured and Indicated resource in the properties reflects more limited 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.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>An audit of sampling and field procedures was undertaken by Geoffrey Balwin in February 2023.</li> </ul>
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>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.</li> <li>The statement should specify whether it relates to global or</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>References: <ul style="list-style-type: none"> <li>Houston, J., Butcher, A., Ehren, P., Evans, K., and Godfrey, L. <i>The Evaluation of Brine Prospects and the Requirement for Modifications to Filing Standards. Economic Geology. V 106.</i></li> <li>AMEC <i>Guidelines for Resource and Reserve Estimation for Brines</i></li> </ul> </li> </ul>

	<p>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.</p> <ul style="list-style-type: none"> <li>▪ These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	
--	--	--



## 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.)

Criteria		Section 4 – Estimation and Reporting of Mineral Ore Resources
Mineral Resource estimate for conversion to Ore Reserves	<ul style="list-style-type: none"> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource estimate used as the basis of the Ore Reserve analysis is detailed in the 3 June 2025 ASX Announcement.</li> <li>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.</li> <li>The Mineral Resource estimate was completed by the Andy Fulton, the CP who also led the Ore Reserve estimates.</li> <li>Additional details on the Mineral Resource estimate are provided in Section 3 above.</li> <li>The mineral resource is inclusive of Ore Reserves.</li> </ul>
Site Visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Close coordination with CP and Lake's technical team throughout exploration program and resource / reserve estimation programs.</li> </ul>
Study Status	<ul style="list-style-type: none"> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The DFS Addendum has been released concurrently with this Ore Reserve update.</li> <li>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.</li> <li>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.</li> <li>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,</li> </ul>

		<p>laguna stage, spring flows, drawdown, and mounding during pumping and injection tests.</p> <ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ The mine plan for a brine project is the well field layout, well depths and construction details and the pumping schedule have been designed to a DFS level. The mine plan has been simulated in the numerical Model, and the results demonstrate its technical feasibility.</li> <li>▪ 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.</li> <li>▪ Costs and modifying factors have been extensively considered.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>▪ The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ The proposed DLE technology has been demonstrated to operate cost-effectively at much lower lithium concentrations (e.g., less than 75 mg/L).</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>▪ 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).</li> <li>▪ The choice, nature and appropriateness of the</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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</li> </ul>

	<p>selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</p> <ul style="list-style-type: none"> <li>▪ The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</li> <li>▪ The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>▪ The mining dilution factors used.</li> <li>▪ The mining recovery factors used. Any minimum mining widths used.</li> <li>▪ The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>▪ The infrastructure requirements of the selected mining methods.</li> </ul>	<p>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.</p> <ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ Particle tracking indicates no recovery of Inferred Resource over the LOM and Inferred Resources have not been used in the Ore Reserve estimate.</li> <li>▪ 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.</li> <li>▪ After lithium extraction spent brine will be injected back into the reservoir at the locations shown in Figure 1.</li> <li>▪ 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.</li> <li>▪ The Mine Plan extracts less than 9% of the Measured and Indicated Resource over the LOM.</li> <li>▪ 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.</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>▪ The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>▪ Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>▪ The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>▪ Any assumptions or allowances made for deleterious elements.</li> <li>▪ The existence of any bulk sample or pilot scale test</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ Lithium chloride eluate (LiCl) produced from the DLE system is purified and concentrated using conventional Reverse Osmosis (RO), Evaporation, and impurity precipitation technology.</li> <li>▪ The purified and concentrated LiCl solution is converted to lithium carbonate via conventional carbonation process using sodium carbonate reagent to precipitate lithium carbonate.</li> <li>▪ 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</li> </ul>

	<p>work and the degree to which such samples are considered representative of the orebody as a whole.</p> <ul style="list-style-type: none"> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	<p>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 (200m<sup>3</sup>) of concentrated lithium chloride product.</p> <ul style="list-style-type: none"> <li>The Kachi demonstration plant campaign validated the IX system under site-representative conditions, confirming consistent performance and the robustness of its modular design.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>The status of studies of potential environmental impacts of the mining and 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.</li> </ul>	<ul style="list-style-type: none"> <li>A high degree of consideration has been given to field development planning that will minimise impact on sensitive environmental areas.</li> <li>Process water recovery early in the project will minimise freshwater resource impacts.</li> <li>The environmental impact assessment for the production phase is well advanced and has been undertaken in parallel with the Resource and Reserve estimation.</li> <li>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.</li> </ul>

		<ul style="list-style-type: none"> <li>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.</li> <li>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 64m<sup>3</sup> per day. Activity is underway to secure the definitive permit for future phases.</li> </ul>
Infrastructure	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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<sup>28</sup>.</li> <li>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.</li> <li>Kachi site freshwater availability for LOM has been confirmed by the hydrogeologic Model.</li> <li>Required infrastructure includes construction and operations camps, electricity infrastructure, brine pumping and reinjection systems, water storage, chemical storage, product storage, and purification systems.</li> </ul>
Cost	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>The operating costs were estimated by Hatch engineering with operating and IXM costs provided by Lilac and electricity rates provided by YPF Luz.</li> <li>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.</li> <li>Allowance for key taxes and charges include: <ul style="list-style-type: none"> <li>Zero percent export duty<sup>29</sup></li> <li>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</li> </ul> </li> </ul>

<sup>28</sup> Refer to ASX announcement dated 2 July 2025

<sup>29</sup> 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.

	<ul style="list-style-type: none"> <li>▪ The allowances made for royalties payable, both Government and private.</li> </ul>	<p>lithium chloride revenues of \$5,000/tonne, consistent with Argentine Mining Investment Law.</p> <ul style="list-style-type: none"> <li>▪ No private royalties are considered in the model.</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ Operating expenditure excludes corporate overhead costs.</li> <li>▪ 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.</li> </ul>
Revenue factors	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ In November 2023, the Kachi Project retained Goldman Sachs as Financial Adviser in connection with exploring a potential strategic partnership for Kachi<sup>30</sup>. 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.<sup>31</sup></li> <li>▪ The impact of any future offtake contract agreements on pricing will be reflected in any subsequent bridging studies.</li> </ul>

<sup>30</sup> Refer to ASX announcement dated 29 November 2023

<sup>31</sup> Refer to ASX announcement dated 7 May 2025

		<ul style="list-style-type: none"> <li>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.</li> <li>Additionally, the Project has assessed and presented a number of sensitivity cases including ranges of forward price projections.</li> </ul>
Market assessment	<ul style="list-style-type: none"> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Lake Resources has an annual paid subscription to Benchmark Mineral Intelligence (BMI) which includes demand, supply, and pricing outlooks.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul>
Economic	<ul style="list-style-type: none"> <li>The inputs to the economic analysis to produce the net present value (NPV) in the</li> </ul>	<ul style="list-style-type: none"> <li>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</li> </ul>



	<p>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</p>	<p>engineering with input from Lilac on DLE costs, Lake on drilling and well field costs, and YPF-Luz on electricity rates.</p> <ul style="list-style-type: none"> <li>▪ Lake conducted a DFS level economic analysis using its own financial model.</li> <li>▪ 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.</li> <li>▪ Mining industry practitioners typically undertake financial modelling using real NPV values, meaning it does not 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.</li> <li>▪ A discount rate of 10% was applied to the cashflow in line with the industry average for lithium assets.</li> <li>▪ 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.</li> </ul>
Social	<ul style="list-style-type: none"> <li>▪ The status of agreements with key stakeholders and matters leading to social licence to operate</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>
Other	<ul style="list-style-type: none"> <li>▪ To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>▪ Any identified material naturally occurring risks.</li> <li>▪ The status of material legal agreements and marketing arrangements.</li> <li>▪ 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</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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:</li> <li>▪ 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.</li> <li>▪ Permitting Failure impacting the Bank Loan. Mitigation includes retention of suitably experienced personnel and a 3<sup>rd</sup> party consultant with experience of Equator Principles.</li> <li>▪ 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.</li> <li>▪ Lithium price drop due to oversupply, from increased production or changing consumer behaviour, leads to a</li> </ul>

	<p>dependent on a third party on which extraction of the reserve is contingent.</p>	<p>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'.</p> <ul style="list-style-type: none"> <li>▪ 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 suitably skilled Project Director, adoption of pro-active approach to management and selection of the most appropriate EPCM contractor.</li> <li>▪ 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 Project Director, the application of appropriate contingency allowance and implementation of pro-active risk management processes.</li> <li>▪ 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</li> <li>▪ 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</li> <li>▪ 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.</li> <li>▪ 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</li> </ul>
--	---	--

		<p>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.</p> <ul style="list-style-type: none"> <li>▪ 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.</li> </ul>
Classification	<ul style="list-style-type: none"> <li>▪ The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>▪ Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>▪ The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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</li> <li>▪ 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 Resource mass estimated per Section 5.5 of this Reserves Estimate</li> </ul>
Audits and Reviews	<ul style="list-style-type: none"> <li>▪ The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<ul style="list-style-type: none"> <li>▪ An audit of sampling and field procedures was undertaken by Geoffrey Balwin in February 2023.</li> <li>▪ Mineral Resource Estimation of November 2023 was independently reviewed by J Houston.</li> </ul>
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>▪ The infrastructure requirements of the selected mining methods.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ Industry accepted guidance was recognised with respect to bore spacing. The M&amp;I for which this Reserve Statement is defined by a compact exploration program with drill hole pattern well within the recommended maximum borehole spacing.</li> <li>▪ All of the multiple parameter assessments have been undertaken with an inherent factor of safety.</li> </ul>

		<ul style="list-style-type: none"> <li>▪ Sampling protocols have been adapted through the program based on QAQC outcomes to reflect uncertainty of analytical result outside the control of the project.</li> <li>▪ The reserve estimate is based on the previously stated resource estimate. The reserve component is located 100% within the previously announced M&amp;I resource of which 98% is within Measured Resource. The resource which includes inferred is considered global.</li> <li>▪ 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.</li> </ul>
--	--	--

**For investor queries, please contact:**

[InvestorRelations@lakereources.com.au](mailto:InvestorRelations@lakereources.com.au) or log onto Investor Hub through Lake's public website.

**Media Contact:**

William Pretty, Teneo

M: +61 405 197 970

E: [William.Pretty@teneo.com](mailto:William.Pretty@teneo.com)

## 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 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.

###