14 May 2025

Lake Resources JORC Update Increases Measured and Indicated Resource to 8.2 Mt LCE from 7.3 Mt LCE[1]

UPDATE HIGHLIGHTS

- Measured Resource has grown by more than 1.1 Mt of lithium carbonate equivalent (LCE) to 4.2 Mt LCE (a more than 25% increase), defined to a depth of 600 meters over 83 square kilometres.
- The Measured and Indicated Resource has grown by approximately 10% or 0.9 Mt LCE to 8.2 Mt LCE.
- The updated total resource is 11.1 Mt of LCE over 275 square kilometres.
- This Mineral Resource Estimate (MRE) update incorporates K25D44, which was the second drillhole in the southern sector of the salar to be advanced beyond 600 meters below ground surface (m bgs).
- K25D44 sample results from the planned production interval in the 2023 Feasibility Study between 200 m bgs and 400 m bgs averaged 274 mg/L.
- The results from K24D41 and K25D44, both in the southern sector of the salar, are indicative of a higher-grade lithium zone.
- The updated geologic model including the lithium concentration and drainable porosity values will be used in forthcoming updates to the Ore Reserve estimate and related hydrogeologic model.
- Upgrades from Lilac's Gen3 to Gen4 media significantly increases lithium recovery rates[2]. These improvements will allow for fewer extraction and injection wellfields in the updated Ore Reserve.

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

The updated resource estimate is based on the incorporation of previously announced K25D44 drilling and testing[3] results that were received since the last Mineral Resource update in November 2023[4].

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[1] Refer to ASX announcement dated 22 November 2023.

[2] Lilac Solutions Inc., 2024. Technical While Paper – Unlocking lithium brine production with ion exchange. September 2024.

[3] Refer to ASX announcement dated 12 February 2024.

[4] Refer to ASX announcement dated 22 November 2023.

This resource update defines the Mineral Resources to be used in the updated hydrogeologic modelling analysis for the update to the Phase 1 Project Definitive Feasibility Study (DFS) capital and operating expenditure estimates currently underway.

K24D41 has grades of 180-348 mg/L lithium over 445 m (166 – 610 m), with an average of 267 mg/L[5]. Over the planned DFS production interval (i.e., 200 m bgs to 400 m bgs), the samples averaged 292 mg/L lithium.

K25D44 has grades of 40 mg/L to 302 mg/L over 582 m (40 m to 622 m bgs) with an average of 219 mg/L. However, all samples beyond 200 m depth are well above the average and sample results from the planned production interval in the 2023 Feasibility Study between 200 m bgs and 400 m bgs averaged 274 mg/L.

The results from these two drillholes within planned production interval averages of 274 mg/L and 292 mg/L reveal the emergence of a higher-grade lithium zone in the southern portion of the salar.

The continuity of the hydrostratigraphy and brine chemistry between these two drillholes between 400 m and 600 m depth is the main driving factor to the increase in Measured Resource since November 2023.

The Kachi Project has shown continual increases in mineral resource estimates (**Figure 1**) since the maiden resource estimate of 4.4 Mt of contained LCE in Inferred and Indicated categories was announced in November 2018[6]:

- The resource was significantly upgraded in January 2023 with a Measured and Indicated Resource of 2.2 Mt of LCE and approximately 3.1 Mt of LCE as Inferred mineral resources[7].
- The total resource was again increased in June 2023 with more than 2.9 Mt of LCE in Measured and Indicated Resource and approximately 5.2 Mt of LCE in the Inferred Resource category for a total resource estimate of more than 8.2 Mt of LCE[8].
- The Measured and Indicated Resource expanded again in November 2023 to 7.3 Mt LCE with 3.3 Mt LCE of Inferred Resource for a total resource estimate of over 10.6 Mt LCE[9].
- The current Measured and Indicated Resource ("M&I") increased to approximately 8.2 Mt LCE (**Figure 1 and Table 1**), as Inferred and, to a lesser extent, Indicated Resources were classified as Measured (**Figure 2 and Figure 3** present resource areas).
- Pumping and Injection testing detailed in August 2023[10] demonstrated that the lithium reservoir in the resource area is permeable and that productive wells can be drilled and constructed for extraction and injection.
- The pumping and injection test data were used to calibrate a hydrogeological model used to simulate the planned extraction and injection wellfields inclusive of lithium concentrations and flow rates through time, which formed the basis of the Ore Reserve Estimate[11].
- Project engineering, mine plan and financial modelling results were summarized in the DFS[12] completed in December 2023.

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[5] Refer to ASX announcement dated 4 October 2023.

[6] Refer to ASX announcement dated 27 November 2018.

[7] Refer to ASX announcement dated 11 January 2023.

[8] Refer to ASX announcement dated 15 June 2023.

[9] Refer to ASX announcement dated 22 November 2023.

[10] Refer to ASX announcement dated 16 August 2023.

[11] Refer to ASX announcement dated 19 December 2023 ("Maiden Ore Reserve Defined").

[12] Refer to ASX announcement dated 19 December 2023 ("Kachi Project Phase One Definitive Feasibility Study").

Figure 1. Change in M&I and Inferred Lithium Resource since 2018

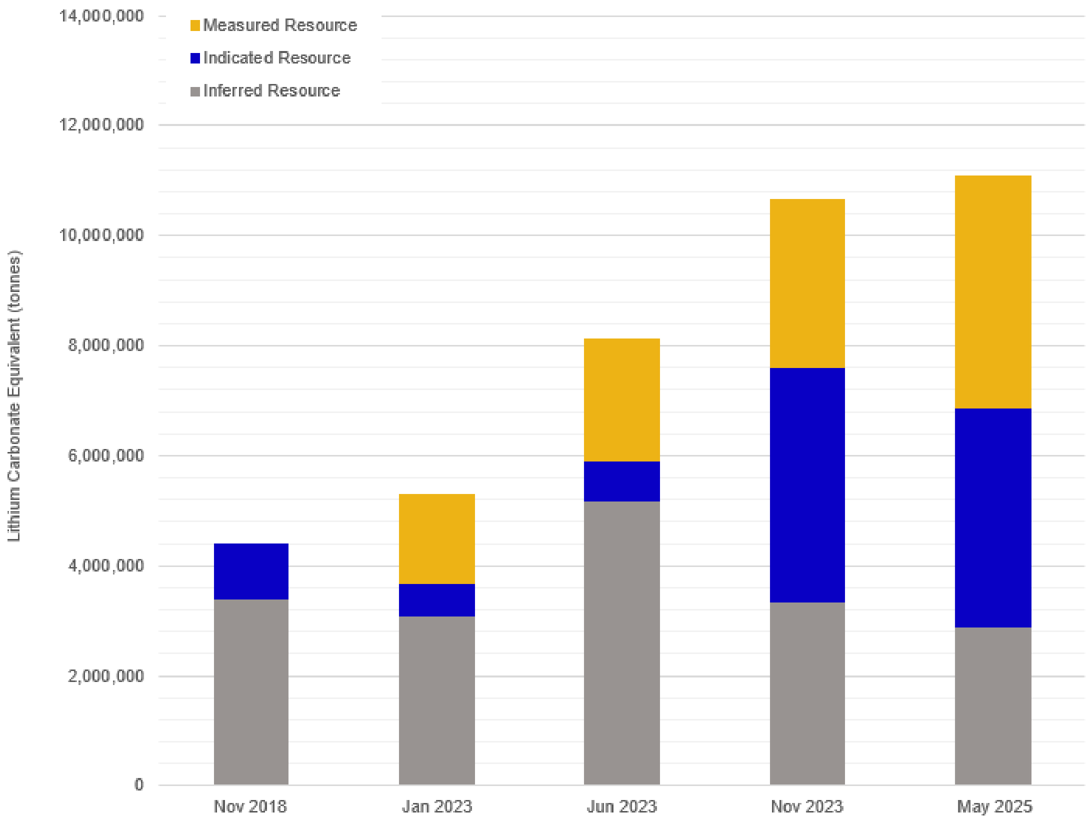

Figure 2. Change in M&I and Inferred Lithium Resource since 2018

Table 1. Updated Resource Summary[13]

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

Jonah Smith, Vice President of Operations, noted: “The increase in Measured and Indicated Resources further derisks the Project and demonstrates the high level of confidence in the chemistry and continuity of the brine in the subsurface over an expansive area.”

[13] See Table 3 below for additional detail on the resource breakdown by category and unit.

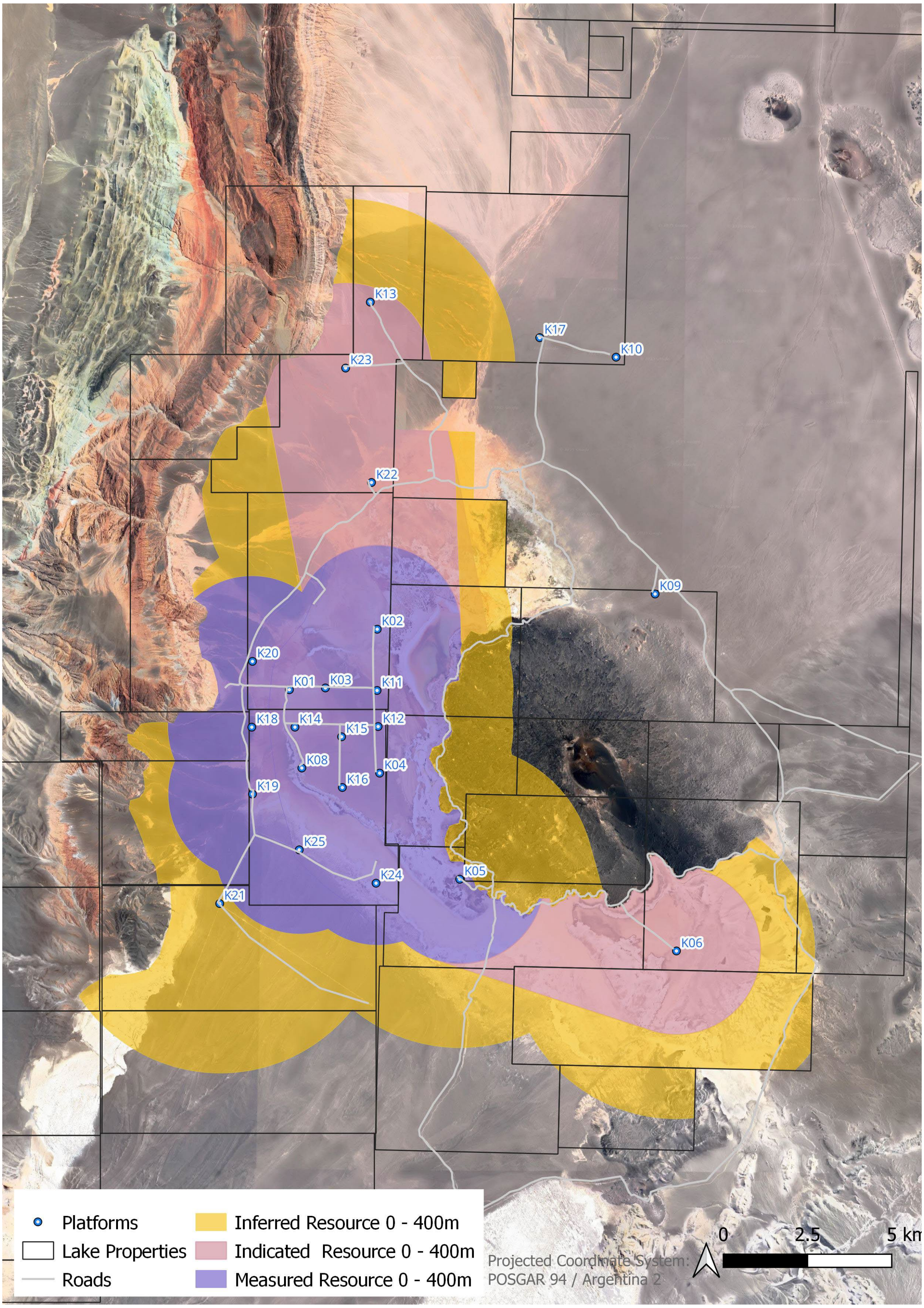

Figure 3. Diagram showing the Measured (purple) and Indicated Resources (pink), with the surrounding area of Inferred Resource (orange) for 0 to 400m.

Figure 4. Plan view map of the Indicated Resources (red), with the surrounding area of Inferred Resource (orange) at a depth of 400 – 600m

A summary of the assessment is provided in the 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 4**). 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.

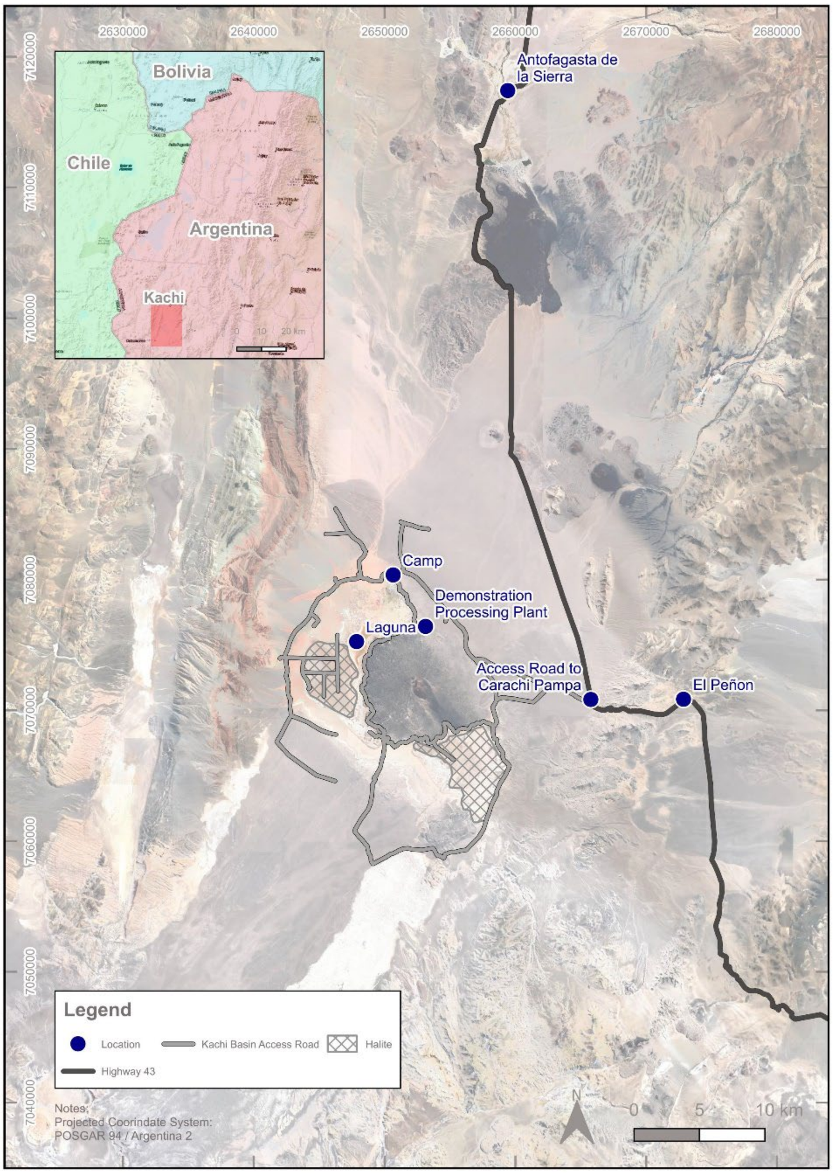

Figure 4. Kachi Project Location and Layout

PROPERTY HOLDINGS

Lake Resources holds 53 mineral leases (Minas) in the Basin covering the surface of the salar and surrounding areas (**Figure 5**). 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 Resources' 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.

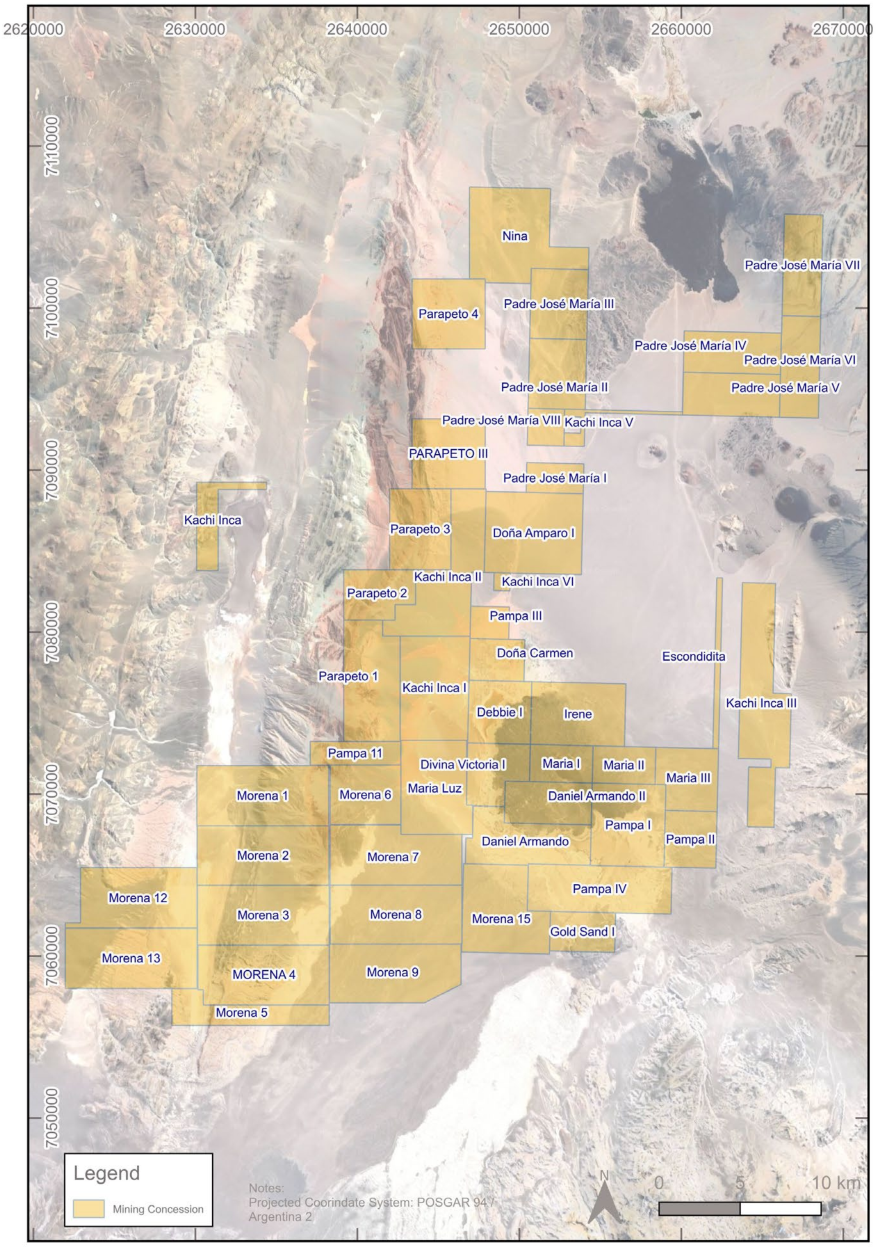

Figure 5. Kachi Project Mineral Concessions

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 6**). 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^2.

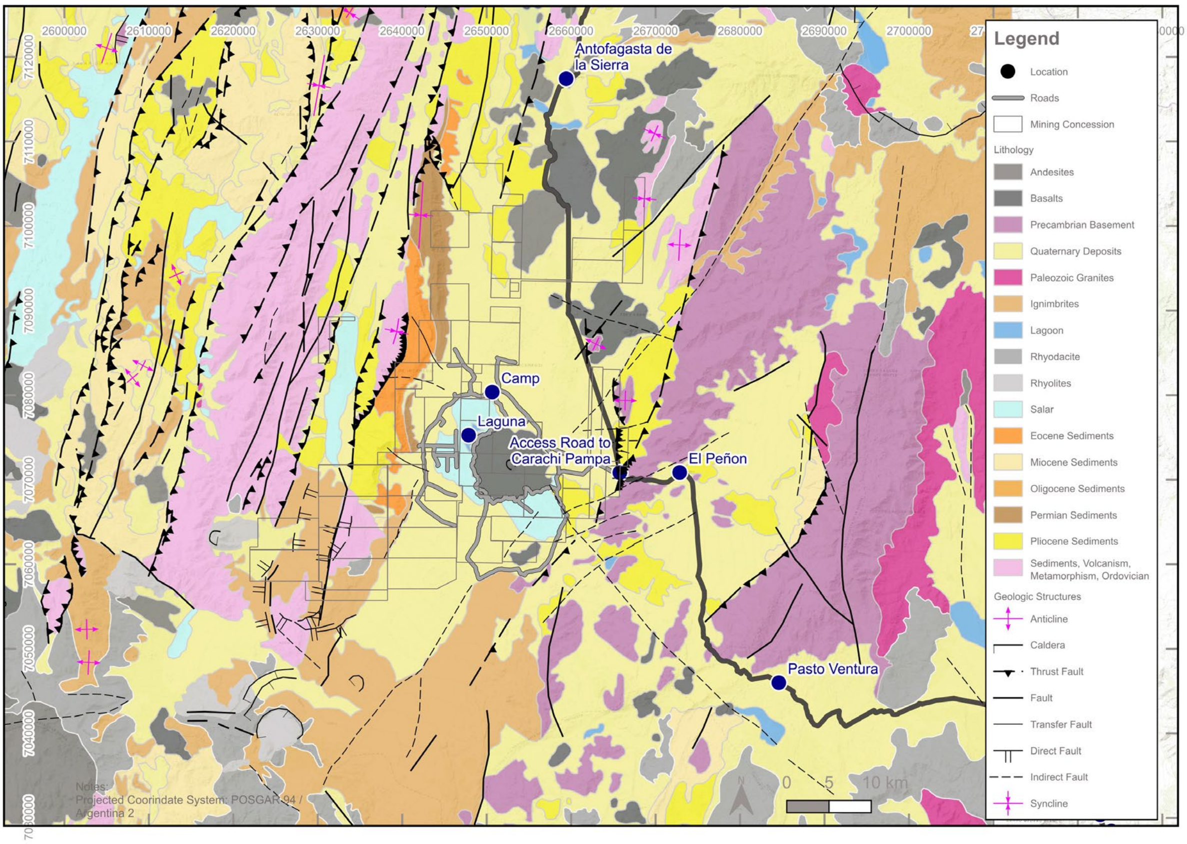

Figure 6 Geology of the Kachi Project Area

The centre of the basin is dominated by the Quaternary basalt flows and the cider-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)[14]: 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 7**), 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 7**) 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

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[14] 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

sector and the sector is host to a substantial freshwater aquifer or wedge, that overlies the lithium bearing brines.

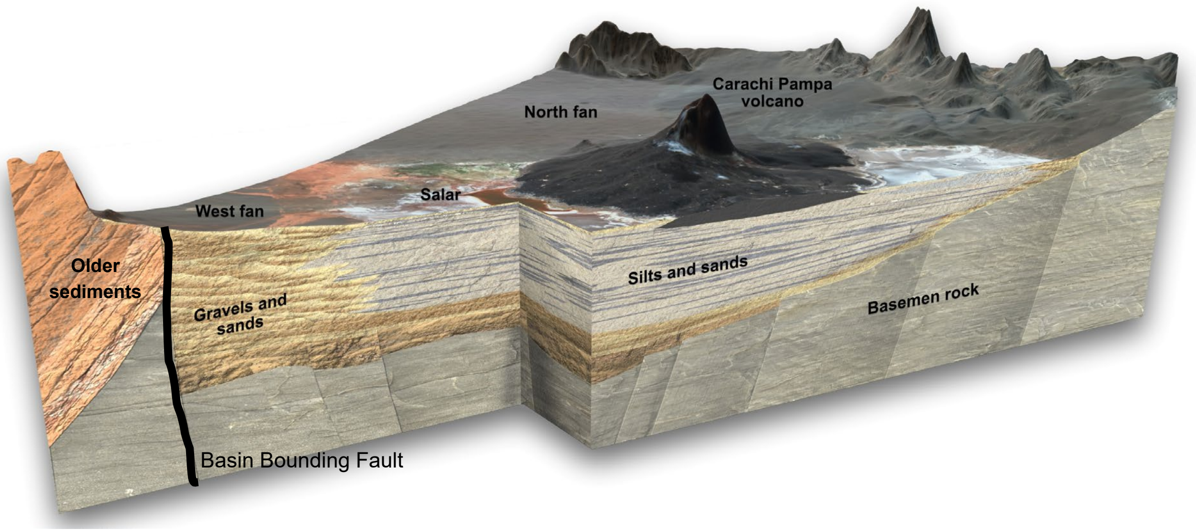


Figure 7. Conceptual hydrogeologic section through the Kachi Project, looking towards the northeast.

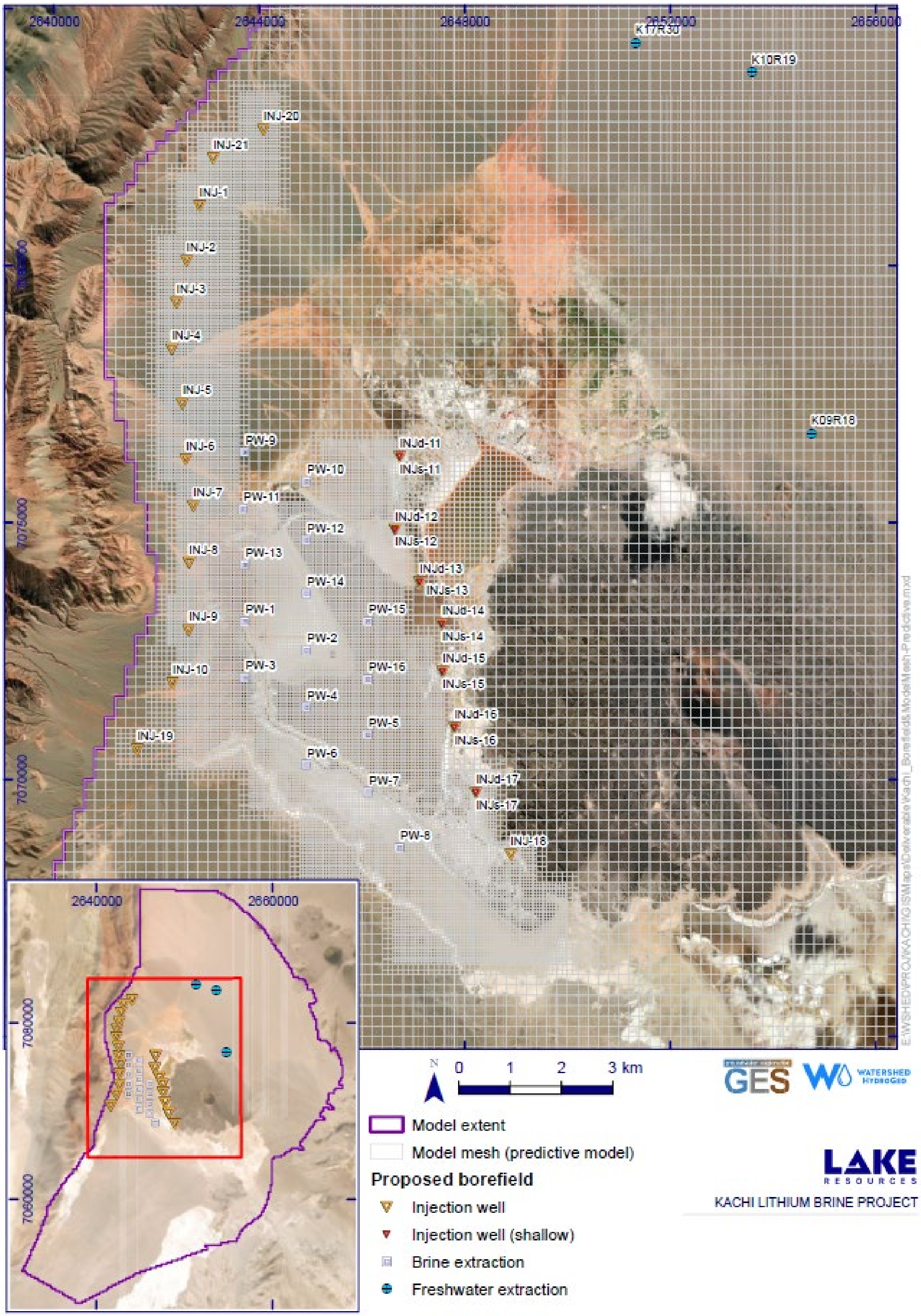
Pumping and injection tests completed in August 2023[15] on two different test wells indicate that the fine-grained sand reservoir of the central resource area is permeable, with measured hydraulic conductivity values in the range of 2 to 4 m/d. The testing indicates that appropriately designed production 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. The wellfield development plan in the DFS consists of 16 extraction wells and 21 injection wells (**Figure 8**). 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.
- Minimize the potential for dilution of the lithium brine resource during operations, and as much as possible 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.

The improved lithium recovery rates associated with the Gen4 Lilac media in combination with higher concentrations of lithium from the last two holes of the 2023 drilling program at the K24 and K25 platforms present an opportunity to further optimize the wellfield designs in forthcoming hydrogeologic modelling for the Ore Reserve update.

[15] Refer to ASX announcement dated 16 August 2023.

Figure 8. Wellfield Layout and Hydrogeologic Model Grid Used in Previous Reserve Modelling[16]



[16] Refer to ASX announcement dated 19 December 2023 ("Maiden Ore Reserve Defined").

DRILLING AND SAMPLING TECHNIQUES

Brine samples from the characterization program have been collected with a variety of sampling methods including:

- Packer (single and double);
- Test well development and long-term pumping tests;
- Installed piezometer screens (airlifting);
- Spearpoint; and,
- Bailer.

Conventional mud rotary drilling was used to drill the larger diameter pumping test wells installed in 2022/2023 and in some of the earlier drilling programs for piezometers. During the 2022/2023 resource characterization program the packer sampling and piezometers have been in holes drilled using a diamond drill rig, generally with PQ casing and packer assemblies to 400 m bgs and HQ casing and packer assemblies from 400 to 600 m bgs.

Packer sampling from diamond drillholes and sampling from installed piezometers and wells have been the principal methods used to acquire geochemical brine samples. Since May 2023, the packer sampling has been entirely single packer configurations, as these have been found to yield the most reliable samples. Additionally, lugeon tests have not been performed since that time to improve hole stability. Standard operating procedures for packer sampling are followed, with significant development of the test interval, extraction of at least three (3) borehole volumes (measured from surface to hole bottom). Sampling only occurs once brine is clear and field chemistry parameters are stable and indicative of reservoir fluids. Samples are collected in 1 Litre plastic bottles with field geochemistry parameters recorded. Samples are stored in the sample storage area (climate-controlled container) until shipped to the laboratory. The type of drillhole and sample approach is included in Section 1 of **JORC Table 1**. Drillhole collars with key analytical laboratory results are presented in **Table 8**.

Additionally, downhole geophysical logs have been collected since May 2019 on most drillholes where conditions are suitable to do so. There are an extensive set of logs including gamma logs, resistivity, acoustic televiewer, inclination, calliper, temperature, and Borehole Magnetic Resonance (BMR). Wells K03R12, K04R15 and K08R14 were retrospectively logged, with installed PVC casing facilitating use of the BMR tool and a total of 16 drillhole have been logged with BMR. BMR logs have been highly useful for identifying zones of movable, capillary and immobile water, specific yield estimates, and relative assessments of hydraulic conductivity. The geophysical logs were limited to 400 m and therefore deeper holes also only have geophysical logs to 400 m.

MINERAL RESOURCE CLASSIFICATION CRITERIA

Preparation of this resource estimate has been led by Andrew Fulton, Competent Person (CP) and Principal Hydrogeologist at Groundwater Exploration Science (GES), with support from Murray Booker (Hydrominex) and Lake's technical team. The resource estimate is prepared in accordance with JORC 2012 standards and although JORC 2012 does not address lithium brines specifically in the guidance documents, the CP has taken into account the Australian Association of Mining and Exploration Companies (AMEC) Guidelines for Resource and Reserve Estimation for Brines and the NI 43-101 guidelines for lithium brines, set forth by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM 2014). The CP considered these guidelines, the intent of the JORC 2012, and experiences from other salars and projects for resource estimation at the lithium brine deposit in the Carachi Pampa Basin.

As with all Projects, the Kachi resource was explored initially with limited drillhole data and an uncertain understanding of the basin complexity. Subsequent drilling programs focused on the central area, with a relatively tight drillhole pattern, robust maiden resource. The 2022/2023 characterization program has focused on expanding the spatial and vertical delineations as well as testing the hydraulic properties of the reservoir materials. These studies in combination with the related hydrogeological conceptual and numerical model development, have led to a significantly improved understanding of the hydrogeology and hydrogeochemistry of the basin as well as the continuity and extent of the brine in the subsurface.

With respect to what is a reasonable distance for data to be extrapolated beyond the drilling area, as a fluid, brine resources are likely to be rather more uniform than a hard rock mineral resource. This is the rationale used by Houston et al. (2011) when suggesting guidelines for interpolated sampling in an immature salar should be 7-10 km between wells for an Inferred Resource, 5 km for an Indicated Resource and 2.5 km for a Measured Resource. Where the resource is open, and in the absence of any potential hydrogeological boundaries, it was considered reasonable to use the same distances for extrapolation distances beyond measurement locations. However, where there was more uncertainty, the extrapolation distance was reduced further.

The current "measured" resource was defined using a protocol of a 2.5 km radial influence around each drillhole.

MEASURED MINERAL RESOURCES

A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Ore Reserve or under certain circumstances to a Probable Ore Reserve.

The Measured Resources (**Figures 9 and 10**) are within the centre of the resource area, over where the stratigraphy is continuous and well correlated, brine chemistry and grades are consistent and as a result there is a high degree of confidence. There are three components of the Measured Resource, the salar deposits, the West Alluvial Fan Complex and a newly defined deep Measured Resource from 400-600 m bgs, where drilling has defined lithium concentrations and stratigraphy. The drill spacing in the Measured Resource area ranges from 1.1 to 1.9 km and averages approximately 1.5 km. The average is less than guidance for an appropriate drill spacing for Measured Resources in clastic salars[16]. Furthermore, three long-term pumping tests (12 to 30 days) have extracted more than 50 million litres of brine that demonstrated remarkably consistent lithium concentration[17], further confirming grade continuity with a high degree of confidence indicative of a Measured Resource designation.

The geometry for the Measured Resource was generated using the location of the existing wells in the project area, each well forming the centre of a 2.5 radius. Once the circles were generated, the circles were unified, obtaining irregular polygons. The measured area takes in the area within 2.5 km of drillholes in the salar area and immediately to the west over the alluvial fan.

For the limit of the Measured Resource, data from wells K20, K18, K19, K2D13, K14, K08, K03, K15, K16, K02, K11, K12, K04 and more recent holes K20, K18, K19 (**Figure 2**) were used. To the west the limit of the overall resource estimate, including the Measured Resource, is truncated by the Permian outcrops and basin bounding faults which form the Los Colorados Range west of the salar. To the east the Carachi Pampa volcano forms the limit of the Measured and Indicated Resources. The eastern portion of the Measured Resource over the in the salar has a specific yield based on the drillholes on the salar. The updated Measured Resource is presented in **Figures 9 and 10**.

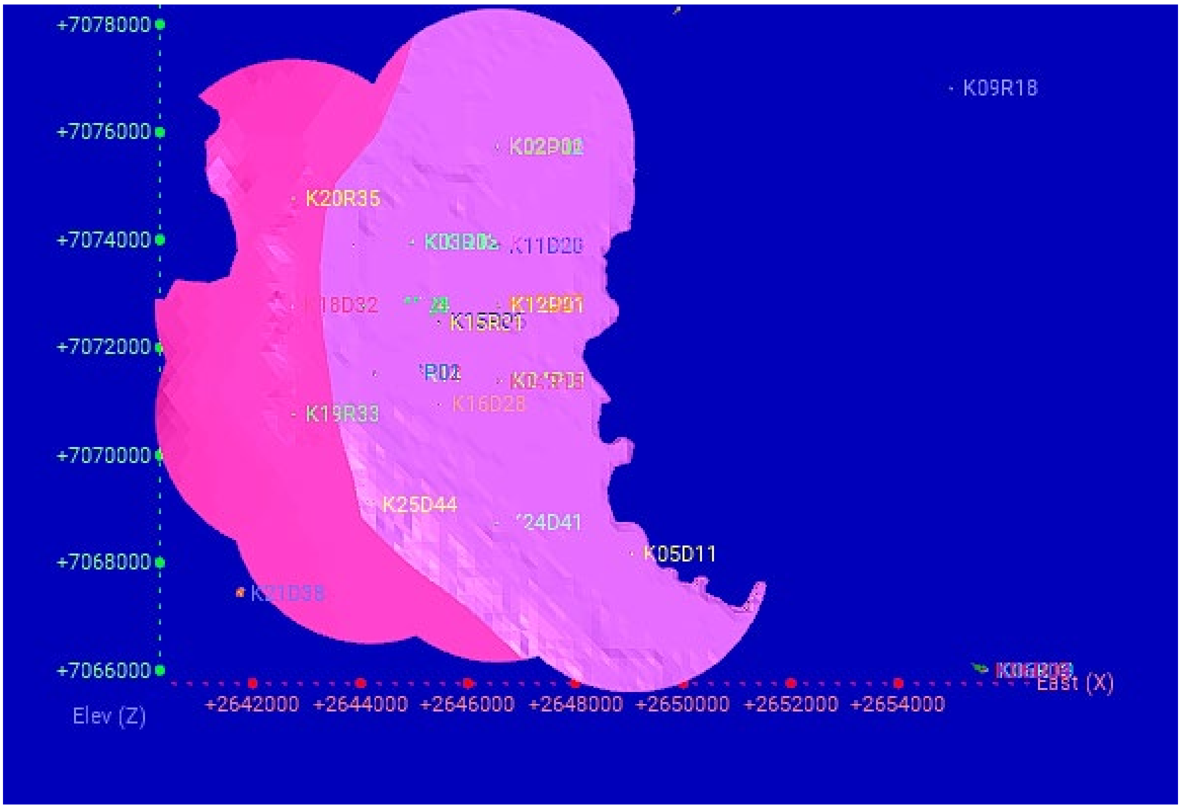


Figure 9. Updated Measured Resource area between 0 and 400 m, based around 2.5 km from individual drillholes, so that data points in the model are no more than 2.5 km from a drillhole. The alluvial fan portions of the Measured Resource (darker pink) is truncated on the western margin by the basin margin. The Measured Resource over the salar area, comprising Units A, B and C is truncated on the east by the surface expression of the Kachi volcano.

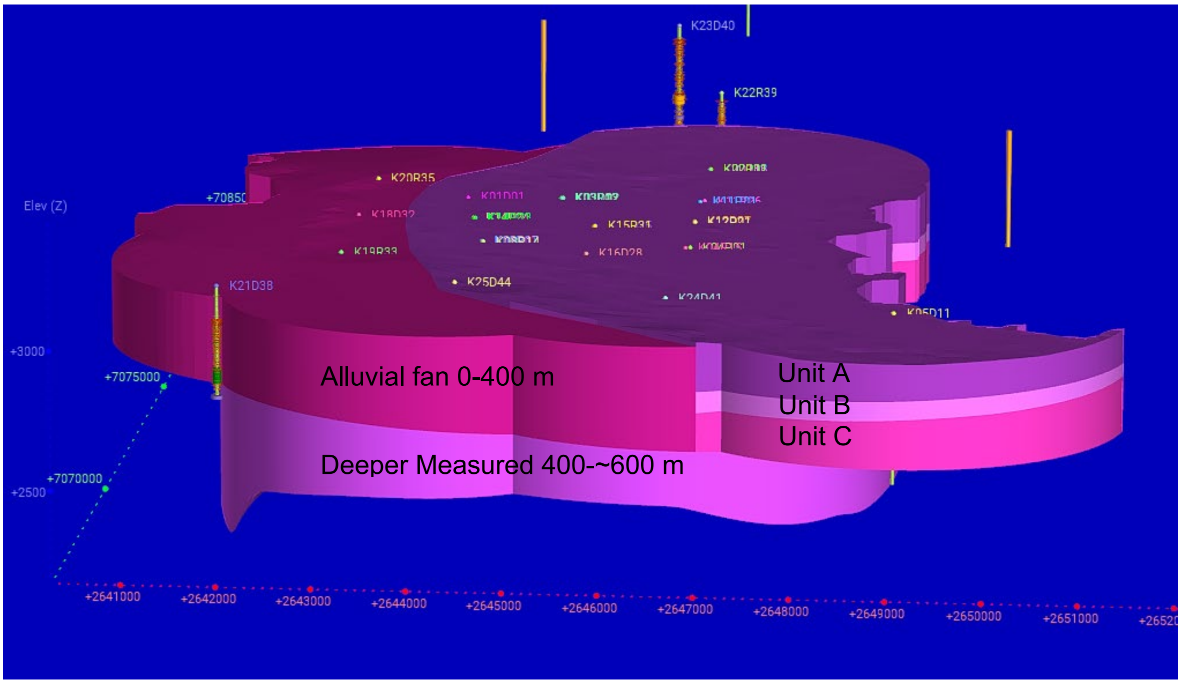


Figure 10. Updated Measured Resource model (with 3 x vertical exaggeration), with Units A, B and C in the salar area from 0 to 400 m bgs, and 0 to 400 m bgs in the alluvial fan to the west. From 400 m to the basement (approximately 600 m depth) there is a lower area of Measured Resource (new in this estimate, and previously part of Indicated Resources)

Key points for the Measured Resource include:

- The western part of the Measured Resource over the alluvial fan has a specific yield based on drillholes at platforms K18, K19 and K20.
- **Drillholes at the K24 and K25 drill platforms provide information between 400 and 600 m and are the major addition to the resource, with this newly defined deeper portion of the Measured Resource shown in Figures 10.**
    - This newly defined Measured Resource (**Figure 11 and 12**) was previously part of the Indicated Resource below the Measured Resource (0-400 m) defined in the November 2023 MRE.
- The updated Measured Resource is comprised of Layer A, B and C (up to 400 meters) within the salar and the unit based on K24-K25 from 400 m depth to basement.
- Measured Resource is also defined from 0 to 400 m bgs in the alluvial fan domain, to the west of the salar.
- The Measured Resource is the sum of these volumes.

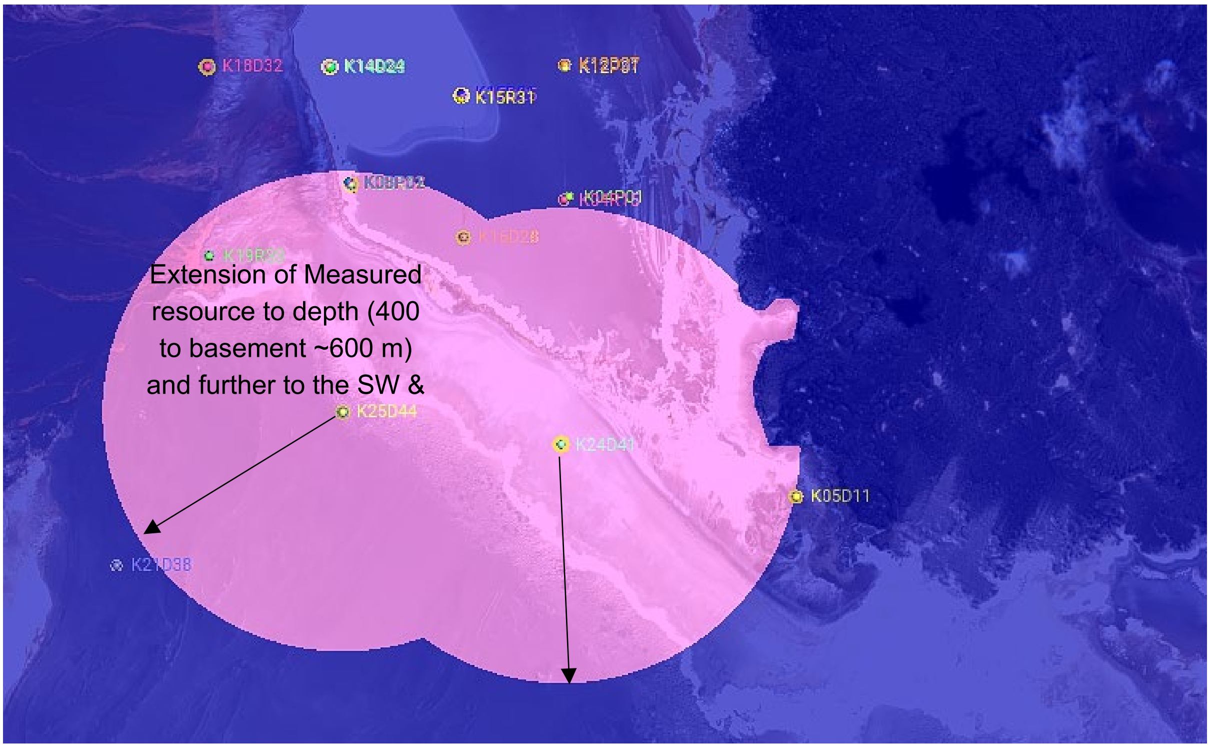


Figure 11. Updated Measured Resource area, based around 2.5 km from individual drillholes, so that data points in the model are no more than 2.5 km from a drillhole.

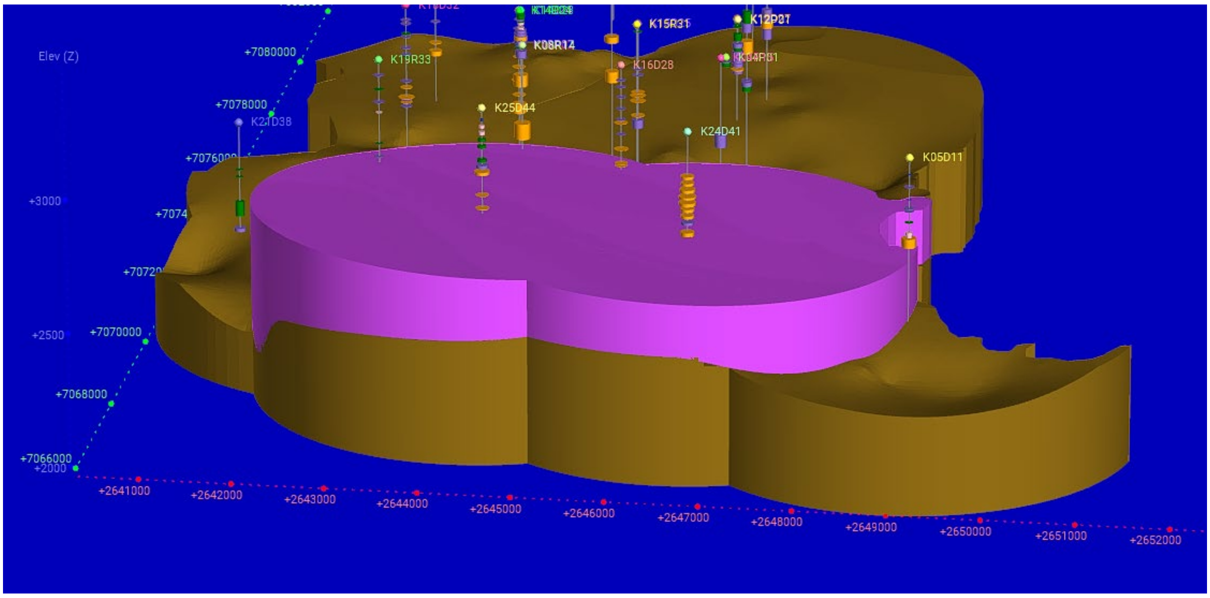


Figure 12. Updated Measured Resource from 400 m bgs (pink unit) to basement (brown, generally about 600 m bgs). This resource volume is overlain by a more laterally extensive Measured Resource zone between 0 and 400 m depth (see Figure 9).

INDICATED MINERAL RESOURCE

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Ore Reserve.

The Indicated Resource covers four areas:

- Underneath Measured Resource footprint from 400 m to 600 m bgs in the main salar footprint (**Figures 13 to 16**).
- The area around K21D38 in the southern portion of the project area.
- The area in the southeast, centred around hole K06 (**Figures 13 to 16**) and extending west to join the Measured Resource from 0 to 400 m bgs (termed Southeast-K06).
- The area around K23D40 in the northern sector of the project area from 0 to 600 m bgs.

The approach to classification of these four areas is described below.

<u>Salar from 400m to 600 m</u>

Between 400 and 600 m beneath the Measured resource (adjacent to the new 400 m to basement depth Measured resource) the volume is classified as Indicated Resource (**Figure 13**). This is based on:

Information from more recent drillhole K24D41 in the south of the Measured Resource, extending to 600 m and information from K22, in the 0 to 600 m Indicated Resource north of the 400 to 600 m

Indicated and Measured Resource zone also provides information confirming continuity of the lithium concentrations through the area.

The specific yield data for this Indicated zone is based on the interpretation of a lateral continuation of the greater than 400 m BMR data, from K24D41 below 400 m, as the Indicated Resource one has broadly similar characteristics to that of the 400 to 600 m deep Measured Resource zone

K21 Area

Based on the drilling information from platforms K24 and K25, and drilling results from K21D38, the area around K21 was upgraded from Inferred Resource to Indicated Resource. A 5 km circular polygon centred on the K21D38 well was used to define the resource extent and truncated by Measured Resource to the north and bedrock outcrops to the west (**Figure 13 and Figure 14**). The vertical constraints of the resource were defined using the elevation of the conductive layer in the TEM survey and a depth of 400 m bgs.

Southeast – K06

For the Indicated Resource around well K06 2.5 km radii was used for the depth interval 0 to 400 m (Figure 14). The area was classified as Indicated because the hole is isolated from the other holes, so as to not fall within the Measured Resource area, but to have a higher degree of confidence than Inferred Resources, due to the nearby drilling and extensive geophysics. This unit has a radius of 2.5 km around the hole.

The model estimate continues to the edge of the volcano. The TEM data shows the conductive brine body extends under the basaltic flow of the Carachi Pampa volcano, however, this is included separately as Inferred Resources

K23 Area

Drilling at K23D40 defined a vertically extensive area of the lithium brine with samples from 228 m bgs to 610 m bgs averaging 251 mg/l primarily flowing from coarse grained materials[17]. The results are used to support the Indicated Resources to 600 m bgs in the northern sector of the project area (**Figure 15 and Figure 16**).

[17] Refer to ASX announcement dated 22 August 2023.

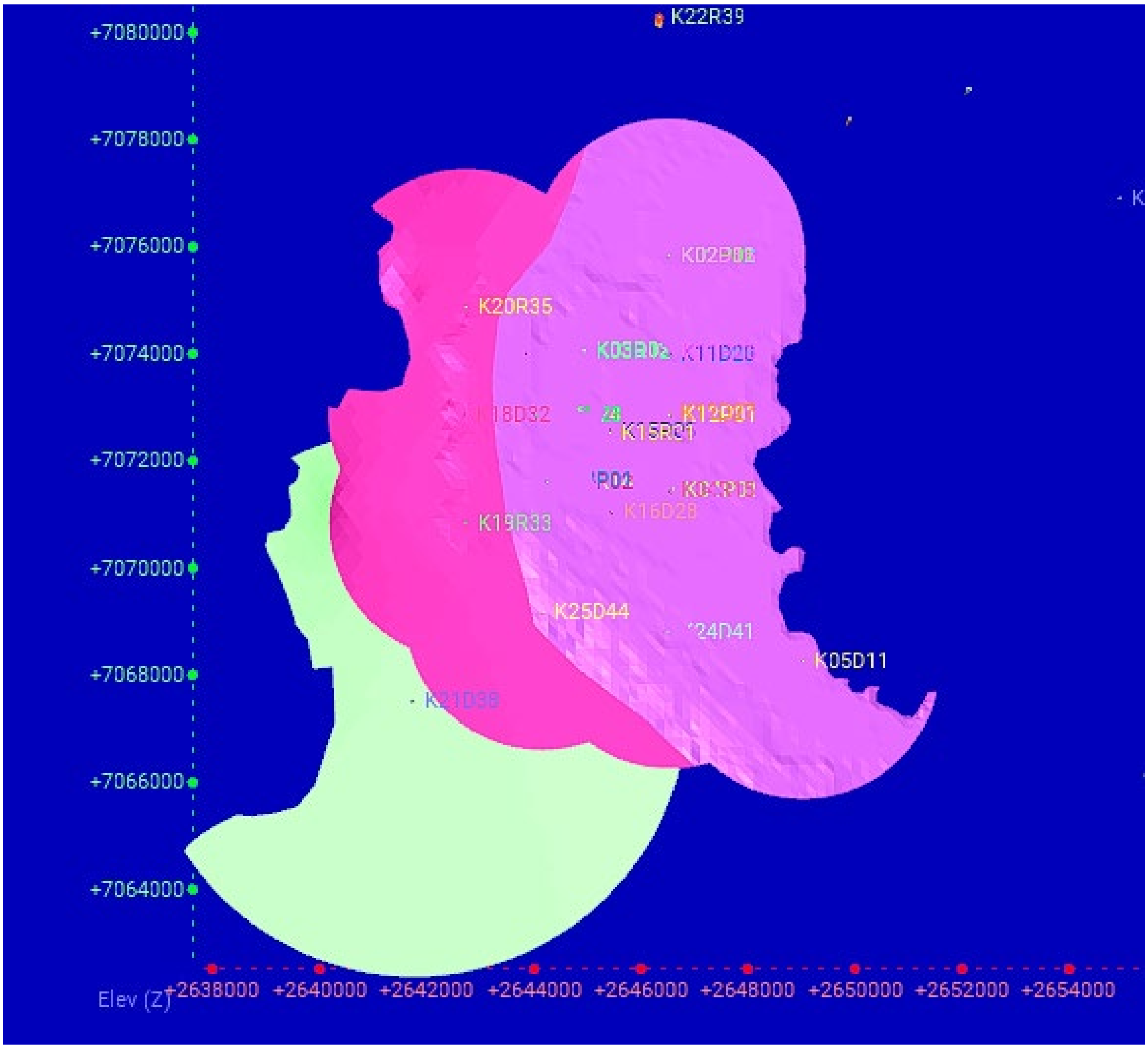


Figure 13. Indicated resource polygon (pale green) adjacent to the Measured Resource defined between 0-400 m bgs.

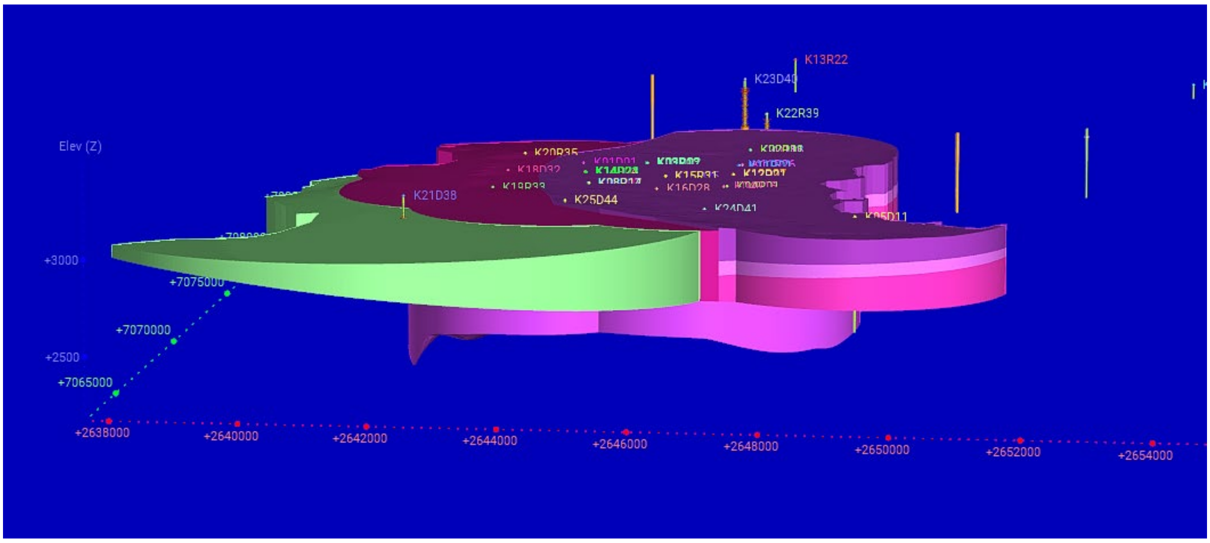


Figure 14. Indicated Resource polygon (pale green) associated with drilling results at K21D38 and immediately adjacent Measured Resource (shown with 3 x vertical exaggeration)

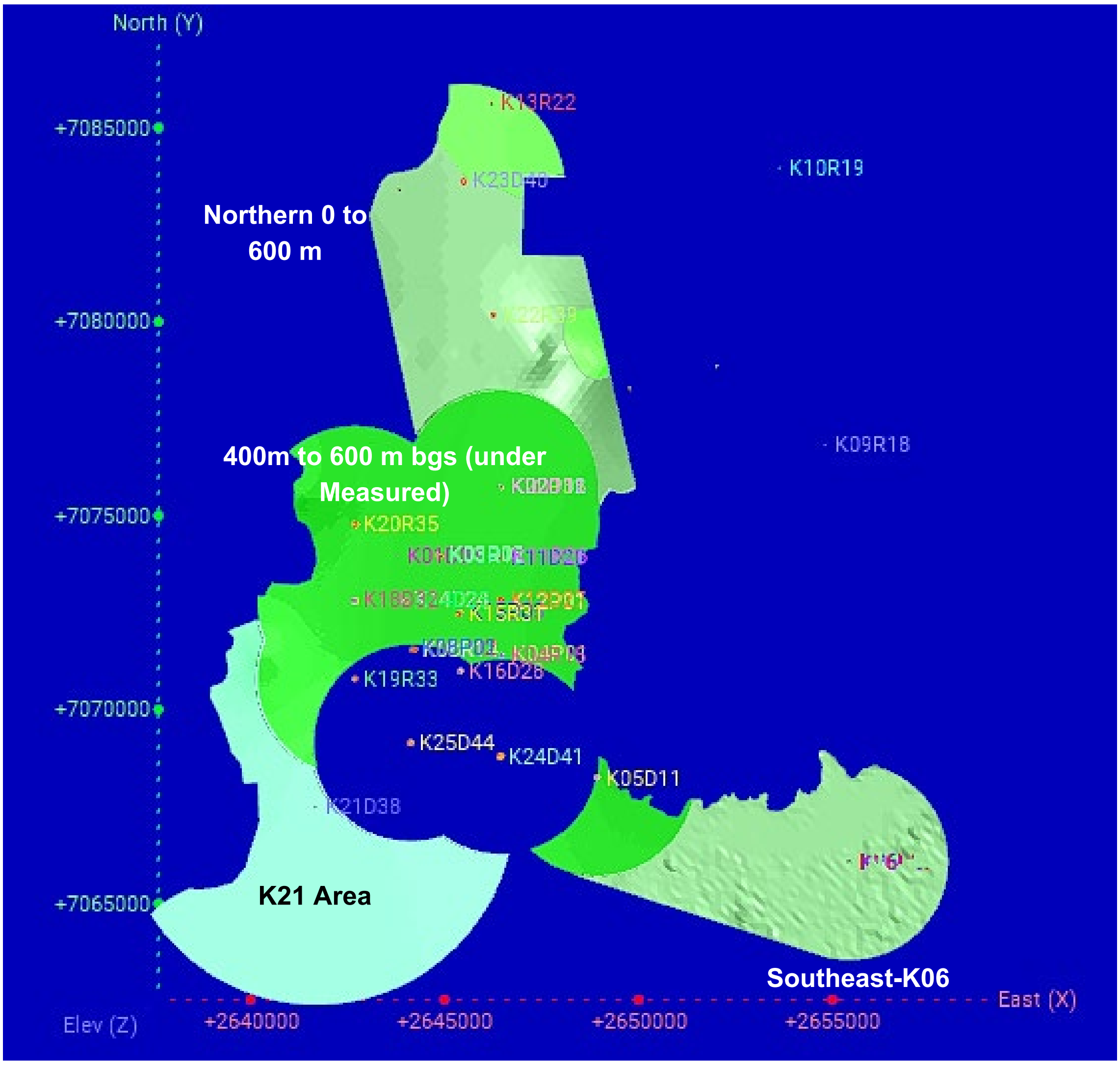


Figure 15. Plan view of the Indicated Resource areas

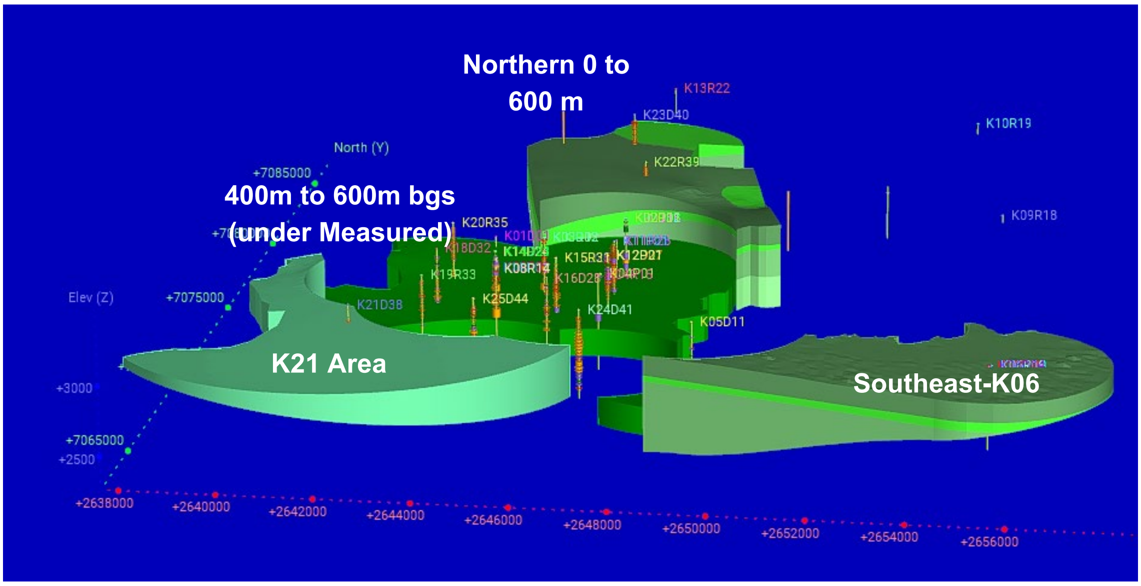


Figure 16. Three-dimensional view of the Indicated Resource areas

INFERRED MINERAL RESOURCES

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes.

The lithium concentrations, fluid density and hydrochemistry within these recent intersections are very consistent and comparable to that observed within the central resource area. Given the consistency and continuity of both the hydrogeological flow regime and hydrochemistry, locations within the interpolated area (between drillholes) are categorized as Indicated resource, and within accepted surrounding areas where values are estimated by extrapolation with further extrapolation to 5 km (and locally beyond this distance) being Inferred Resource.

Inferred Resources are defined surrounding the Measured and Indicated Resources and beneath the eastern part of the Carachi Pampa volcano flows. The distribution of the Inferred Resource is shown in **Figures 17 to 20**.

- 5 km radii around all wells were used as the outer limit of the Inferred Resource, except around K23D40 in the north, where a 7.5 km radius was used.
- The outer limit is clipped to the property boundaries.
- The radial distance from drillholes is limited to 4 km along the western side of the volcano, to prevent the resource from covering the interpreted main conduit of the volcano.
    - Brine saturated sediments extend beneath the shield volcano east of the salar, but to date, no drilling has been carried out in these areas.
    - However, TEM survey results confirm that the highly conductive brine body extends beneath the shield volcano north, west, east and southern margins and is likely to continue beneath the entire volcano, except in the (assumed to be vertical) feeder structure along which the lava was injected before flowing out at the land surface.
    - Additionally, drilling immediately adjacent to the surface lava flows have intersected lithium brine (e.g., K05) and wells north of the volcano, on mineral concessions owned by others, also intersected lithium brine.
- In the northeast the resource is inferred from 0 to 600 m depth, the depth of K23D40. West of K22 it was limited to a maximum depth of 400 m, given the shallower driller at K22R39.The western extent is limited by the Permian outcrops, which form the limit of the basin fill materials.

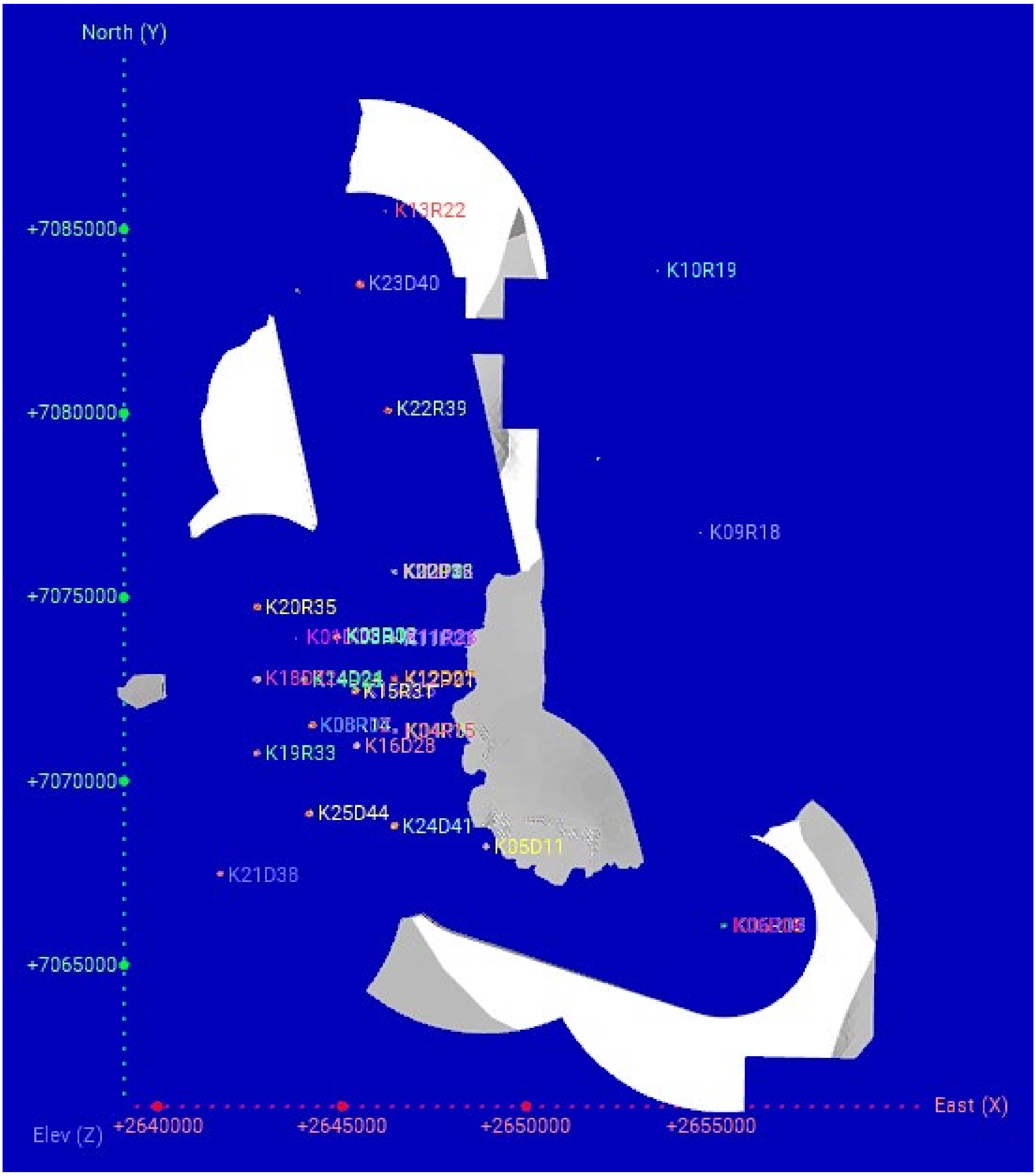


Figure 17. New Inferred Resource areas shown in grey and distinguished in 3D in the figure below. The Inferred resources are located adjacent to the Indicated Resources and beneath the western side of the Carachi Pampa volcano, controlled by a radius of influence around the drillholes. TEM geophysics indicated that the brine extends east beneath the volcano

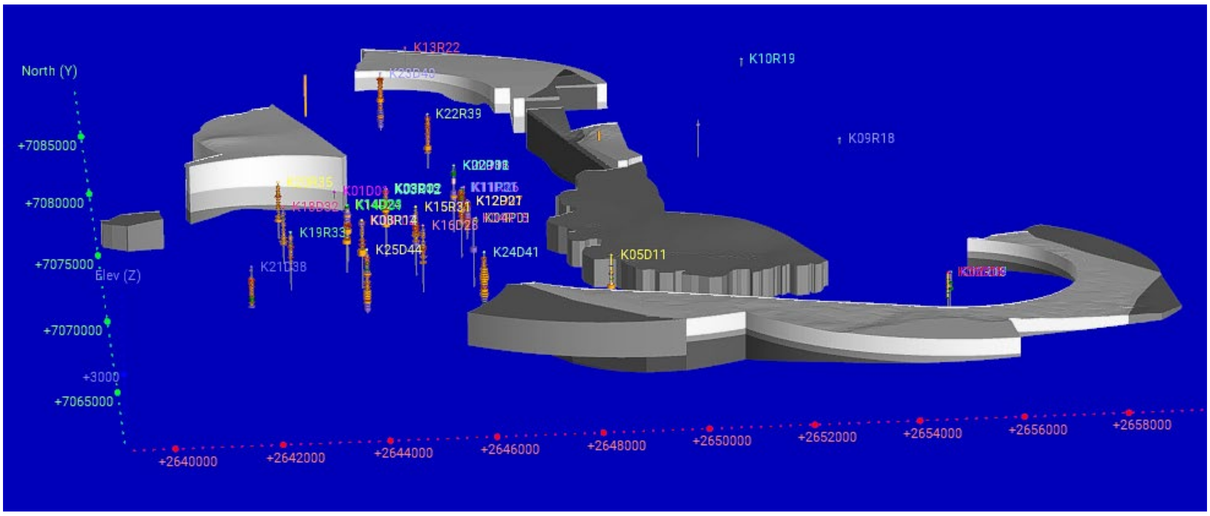


Figure 18. Updated Inferred Resource areas shown in different shades of grey in 3D. The Inferred resources are located adjacent to the Indicated Resources and beneath the western side of the Carachi Pampa volcano, controlled by a radius of influence around the drillholes. TEM geophysics indicated that the brine extends east beneath the volcano

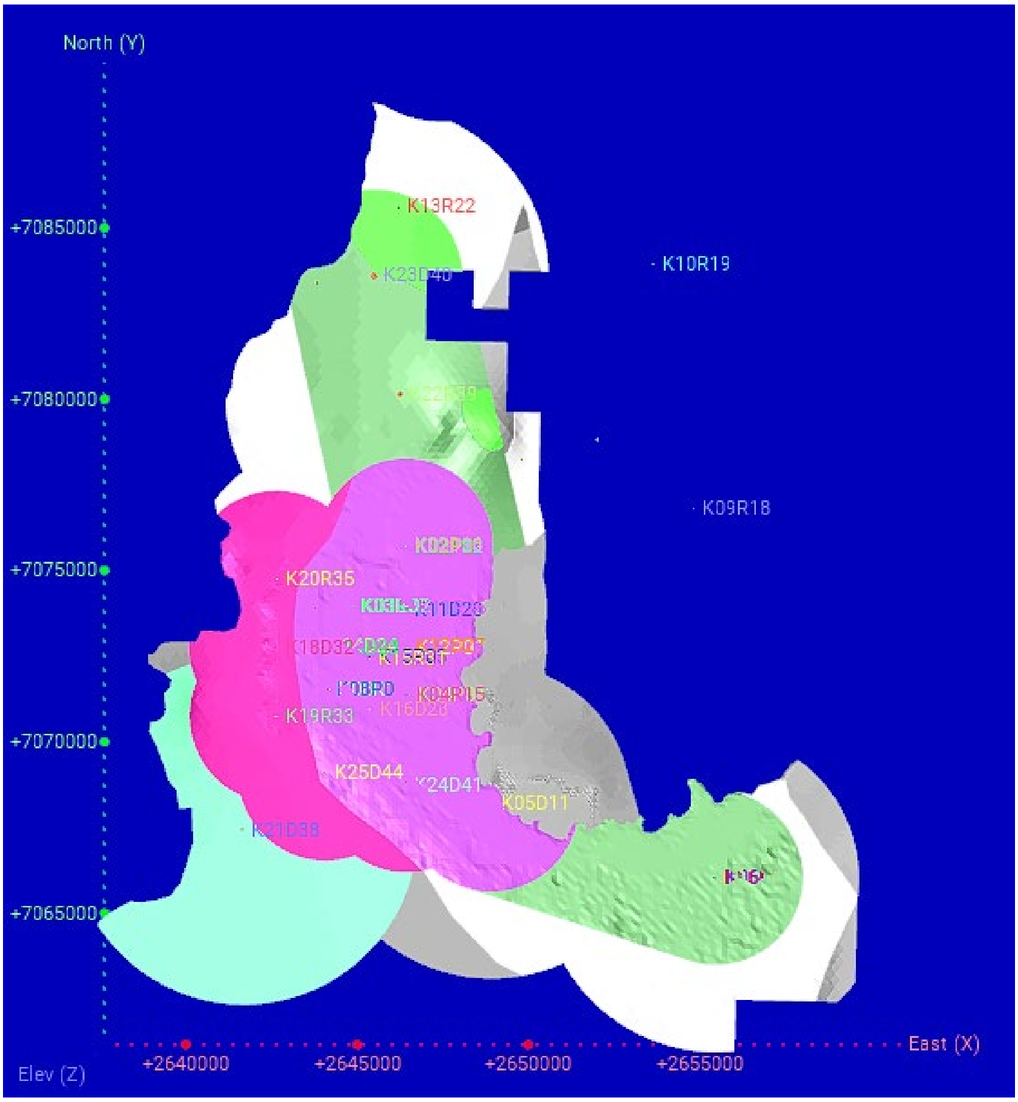


Figure 19. Measured Resources (pink), Indicated Resources (green shades) and Inferred Resources (grey to white)

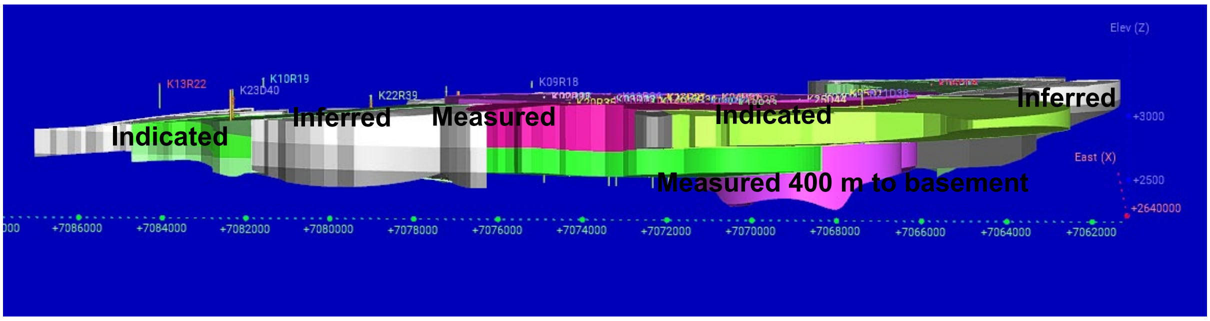


Figure 20. Looking to the east across the resource area, with the irregular boundary on the west where the resource terminates against the Permian rocks west of the salar (graphic has 3X vertical exaggeration). Measured Resources (pink), Indicated Resources (green shades) and Inferred Resources (grey to white).

SAMPLE ANALYSIS METHOD

Lithium Concentration and Hydrochemistry

Samples are taken in triplicate, with primary sample analyses split between two analytical laboratories. In the earlier days of the Project the Alex Stuart laboratory (AS) was used as the primary laboratory, this was later changed to the SGS laboratory (SGS). As a result of recent sampling having samples generally run at both the primary and check laboratories, the majority of geochemical samples have been duplicated. A backup sample is stored onsite at the operations centre in a secured, climate-controlled storage container and away from sunlight.

In total, there are 1015 total samples in the database at the time of this update with 661 resource samples and 60 additional duplicates samples run at as AS in addition to all the samples run at SGS. Trip blanks are also collected and analysed. Samples are analysed for density (at 20°C), alkalinity, bicarbonate, carbonate, chloride, calcium, strontium, iron, lithium, boron, magnesium, manganese, sodium, potassium, zinc, pH, total dissolved solids, sulphate by established laboratory methods.

Previous analysis of duplicate pairs (SGS versus AS) showed a bias for SGS under-reporting Li values at the 25th percentile, matching well with AS at the median percentile, and over-reporting at the 75% percentile.[18]

In addition to lithium characterization work, a subset of Project area samples and more regional samples were analysed for strontium isotopes (Sr87/Sr86), stable isotope ratios (δ 18O, δ 2H) and tritium (3H) to improve our understanding of groundwater flow regime in the Carachi Pampa Basin, including major inflows and sources of groundwater recharge and regional scale flow paths.[19] While these data were not used in the resource estimate, they have significantly improved our understanding of the hydrogeological system and are used to support conceptual and numerical model development of the Carachi Pampa Basin.

DRAINABLE POROSITY

More than 300 core samples have been analysed using the Rapid Brine Release (RBR) method at Geosystems Analysis (GSA) laboratory in Tucson, Arizona. An additional 20 core samples were

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[18] Refer to ASX announcement dated 22 November 2023.

[19] Lithium Solutions. (2023). Hydrophysical water budget assessment and hydrogeochemical and isotopic tracing of water source and transit in Carachi Pampa Basin, Argentina, Kachi Project (Lake Resources). Submitted by Brendan J. Moran, Ph.D., and David F. Boutt, Ph.D.

analysed using the Relative Brine Release Capacity (RBRC) method at the Daniel B. Stephens laboratory in Albuquerque, New Mexico for comparison to GSA results. The laboratory test work is used to support the understanding of drainable porosity and comparison to the BMR data from the downhole geophysical surveys. However, when available, the in-situ BMR data is used for the resource model development, due to the high frequency nature of the data (i.e., continuous downhole), which is aggregated to 10 m values. The BMR data is systematically lower than the laboratory data and therefore is considered conservative relative to the laboratory drainable porosity data. Below 400 m, BMR data is not available and drainable porosity at less than 120 bars is used to populate the drainable porosity block model below this depth. Use of the specific yield at less than 120 bars is considered conservative (i.e., lower lithium resource estimate) and these data were generally found to be more consistent with the BMR compared to traditional specific yield estimates.

Fifty-eight (58) samples were received from GSA since the November 2024 resource update. The samples are associated with K23D40 (4), K24D41 (15), and K2539 (39). The results from K23D40 are generally consistent (**Table 2**) with the previously analysed materials encountered with K23D40 that are representative of coarser grained sand associated with the western alluvial fans and serves as another line of evidence as to the suitability of the western fans for injection. The results from K24D41 and K24D42 are consistent with transitional materials from the southern fan to the salar with relatively high average specific yield, particularly from 400 to 600 m depth. K25D42 materials have slightly higher specific yield values, consistent with the conceptual model of finer materials towards the salar centre.

Table 2. Laboratory results for specific yield from boreholes with results since November 2024

Parameter	K23D40	K24D41	K25D42
Average Specific Yield (0-120 bar)	18.5	9.9	10.1
Average Specific Yield	21.7	13.8	15.1
Average Specific Yield (0-120 bar) 400-m to TD	19.2	9.9	12.5
Average Specific Yield – 400-m to TD	22.7	15.0	18.5

As drilling on the Kachi project progressed it became apparent that gravelly sand units associated with the alluvial fans, outside of the salar core, have higher specific yield values than the salar sediments themselves. Some modifications to the specific yield values used in the gravelly sand areas of the resource were made after exporting the resource model output. This was done because the resource model was not constrained by the salar and alluvial fan domain areas that have been observed in the field. The estimation utilised data from both domains in the expansion of the search ellipse, to maximise the amount of specific yield data available for the estimation.

Specifically, the domain demarcation is between the central salar, where there is a high density of data points, and the surrounding gravelly sand alluvial fan areas, where the drilling density is lower. The model has “reached out” with search ellipses across these boundaries influencing the specific yield of the fan stratigraphy with the characteristics found within the central salar.

The adjustments to Sy within peripheral alluvial fan areas, while higher than interpolated BMR data are significantly lower than laboratory derived specific yield values. For example, the western alluvial fan ranges from 6.3% to 9.5, well below laboratory values at K23D40.

ESTIMATION METHODOLOGY

Estimation of a brine resource requires definition of:

- The spatial distribution of the host sediments (the aquifer distribution)
- The distribution of drainable porosity (specific yield) values
- The distribution of elements in the brine
- The external limits (geological or property boundaries) of the resource area

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

The Kachi sediments are a layered sequence of sediments that contributes brine flow to production wells. More permeable sand and gravel units provide relatively higher flows. The combined 2023 Measured, Indicated and Inferred resources cover 275 km^2 (**Figure 2**), consistent with the November 2023 MRE, given that the overall footprint of the total resource has not changed. Increases have been vertical in nature as a result of deeper drilling at K24 and K25.

The pore spaces of the unconsolidated sediments within the basin are interpreted to be filled with brine below any freshwater, with the "hard" boundaries of the basin, namely the bedrock surface and basin bounding faults, conceptualized to be the limiting factor in brine distribution. However, for the resource estimate the brine extent is limited by:

- The depth of drilling in various sectors of the basin below which no resource is estimated.
- The basin bounding fault to the west (**Figure 6 and Figure 7**).
- Constraints on interpolations and extrapolations under the volcano in the basin centre (**Figure 6**), to add conservativeness to the Inferred Resource estimates given higher uncertainty in that area.
- The top surface of the resource is defined by the top of brine surface (i.e., bottom of brackish water layer).
- Top of basement surface defined by drilling intersections, and lack thereof, and extensive passive seismic data sets.
- Constraints on the spatial extents of the extrapolation resources to radial distances to incorporate a degree of conservativeness rather than extension of the resource to conceptual limits such as distal basin boundaries conceptualize to limit the brine extent. These are described in each section of the different mineral resource classifications.

The depth the passive seismic geophysical survey basement topography is calibrated with two drillholes to date and provides a limit for the resource, which extends no deeper than 600 m, close to the maximum depth to drilling to-date (630 m).

Within the salar the three-dimensional distributions of the different stratigraphic units were defined using Leapfrog software, with these units based on geological and geophysical logging observations, correlation between resource drillholes and environment of deposition mapping (e.g., to delineate alluvial fan and transition zones), as described in detail in the November 2023 Resource Update.[20]

BMR downhole geophysics was used to provide drainable porosity data to generate a block model across the salar area, applying ordinary kriging to the composited drainable porosity data (i.e., 10 m vertical averaging of BMR data). The 10-m composited BMR data (**Figure 21**) was compared with laboratory derived drainable porosity estimates. The BMR data is consistently lower and provides a more conservative source of data and is used because of the higher vertical resolution. Below 400-m

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[20] Refer to ASX Announcement dated 22 November 2023.

BMR data is not available, and specific yield has been estimated by including laboratory specific yield data from deep drillholes at K24 and K25 (**Figure 22**; see details in Drainable Porosity section).

The distribution of lithium used in the modelling was estimated from interval sampling data from surface to maximum drilling depth (630 m bgs at K25D44). Samples were nominally targeted at spaced of 20 m intervals, but actual sampling depended on drillhole conditions.

The assay data contained several sites where multiple samples were taken in different ways (installed piezometers with fixed screen intervals, in addition to packer sampling) and these were averaged, and the mean used within the resource calculations. The duplicate results for each individual sample taken were also averaged with primary laboratory results, for consistency in the results utilised for estimation.

The block model was constructed with 200 m by 200 m blocks, with 10 m vertical extent. The resource estimate was undertaken using Leapfrog software, with a variogram developed for the drainable porosity data (**Figure 23**) and the lithium data was evaluated statistically (**Figure 24**) and estimated using the Radial Basis Function in Leapfrog. Estimation was undertaken using ordinary kriging for the much higher number of BMR drainable porosity samples and Inverse Distance Squared estimation for brine samples, which are much more limited.

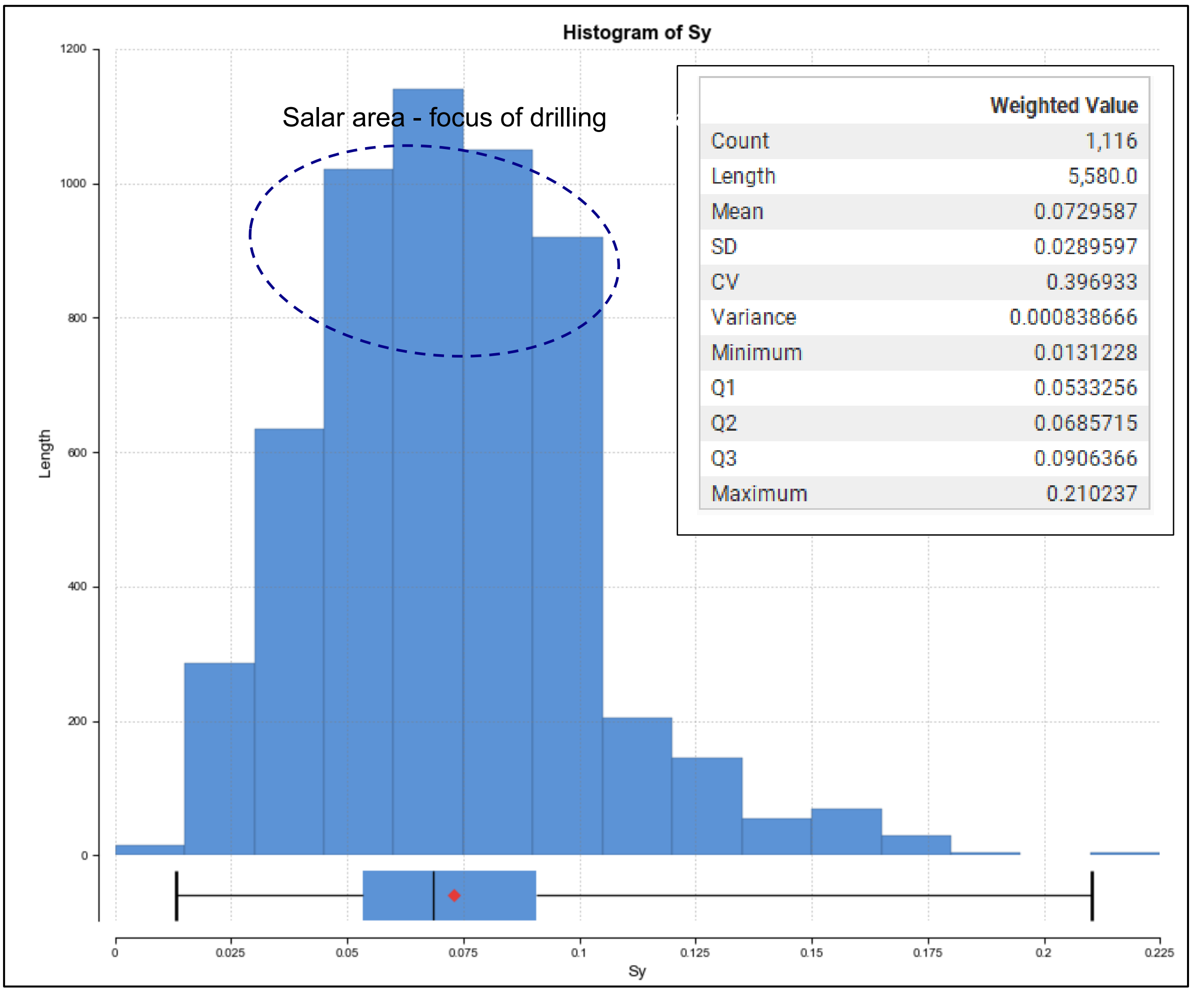

Figure 21. Drill holes with downhole specific yield (Sy; freely drainable fluid) data from the BMR data composited at 10 m intervals – including data from K25D44, K24D41 and K23D40. Note that below 400 m BMR estimates for Sy are not available and laboratory data is used in the model.

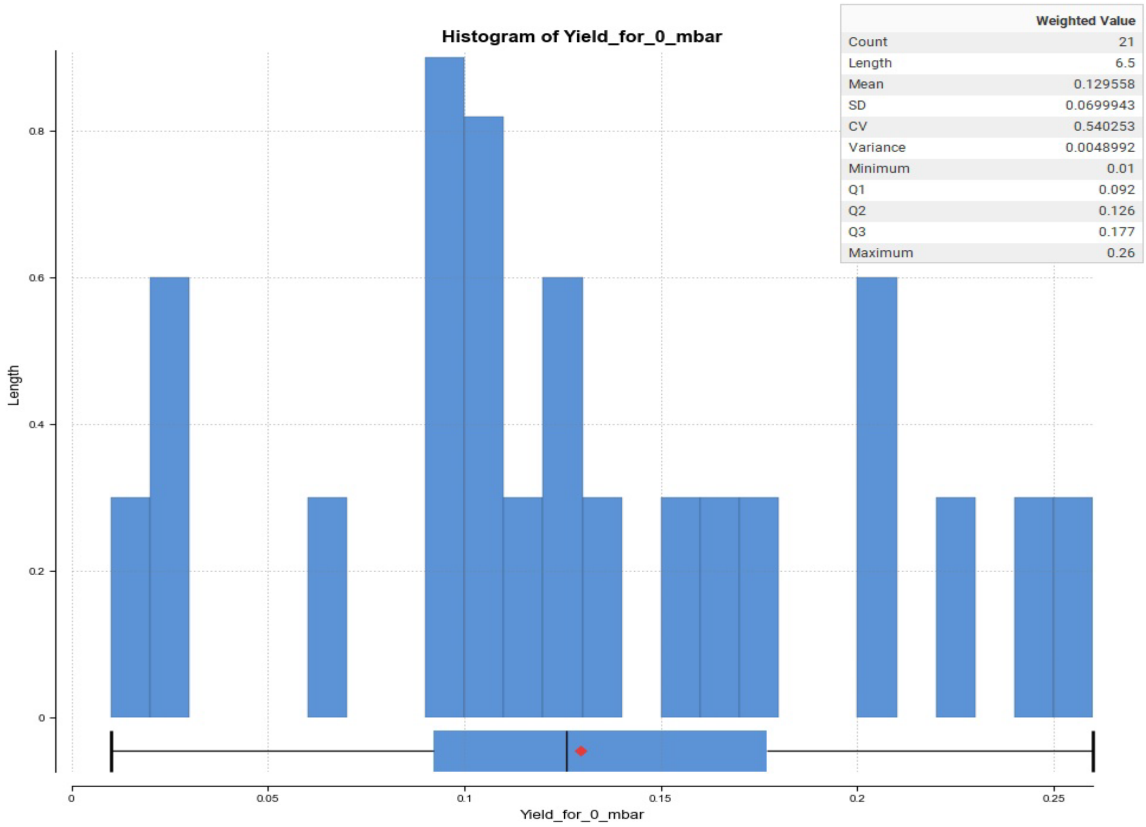

Figure 22. Laboratory drainable porosity data from drillholes from K25D44 and K24D41.

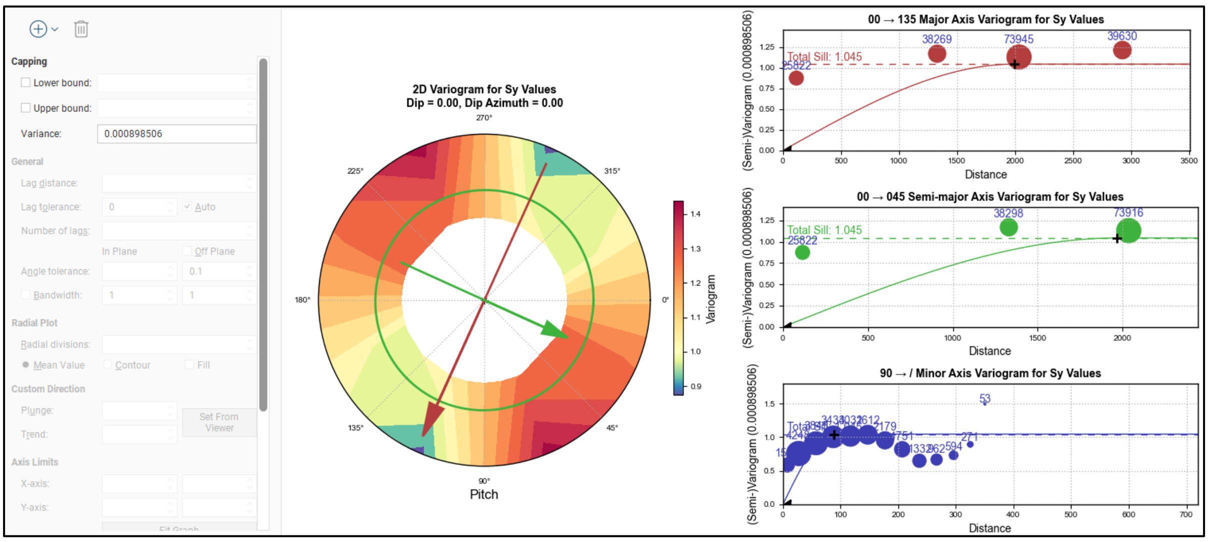

Figure 23. Variogram development for specific yield data

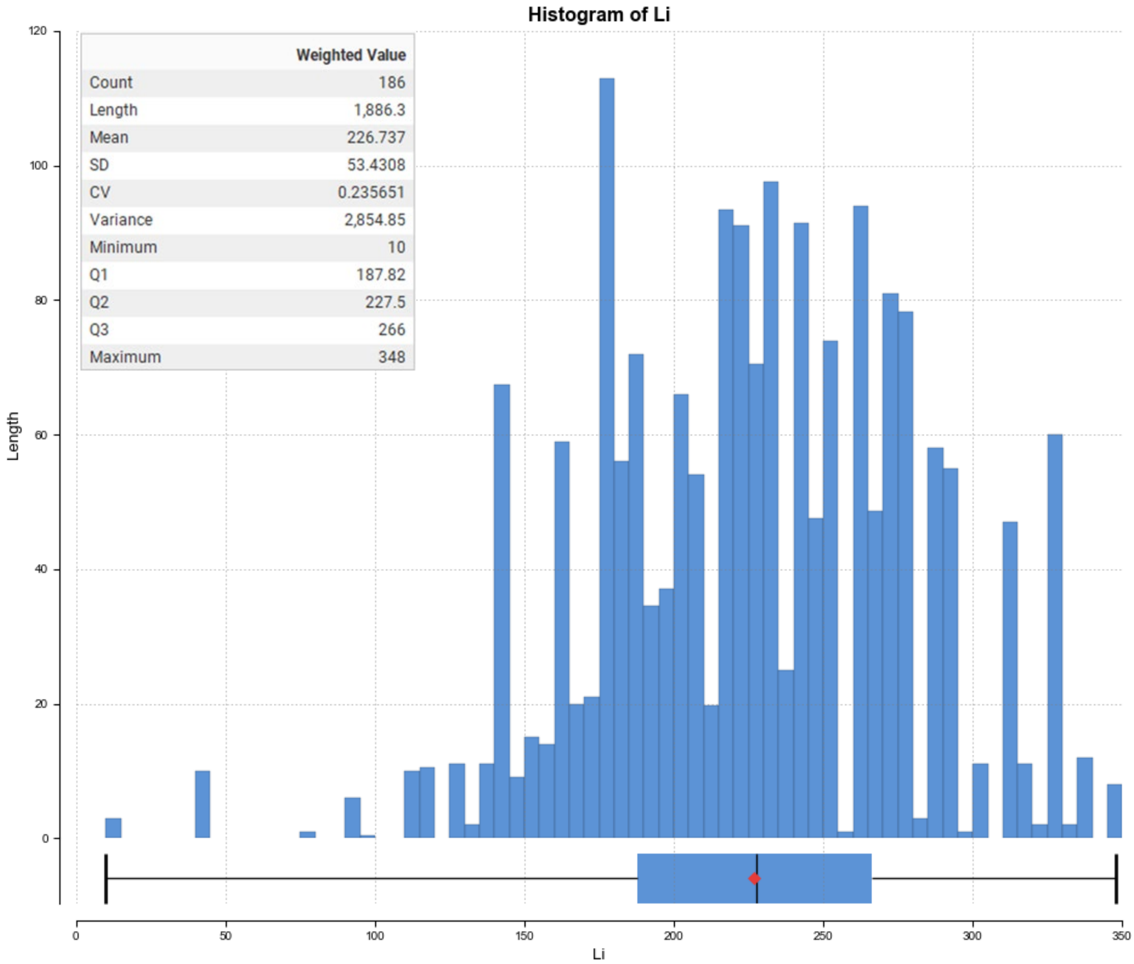

Figure 24. Distribution of lithium concentration samples, with summary statistics. Assays are based on averages of samples analysed at both the Alex Stuart and SGS laboratories with the addition of information.

The drainable porosity data was estimated in two passes for the Measured and Indicated Resources within a 2.5 km radius and three passes for the model including Inferred material up to 5 km from drillholes, with an expansion of the search ellipse in each pass. Estimation was conducted with Ordinary Kriging for the first two passes and utilised Nearest Neighbour estimation for the third pass. The area classified as Measured was not directly related to the passes as the compact drill pattern as contained within a tight radius and therefore the area considered as measured is within Passes 1 and 2. restricted to within a 2.5 km radius from drillholes, in keeping with the suggestion of Houston et. al.[21] Given sparser data, lithium concentrations were estimated using the Inverse Distance Squared method, with two passes with expanded search radii for the Measured Resources estimated in the 2.5 km radius and a third pass for the area which has been classified as Inferred. The product of lithium concentration at 2800 m asl, within Unit B is shown in **Figure 24**, and an East - West cross section through K24D41 and K25D44 (**Figure 25**). Drainable porosity (**Figure 26**) estimation was calculated by Leapfrog and displayed in the Edge statistics module. The resulting MRE is presented in **Table 3**.

[21] 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

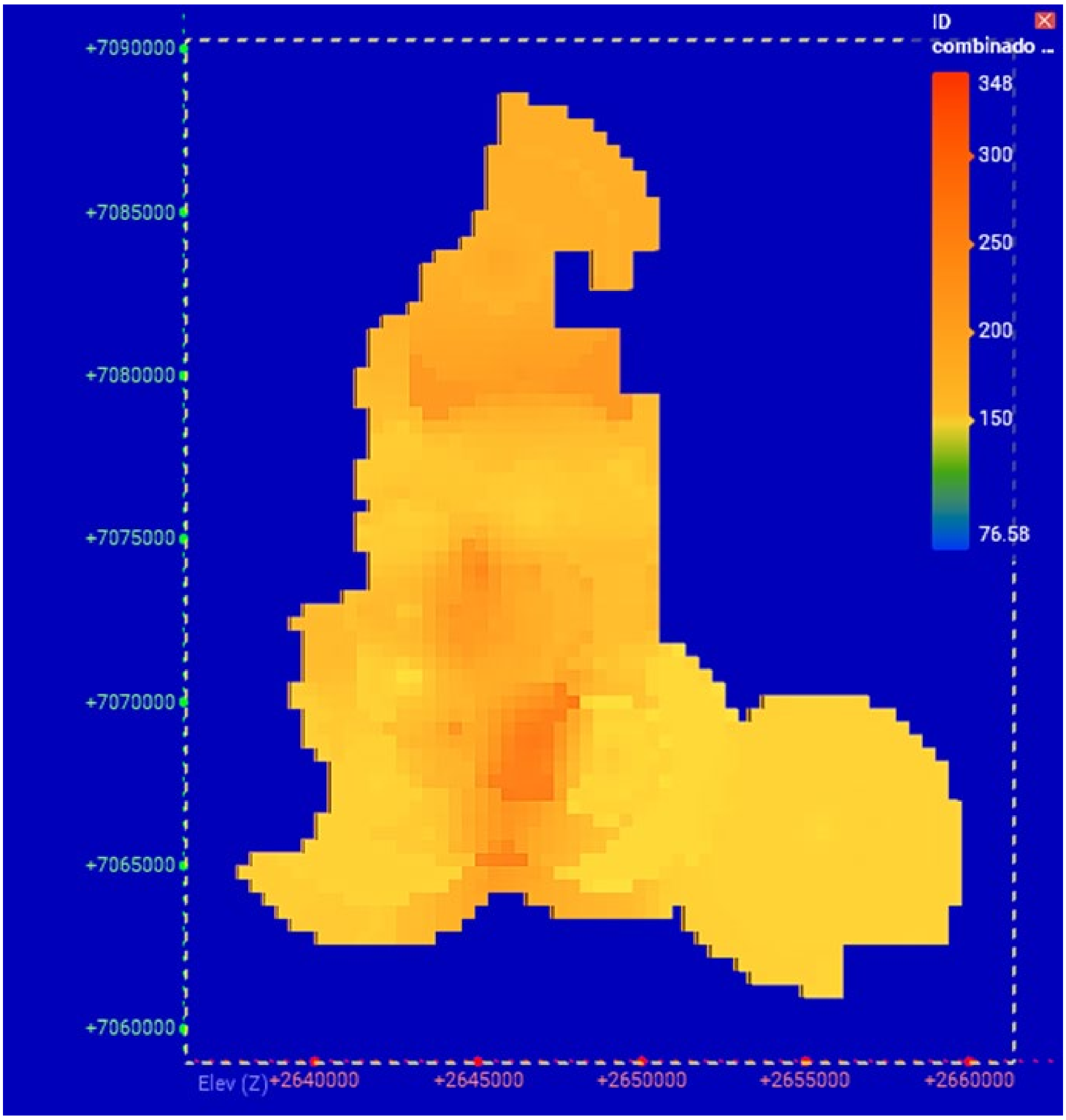

Figure 24. Interpolated and extrapolated lithium concentrations at 2800 m asl, within Unit B

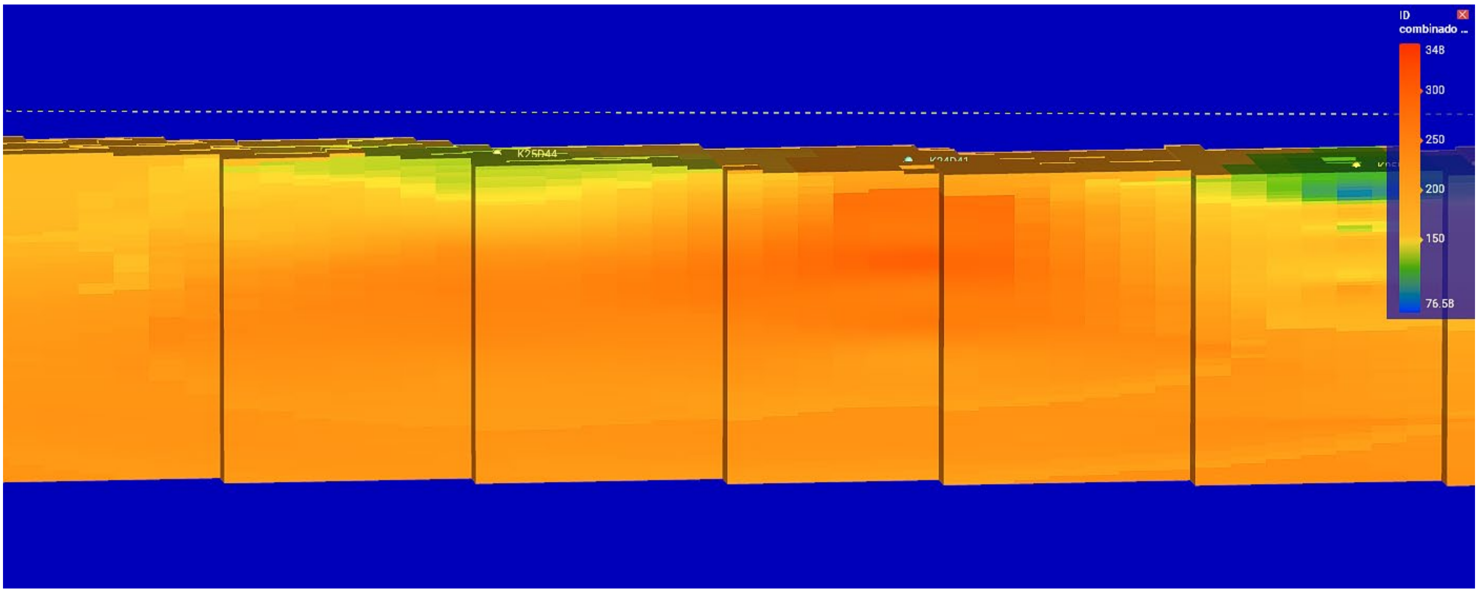

Figure 25. Interpolated and extrapolated lithium concentrations: East - West cross section through K24D41 and K25D44

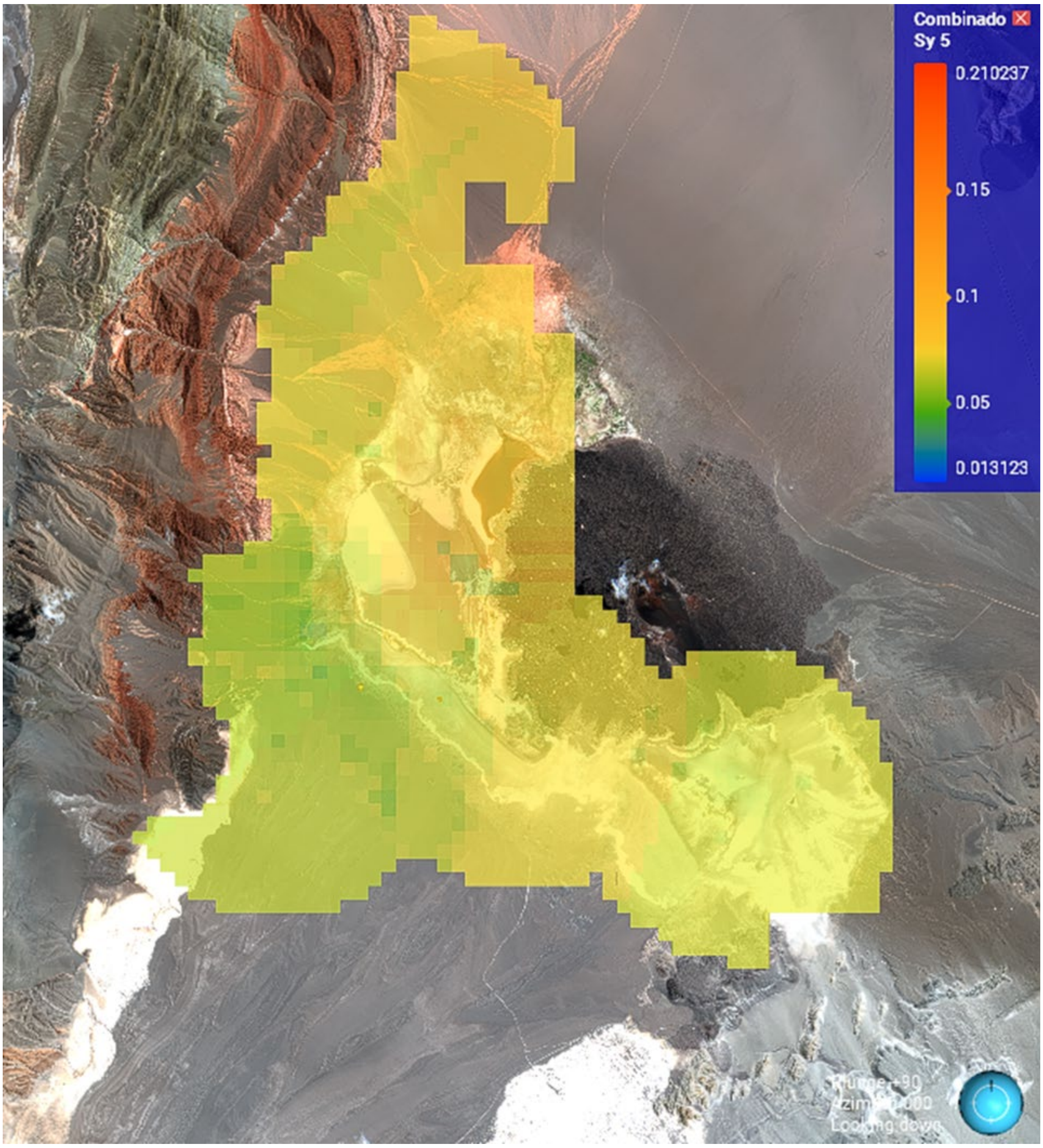

Figure 26. Interpolated and extrapolated Specific Yield at 2800 m asl, centred on Unit B. The outline is projected to surface, with the satellite image of the salar shown.

Table 3. Updated resource estimate of contained lithium

Measured Mineral Resource May 2025 (to 600 m depth)								
Unit	Sediment Volume m^3	Specific Yield %	Brine volume m^3	Liters	Li mg/L	Li grams	Li Tonnes	Tonnes LCE
A	10,339,000,000	0.078	806,442,000	806,442,000,000	0.210	169,352,820,000	169,000	901,000
B	4,385,500,000	0.088	385,740,000	385,740,248,000	0.229	88,334,517,000	88,000	470,000
C to 400	7,561,800,000	0.068	514,202,000	514,202,400,000	0.230	118,266,552,000	118,000	629,000
Fan West to 400	11,088,000,000	0.095	1,053,360,000	1,053,360,000,000	0.220	231,739,200,000	232,000	1,233,000
C to 400	7,561,800,000	0.068	514,202,000	514,202,400,000	0.230	118,266,552,000	118,000	629,000
K24 -K25 below 400	7,744,200,000	0.093	720,211,000	720,210,600,000	0.250	180,132,593,000	180,000	958,000
Total	**41,118,500,000**		**3,479,955,000**	**3,479,955,248,000**		**787,825,682,000**	**788,000**	**4,191,000**

Indicated Mineral Resource May 2025 (to 600 m depth)								
Unit	Sediment Volume m^3	Specific Yield %	Brine volume m^3	Liters	Li mg/L	Li grams	Li Tonnes	Tonnes LCE
A South	3,694,300,000	0.076	278,924,000	278,924,453,000	0.181	50,485,326,000	50,000	269,000
B South	1,489,000,000	0.075	111,544,000	111,543,670,000	0.179	19,927,611,000	20,000	106,000
C South	4,434,492,000	0.067	297,111,000	297,110,964,000	0.182	54,076,275,000	54,000	288,000
A North	3,075,200,000	0.095	292,144,000	292,144,000,000	0.232	67,776,824,000	68,000	361,000
B North	4,294,400,000	0.102	438,029,000	438,028,800,000	0.241	105,431,342,000	105,000	561,000
C North	4,115,300,000	0.102	419,761,000	419,760,600,000	0.182	76,396,429,000	76,000	406,000
D North	5,073,100,000	0.102	517,456,000	517,456,200,000	0.182	94,177,028,000	94,000	501,000
K21	8,304,500,000	0.065	541,394,000	541,393,608,000	0.192	103,822,511,000	104,000	552,000
Under Measured ABC 400-600	7,453,100,000	0.067	501,818,000	501,817,968,000	0.242	121,529,774,000	122,000	647,000
Under Measured Fan 400 - 600	3,775,900,000	0.063	239,343,000	239,343,351,000	0.242	57,850,485,000	58,000	308,000
Total	**45,709,292,000**		**3,637,524,000**	**3,637,523,614,000**	**0**	**751,473,605,000**	**751,000**	**3,998,000**

Combined Measured and Indicated								
	86,827,792,000	**-**	**7,117,478,861**	**7,117,478,861,140**	**-**	**1,539,299,286,959**	**1,539,299**	**8,189,000**

Inferred May 2025								
Unit	Sediment Volume m^3	Specific Yield %	Brine volume m^3	Liters	Li mg/L	Li grams	Li Tonnes	Tonnes LCE
A	3,870,500,000	0.08	309,640,000	309,640,000,000	0.185	57,283,400,000	57,000	305,000

B	1,569,100,000	0.079	123,959,000	123,958,900,000	0.191	23,676,150,000	24,000	126,000
C	5,446,470,000	0.074	404,338,000	404,338,308,000	0.218	88,218,532,000	88,000	469,000
Fan North	9,109,970,000	0.102	929,217,000	929,216,940,000	0.232	215,578,330,000	216,000	1,147,000
Fan South	2,767,500,000	0.093	257,378,000	257,377,500,000	0.239	61,513,223,000	62,000	327,000
Under volcano	6,718,700,000	0.074	500,187,000	500,187,059,000	0.193	96,425,185,000	96,000	513,000
Total	**29,482,240,000**	**-**	**2,522,621,000**	**2,522,620,663,000**	**-**	**542,294,093,000**	**542,000**	**2,885,000**

- JORC definitions were followed for Mineral resources.
- The Competent Person for this Mineral Resource estimate is 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.
- Numbers may not add due to rounding.
- Specific Yield (Sy) = Drainable Porosity
- Lithium is converted to lithium carbonate (Li2CO3) with a conversion factor of 5.32. Sediment volume, brine volume, litres, grams, lithium tonnes and tonnes LCE rounded to nearest thousand.
- For details on the lithology units please refer to the November 19, 2023 ASX announcement.

INTERPOLATED AND EXTRAPOLATED RESOURCE

A portion of the various mineral resources have been extrapolated beyond drillhole locations (**Table 4** and **Figures 27** and **28**). Such judgements are common within resource estimation and the concept of relative interpolated vs extrapolated resources are in part, important for conveying confidence in the resource estimation process. Reporting of the extrapolated fraction is a JORC 2012 requirement (Reporting on Mineral Resources, Sections 20-28) and as noted in that document, one must consider the style of mineralization, in this case a lithium brine (i.e., a fluid) that fills pore spaces within an unconsolidated porous media. These differences compared to typical hard rock mining projects should be considered when evaluating these proportions. A more nuanced discussion is provided in the November 19th 2023 ASX Announcement. An improvement since November 2023 is that the analysis considers resource volume rather than the areal footprints, which is more precise way to estimate the interpolated and extrapolated fractions.

Table 4. Interpolated vs Extrapolated Resource

Mineral Resource Category	Total Resource Estimate (LCE)	Interpolated Fraction (% / LCE)	Extrapolated Fraction (% / LCE)
Measured	4,191,000	78	22
Indicated	3,998,000	52	48
Inferred	2,885,000	23	77

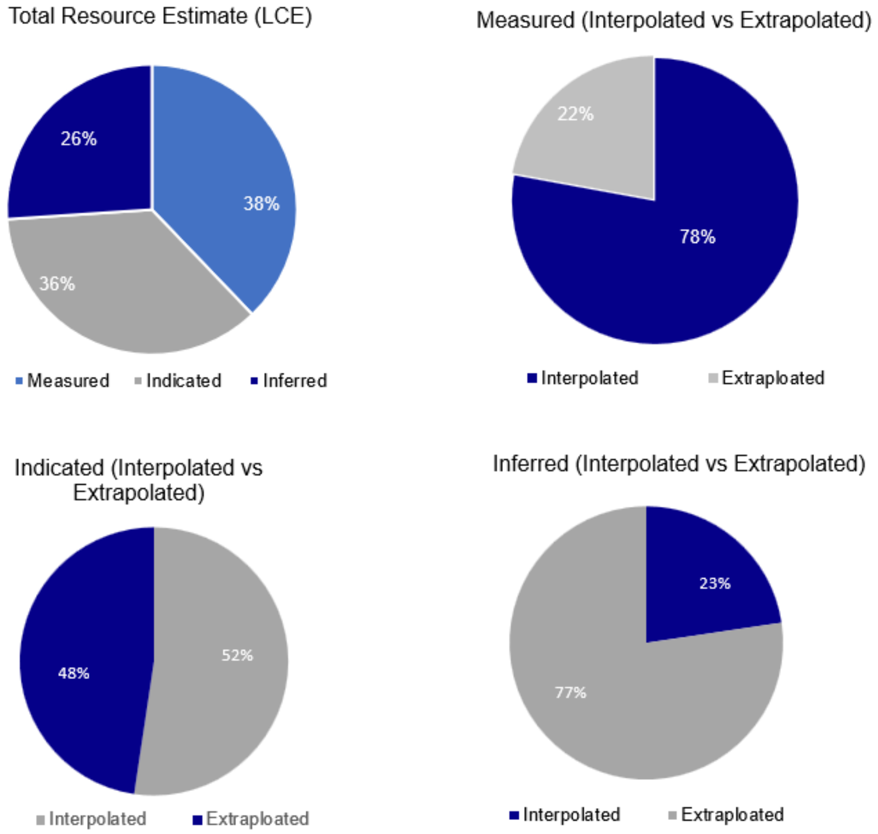

Figure 27. Proportion of Extrapolated Resource by Resource Category and Proportion of Interpolated vs Extrapolated for Resource Components

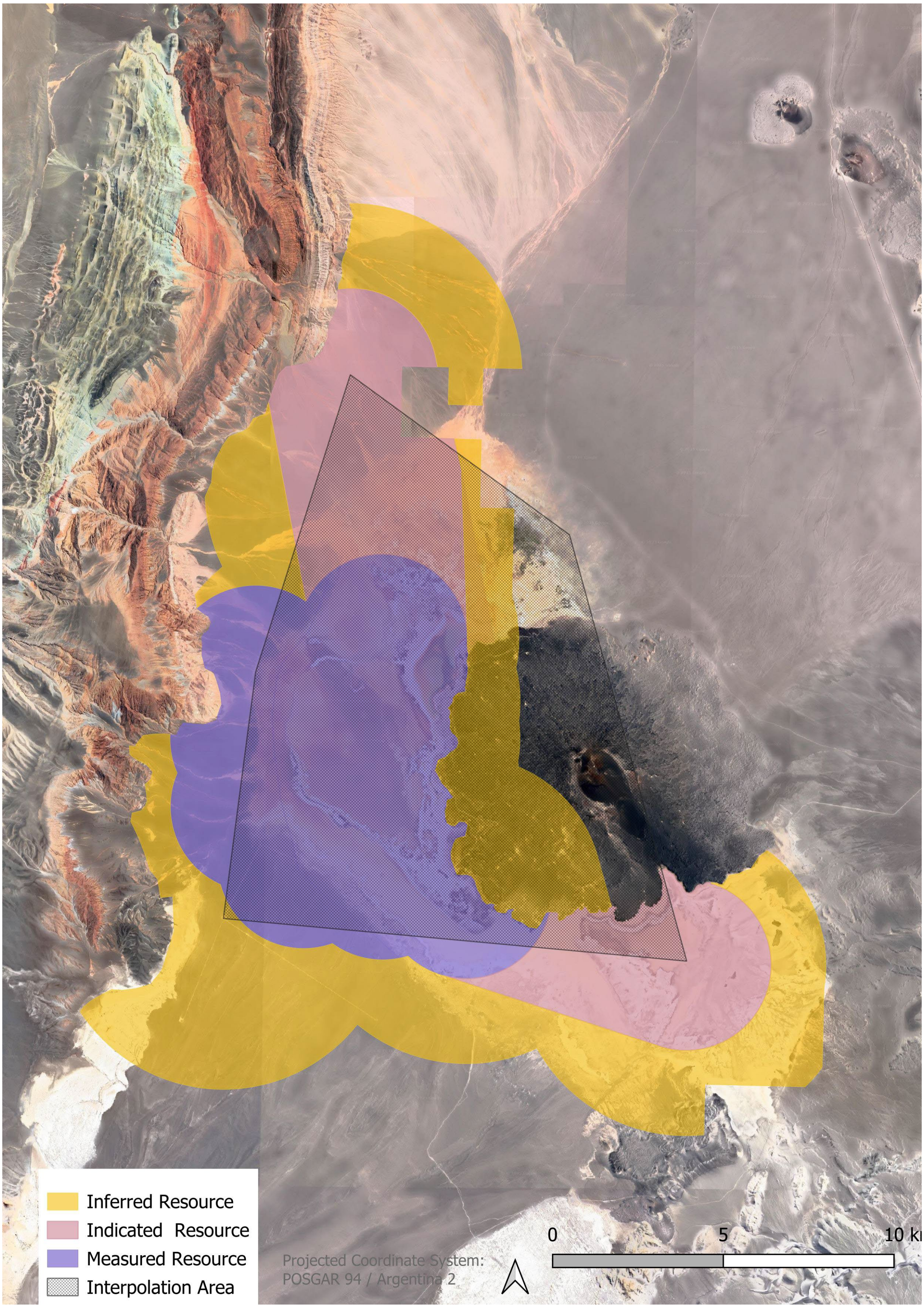

Figure 28. Polygon delineated by lithium brine intercepts (within black polygon) and used to estimate the interpolated resource and the extrapolated resource (beyond back polygon)

EXPLORATION TARGETS

The exploration target is primarily defined based on the interpreted distribution of the brine unit (**Figure 29**). This conductive layer is cut with the limits of the properties and the Measured, Indicated and Inferred models, forming the difference between the property outlines, basement rock below the properties and the resources located around the drillholes.

The limit of the exploration target in depth is given by the basement modelled from the passive seismic and its top by the conductive limit from the TEM profiles. Where the Measured, Indicated and Inferred resources do not extent to the basement the exploration target (**Table 5**) includes the volume between 600 m and the base of the sediments overlying the basement. The exploration target has decreased since the November 2023 resource estimate, in response to expansion of the Indicated and Measured resources laterally and at depth and minor modifications of the model volume. The spatial distribution of the exploration target by depth is shown in **Figure 30**.

The target is divided into two zones, an upper layer (grey) with its base at 400 meters depth and a lower layer (red) that extends from 400 meters to the top of the basement. This allows for the volume underlying the Measured, Indicated and Inferred Resource to be incorporated and for the estimation lateral extent of the target.

The TEM surveys and follow up drilling, have demonstrated that the TEM provides valuable insights as the spatial and vertical distribution of brine in the basin. In tandem, they have confirmed that the distribution of the brine extends well beyond the salar footprint. The TEM results further suggests that the brine resource expands well beyond the delineated resource areas, highlighting the potential for further resource expansion with additional drilling.

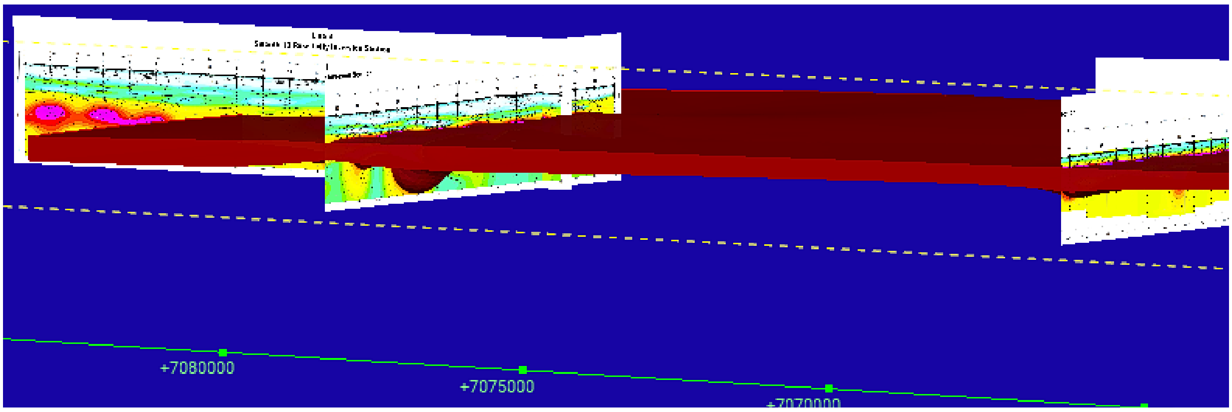

Figure 29. Conductive zone (brown) defined from TEM geophysical profiles, used to define the exploration target in the area away from the salar (figure shows the northern TEM lines 1 and 2 on the left and 3 and 4 on the right). Note, the potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources

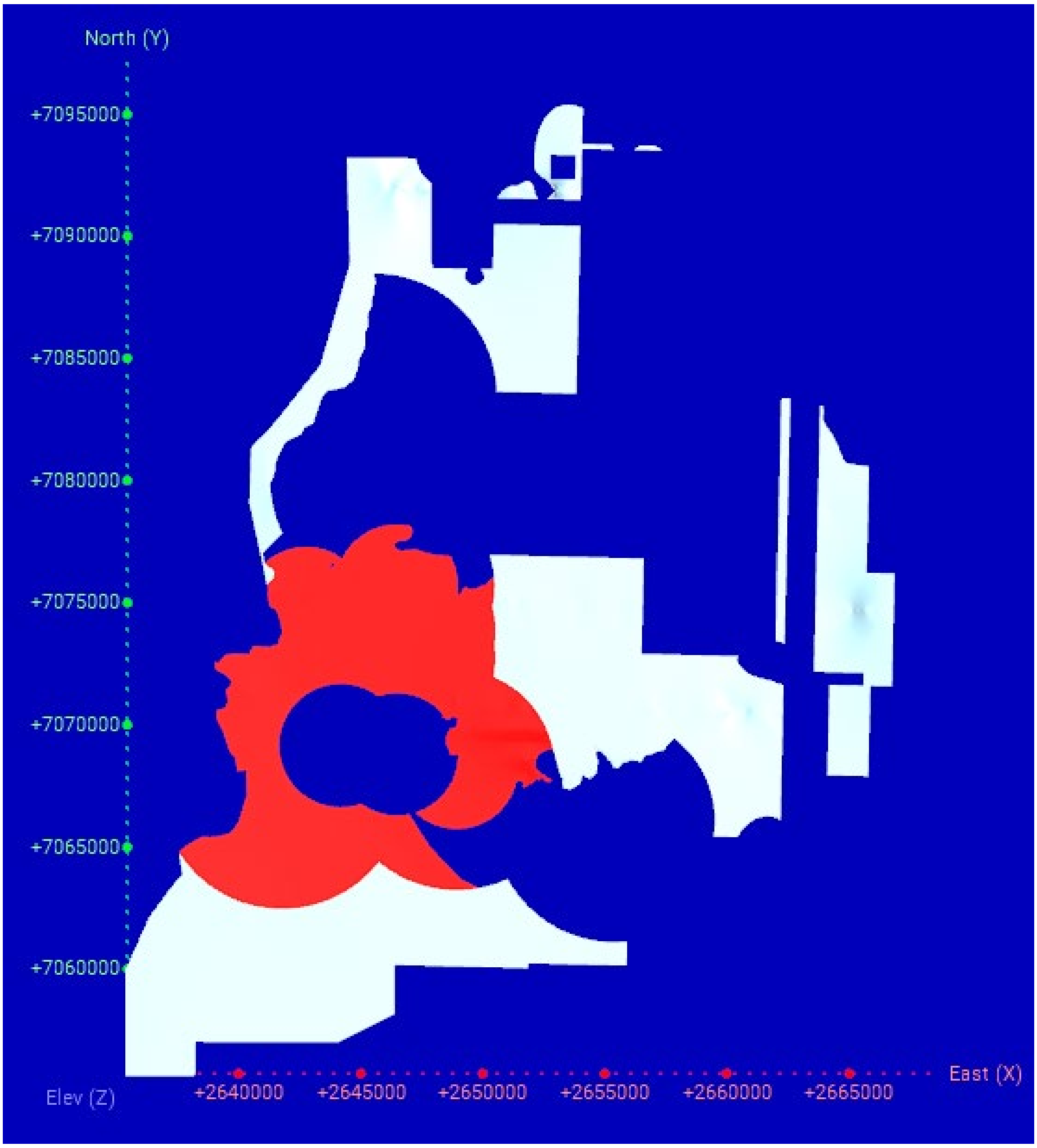

Figure 30. Exploration target, showing the different component zones. The conductive zone identified from the TEM in the upper 400 m of the sediments is shown in grey. As the brine becomes deeper below the resource area the Exploration Target is only present below 600 m (shown in red) and not present around the updated Measured Resource defined around holes K24 and K25 (which extends to the basement). The Inferred Resources in the north now extend to the basement and the Exploration Target is located west and east of these areas. Note, the potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources.

Table 5. May 2025 Exploration target estimate, showing the potential low and high range of contained lithium that has not yet been drilled and confirmed

Area	Sediment Volume m^3	Porosity	Brine volume m^3	Li g/l	Li Tonnes	Tonnes LCE
Target around resources (grey)	90,506,000,000	0.06	5,430,360,000	0.100	543,000	2,889,000
Target below resources (red)	22.953,290,000	0.06	1,377,197,000	0.100	138,000	733,000
Total	113,459,290,000		6,807,557,000		681,000	3,622,000

Area	Sediment Volume m^3	Porosity	Brine volume m^3	Li g/l	Li Tonnes	Tonnes LCE
Target around resources (grey)	90,506,000,000	0.12	10,860,720,000	0.200	2,172,000	11,557,000
Target below resources (red)	22.953,290,000	0.12	2,754,395,000	0.200	551,000	2,931,000
Total	113,459,290,000		13,615,115,000		2,723,000	14,486,000

CUT-OFF GRADES

Resources are estimated utilizing a conservative cut-off grade of 100 mg/L Lithium. The cut-off grade is consistent with the cut-off grade used in the DFS.[22]

MINING AND METALLURGICAL METHODS AND PARAMETERS

Lithium brine will be extracted from the saturated sediments using vertical wells, initially focused on the central resource area. These wells will be at least 400 m deep with screens on the order of 200 m. After brine processing, the spent brine, which has about 20-percent of the original lithium content and 90-percent of the total dissolved solids remaining will be injected back into the subsurface via injection wells and/or potentially rapid infiltration basins. The current plan includes a plant and related infrastructure targeted to have capacity to produce 25,000 tpa of battery grade lithium carbonate from the lithium chloride brine resource.[23]

The feed is extracted and pumped from the brine extraction wells to the Brine Feed Pond, which provides surge volume between extraction wells and the main processing plant. The brine is pH-adjusted to precipitate iron and then fed to a filtration system to remove suspended solids. The filtered brine is then processed in the direct extraction package, which recovers and concentrates lithium to the eluate stream. The DLE step employs a novel ion-exchange media and system developed by Lilac Solutions to extract lithium from the brine and elute the extracted lithium with hydrochloric acid solution. Waste and depleted brine from the DLE is sent to waste RO treatment and brine reinjection respectively.

The eluate stream is then concentrated through reverse osmosis. The concentrated eluate is treated for impurities by the stage-wise addition of lime and sodium carbonate, with the solid precipitates separated by filtration. Impurity removal is followed by evaporation using mechanical vapour recompression (MVR) technology, making it suitable for further processing into lithium carbonate and

[22] Refer to ASX Announcement dated 19 December 2023 ("Kachi Project Phase One Definitive Feasibility Study").

[23] Refer to ASX Announcement dated 19 December 2023 ("Kachi Project Phase One Definitive Feasibility Study").

recovering water (as RO permeate and evaporator condensate) for recycling. Further trace impurities are removed by ion exchange to target battery-grade product specifications. Lithium carbonate is precipitated from the purified stream by addition of sodium carbonate, the primary reagent input for the process.

The precipitated lithium carbonate is washed through two stages of centrifuging and a stage of repulp washing to achieve the final product purity required. This product is dried and packaged for sale. A recirculation stream from lithium carbonate precipitation, which contains a considerable residual amount of soluble lithium chloride, is fed to a crystallization system for additional lithium recovery, condensate water recovery, and the production of a concentrated sodium chloride brine feed for the chlor-alkali plant. An on-site chlor-alkali plant electrochemically converts sodium chloride from the concentrated brine into hydrochloric acid and sodium hydroxide reagents to meet the demands of the process.

Based on the material presented in this update and the DFS, the project exceeds the reasonable prospects criteria for economic extraction of lithium from the brine.

ORE RESERVE

A hydrogeological model has been developed and calibrated to pumping and injection tests completed at the Project. The model was used to support the Maiden Ore Reserve[24] and the DFS[25] wellfield development plan and EIA submittal. The Ore Reserve has not been updated as part of this resource update. An updated Ore Reserve using the current resource is planned; but otherwise this updated resource estimate does not report an Ore Reserve estimate for the first time, nor has any Ore Reserve reported in this resource update materially changed from the Maiden Ore Reserve (when the Ore Reserves presented in Table 6 were first reported). The updated resource estimate results in only minor changes to the lithium grade block model. However, as noted above improvements in lithium recovery with Lilac's Gen4 media present opportunities to reduce the number of extract and injection wells from lower concentration sectors. Previously reported Ore Reserves are presented in **Table 6**.

Table 6. Proved and Probable Lithium Reserves

Reserve Category	Years	Lithium (Tonnes)	LCE (Tonnes)	Average Lithium (mg/L)
Proved	0-1	3,829	17,500	258.6
Proved	2-7	28,195	150,000	257.2
Probable	8-25	65,789	350,000	245.0

Notes to the Reserve Estimate:

- Lithium is converted to lithium carbonate (Li_2CO_3) equivalent (LCE) with a conversion factor of 5.32.
- The effective date for the Reserve Estimate is based on the November resource update (November 22, 2023), with the reserve to be updated based on the updated MRE in this document in the future.
- The reserve above includes processing losses in the plant and transfer ponds.
- Numbers may not add due to rounding effects.
- Projected processing is based on first year rate of 17,500 tonnes LCE.
- Projected processing for Years 2 - 25 rate of 25,000 tonnes LCE.
- The Competent Person for the Mineral Reserve estimate is Andrew Fulton.

[24] Refer to ASX announcement dated 19 December 2023 ("Maiden Ore Reserve Defined").

[25] Refer to ASX Announcement dated 19 December 2023 ("Kachi Project Phase One Definitive Feasibility Study").

ENVIRONMENT, SOCIAL AND GOVERNANCE (ESG)

Salt lakes/salars are a form of wetland, which are inhospitable to all except adapted flora and fauna, and which have been successfully developed as lithium operations coexisting with the native flora and fauna in both Argentina and Chile. 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 2009 under an agreement between the Ramsar Convention Organization and the government of Argentina, represented by the Environmental Secretariat of the Catamarca Province. The provincial government in 2021 approved lithium extraction and mine development at the nearby Tres Quebradas lithium brine Project, located in a similar wetland zone to the Lake 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 of the project in the Carachi Pampa basin. A specific study has been carried out to project climate change in the period up to 2050. A thorough biodiversity and ecosystem services baseline has been compiled, covering the desert and salt flat with emphasis on the wetlands and lake close to the Carachi Pampa volcano. Special emphasis has been 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 have been developed for minimizing risks in all sensitive areas. Cultural heritage, paleontological and landscape assessments complete the baseline which has been designed in line with the requirements of the Equator Principles.

A social baseline has been constructed from surveys of land use, communities and public perceptions in nearby El Peñon and Carachi Pampa Community, supported by two field surveys with numerous interviews and three 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 will have measured airborne emissions of gases and particulate matter withing national standards. Hazardous materials and solid wastes will be managed according to good international industry practices (GIIP in the IFC terminology).

A permitting plan has been developed, with emphasis initially on the Environmental Impact Assessment (EIA) was submitted to the Mining Ministry of Catamarca in March 2024 and is currently being evaluated by authorities, with the goal of receiving the Environmental Impact Declaration (EID) resolution by the end of the second quarter 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 of the Kachi project.

Competent Person's Statement – Kachi Lithium Brine Project

The information contained in this ASX release relating to Exploration Results 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

TITLE					Tenure Type	Status	Mining Concession	Minerals	AREA (Hectares)	STATUS		
Tenement	Number–- Gde	Title Owner	Title Acquisition	Registration						Claims	EIA pending Approval	Royalty
MARIA I	EX–- 2021–- 00362285–- CAT (140/2018)	MVM / Lake	11/15/2018	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1260.0736	12	Pending	No
MARIA II	EX – 2021–- 00373528–- CAT (14/2016)	MVM / Lake	8/24/2017	Registered	Exploration Concession	Granted	N/A	Lithium Salts	546.9333	5	Pending	No
MARIA III	EX–- 2021–- 00293511 – CAT (15/2016)	MVM / Lake	8/24/2017	Registered	Exploration Concession	Granted	N/A	Lithium Salts	834.7969	9	Pending	No
KACHI INCA	EX–- 2021–- 00361579–- CAT (13/2016)	MVM / Lake	8/24/2017	Registered	Exploration Concession	Granted	N/A	Lithium Salts	857.7131	9	Pending	No
KACHI INCA I	EX–- 2021–- 00432837 – CAT (16/2016)	MVM / Lake	8/24/2017	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2880.4365	29	Pending	No
KACHI INCA II	EX–- 2021–- 00221521 – CAT (17/2016)	MVM / Lake	8/24/2017	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2822.7403	29	Pending	No
KACHI INCA III	EX–- 2121–- 00321200 – CAT (47/2016)	MVM / Lake	8/24/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	3355.3649	34	Pending	No
KACHI INCA V	EX–- 2021–- 00208240 – CAT (45/2016)	MVM / Lake	10/10/2017	Registered	Exploration Concession	Granted	N/A	Lithium Salts	305.1754	4	Not yet submitted	No
KACHI INCA VI	EX–- 2021–- 00294250 – CAT (44/2016)	MVM / Lake	8/24/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	109.787	2	Pending	No
DANIEL ARMANDO	EX–- 2021–- 00208733–- CAT (23/2016)	MVM / Lake	8/24/2017	Registered	Exploration Concession	Granted	N/A	Lithium Salts	3121.876	32	Pending	No
DANIEL ARMANDO II	EX–- 2021–- 00331263– CAT (97/2016)	MVM / Lake	10/7/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1589.664	16	Pending	No
MORENA 1	EX–- 2021–- 00328638 – CAT (72/2016)	MVM / Lake	10/7/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	3024.4662	31	Pending	No
MORENA 2	EX–- 2021–- 00390312 – CAT (73/2016)	MVM / Lake	10/7/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2989.429	30	Pending	No
MORENA 3	EX–- 2121–- 00361695 – CAT (74/2016)	MVM / Lake	10/7/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	3007.1366	31	Pending	No
MORENA 4	EX–- 2021–- 00293790 – CAT (29/2019)	MVM / Lake	9/18/2019	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2967.6745	30	Pending	No

TITLE					Tenure Type	Status	Mining Concession	Minerals	AREA (Hectares)	STATUS		
Tenement	Number–- Gde	Title Owner	Title Acquisition	Registration						Claims	EIA pending Approval	Royalty
MORENA 5	EX–- 2021–- 00221381 – CAT (97/2017)	MVM / Lake	11/29/2019	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1415.8752	15	Pending	No
MORENA 6	EX–- 2021–- 00208283 –CAT (75/2016)	MVM / Lake	10/7/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1606.1445	17	Pending	No
MORENA 7	EX–- 2021–- 00259078 – CAT (76/2016)	MVM / Lake	10/7/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2804.9561	29	Pending	No
MORENA 8	EX–- 2021–- 00294310–- CAT (77/2016)	MVM / Lake	10/7/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2961.0131	30	Pending	No
MORENA 9	EX–- 2021–- 00368898 – CAT (30/2019)	MVM / Lake	11/29/2019	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2821.5762	29	Pending	No
MORENA 10	EX–- 2022–- 00508476–- CAT	MVM / Lake	Pending	Registered	Exploration Concession	Not Granted	N/A	Lithium Salts	2712.9283	28	Pending	No
MORENA 12	EX–- 2021–- 00259022 – CAT (78/2016)	MVM / Lake	10/7/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2703.6817	28	Pending	No
MORENA 13	EX–- 2021–- 00258895 – CAT (79/2016)	MVM / Lake	10/7/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	3024.4662	31	Pending	No
MORENA 15	EX–- 2021–- 00360876 – CAT (162/2017)	MVM / Lake	8/30/2018	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2559.0852	26	Pending	No
PAMPA I	EX–- 2021–- 00233741 – CAT (129/2013)	MVM / Lake	11/24/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	690	7	Pending	No
PAMPA II	EX–- 2021–- 00430058 -CAT (128/2013)	MVM / Lake	2/8/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1053.15	11	Pending	No
PAMPA 11	EX–- 2021–- 00372498 – CAT (201/2018)	MVM / Lake	2/7/2020	Registered	Exploration Concession	Granted	N/A	Lithium Salts	815	9	Pending	No
PAMPA IV	EX–- 2021–- 00322433 – CAT (78/2017)	MVM / Lake	3/22/2018	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2569.3125	26	Pending	No
IRENE	EX–- 2021–- 00212993 – CAT (28/2018)	MVM / Lake	9/6/2018	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2052.2562	21	Pending	No
PARAPETO 1	EX–- 2021–- 01648141 – CAT (133/2018)	MVM / Lake	9/24/2018	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2280.5717	23	Pending	No
PARAPETO 2	EX–- 2021–- 00235750 – CAT (134/2018)	MVM / Lake	9/24/2018	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1729.716	18	Pending	No
PARAPETO 3	EX–- 2121–- 00261195 – CAT (132/2018)	MVM / Lake	11/28/2018	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1891.5621	19	Pending	No
PARAPETO III	EX–- 2021–- 00854749 – CAT	MVM / Lake	23/08/2022	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1949.1255	20	Pending	No
GOLD SAND I	EX–- 2021–- 00376209 – CAT (238/2018)	MVM / Lake	4/24/2019	Registered	Exploration Concession	Granted	N/A	Lithium Salts	853.602	9	Pending	No

TITLE					Tenure Type	Status	Mining Concession	Minerals	AREA (Hectares)	STATUS		
Tenement	Number–- Gde	Title Owner	Title Acquisition	Registration						Claims	EIA pending Approval	Royalty
TORNADO VII	EX–- 2021–- 00208328 – CAT (48/2016)	MVM / Lake	11/24/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	6628.842	67	Pending	No
DEBBIE I	EX–- 2021–- 00196977 – CAT (21/2016)	MVM / Lake	8/24/2017	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1742.85	18	Pending	No
DOÑA CARMEN	EX–- 2021–- 00321876 – CAT (24/2016)	MVM / Lake	8/24/2017	Registered	Exploration Concession	Granted	N/A	Lithium Salts	873.1146	9	Pending	No
DIVINA VICTORIA I	EX–- 2021–- 00368383 – CAT (25/2016)	MVM / Lake	8/24/2017	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2420.1	25	Pending	No
DOÑA AMPARO I	EX–- 2021–- 00294138 – CAT (22/2016)	MVM / Lake	8/24/2017	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2695.2986	27	Pending	No
ESCONDIDITA	EX–- 2021–- 00143141 – CAT (131/2018)	MVM / Lake	9/24/2018	Registered	Exploration Concession	Granted	N/A	Lithium Salts	373.4346	4	Pending	No
GALAN OESTE	EX–- 2021–- 00153718 – CAT (43/2016)	MVM / Lake	10/14/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	3166.9356	32	Pending	No
MARIA LUZ	EX–- 2021–- 00153678 – CAT (34/2017)	MVM / Lake	3/27/2018	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2424.9638	25	Pending	No
NINA	EX–- 2021–- 00360751 – CAT (106/2020)	MVM / Lake	10/26/2021	Registered	Exploration Concession	Granted	N/A	Lithium Salts	3125.0644	32	Not yet submitted	No
PADRE JOSE MARIA I	EX–- 2021–- 00432843 – CAT (95/2012)	MVM / Lake	1/29/2021	Registered	Exploration Concession	Granted	N/A	Lithium Salts	650.0094	7	Pending	No
PADRE JOSE MARIA II	EX–- 2021–- 00432950 -CAT (96/2012)	MVM / Lake	1/29/2021	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1523.1476	16	Not yet submitted	No
PADRE JOSE MARIA III	EX–- 2021–- 00433095 – CAT (94/2012)	MVM / Lake	1/29/2021	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1523.1476	16	Not yet submitted	No
PADRE JOSE MARIA IV	EX–- 2021–- 00433149 – CAT (93/2012)	MVM / Lake	1/29/2021	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1528.6905	16	Not yet submitted	No
PADRE JOSE MARIA V	EX–- 2021–- 00647090 – CAT (92/2012)	MVM / Lake	1/29/2021	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1584.3384	16	Not yet submitted	No
PADRE JOSE MARIA VI	EX–- 2021–- 00647273 – CAT (91/2012)	MVM / Lake	1/29/2021	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1507.3002	16	Not yet submitted	No
PADRE JOSE MARIA VII	EX–- 2021–- 00647377 – CAT (90/2012)	MVM / Lake	1/29/2021	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1499.7985	15	Not yet submitted	No
PADRE JOSE MARIA VIII	EX–- 2021–- 00647631 – CAT (89/2012)	MVM / Lake	1/29/2021	Registered	Exploration Concession	Granted	N/A	Lithium Salts	515.0332	6	Not yet submitted	No
PAMPA III	EX - 2021 - 00429001 – CAT (130/2012)	MVM / Lake	29/06/2015	Registered	Exploration Concession	Granted	N/A	Lithium Salts	600.00	6	Pending	No
PARAPETO 4	EX–- 2021–- 01651926 –CAT (187/2020)	MVM / Lake	23/08/2022	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1948.9079	20	Not yet submitted	No

Table 8. Resource Drillhole Collars

Hole id	Easting	Northing	Drilling Method	From	To	Resource Unit	Li (mg/L)	Mg (mg/L)	K (mg/L)	Sample Type
K02D13	2646493	7075690	Diamond HQ	58.5	59.5	A	217	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	31 9	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	Rotary	7	10	A	93.7	1378.3	1778.3	Airlift
K02P02	2646565	7075674	Rotary	31	35	A	175.7	2525.1	3762.2	Airlift
K03R03	2644936	7073943	Rotary	213.08	236.08	B	287.5	1243.4	5880.5	Airlift
K03R12	2644942	7073926	Rotary	349.16	391.44	C	275.7	1140	5403.6	Pumping test
K04P01	2646565	7071419	Rotary	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	4212	Airlift
				31	34	A	184.9	3154.2	4329.1	Airlift
K04R15	2646513	7071387	Rotary	295	343	C	242.2	1240.7	5336.8	Pumping test
K05D09	2648943	7068270	Diamond HQ	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	1926	Artesian
				188	190	B	215.3	919	3596	Double packer
				200	201	B	204	919.7	3669.5	Double packer
				242	243	C	176	889.6	3115.8	Double packer
K05D11	2648950	7068270	Diamond HQ	288	289	C	142.9	1088	2251	Artesian
				299	300.5	C	116.3	1035	1782	Artesian
				291	334.5	C	286.4	1164	4084	Simple packer
K06D04	2655328	7066144	Rotary	95	113	A	187	879.1	3294.2	Airlift
K06D08	2655338	7066149	Diamond HQ	69	70	A	187.6	999.4	3241	Drive point
				120	121	A	181.9	933.4	3301	Drive point
				165	166	A	170	880	3650	Drive point
				205	206	B	164	891	3575	Drive point
				258	259	C	189	962	4120	Drive point
				354	405	R	161.5	911	3415	Simple packer

K06R10	2655398	7066156	Rotary	150	173.5	B	191.9	1119	3420.8	Artesian
K08R14	2644275	7071546	Rotary	300	360	C	326.5	1231.9	6038.5	Airlift
K08P01	2644254	7071571	Rotary	40	43	A	181.4	2385.4	3836.9	Airlift
				41.5	47.5	A	175.6	2193.9	3514	Airlift
K08P02	2644261	7071562	Rotary	7	10	A	185.1	4352.6	3545.4	Airlift
K08R17	2644263	7071556	Rotary	141.33	195.33	A	224.2	3818.9	4738.2	Pumping test
K11D20	2646488	7073873	Diamond HQ	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	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
K11R29	2646548	7073949	Rotary	200	255	B	287.25	1653.5	5426.25	Pumping test
K11P01	2646522	7073067	Rotary	31	34	A	183.6	2736.5	4202.5	Airlift
K12P01	2646522	7072770	Rotary	13	16	A	150.8	2520.1	3781.6	Airlift
				25	28	A	178.4	2918.1	4338.2	Airlift
				26.15	29.1	A	173.65	2636	3896	Airlift
K12D21	2646520	7072801	Diamond HQ	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	Bailer
				171	184	A	233.5	1353	4992	Bailer
				195	199	B	223.6	1383.6	4521.1	Bailer
				202	211	C	221.2	1408.5	4036.4	Airlift

K14D23	2644072	7072780	Diamond HQ	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	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	Diamond HQ	70.3	71.3	A	231.4	2273.8	4624.7	Double packer
				88.3	89.3	A	208	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	1839.1	4241.8	Double packer
K14R37	2644113	7072780	Rotary	350	373.5	C	300.8	955.75	4965.7	Pumping test
				350	373.5	C	325	1022.5	5446	Airlift
K15D25	2645438	7072482	Diamond HQ	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	5480	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
K14P01	2644059	7072767	Rotary	31.9	35.86	A	200.6	2764.2	3806.4	Airlift
K15P01	2645434	7072497	Rotary	30.9	33.9	A	164.4	2268.5	3744.2	Airlift
K15R36	2645456	7072403	Rotary	350	400.5	C	306.8	677.1	5075.6	Pumping test

K16D28	2645457	7070992	Diamond HQ	56.3	57.3	A	231.9	2562	4425	Double packer
				82.3	83.3	A	211.8	2564.5	4404	Double packer
				121.3	122.3	A	207.1	2337	4353	Double packer
				166.3	167.3	A	207.7	2545.5	4426	Double packer
				208.3	209.3	B	223.25	2488	4543	Double packer
				221.3	222.3	B	300.08	1469	6085	Double packer
				265.3	266.3	B	204.2701	2459.5	4376	Double packer
				322.3	323.3	C	295.5663	1166	5361	Double packer
				377.3	378.3	C	260.2421	855	4720	Double packer
				387.3	388	C	265.6143	886.5	4821	Double packer
K18D32	2642714	7071991	Diamond HQ	73	74	A	221	3506	4150	Double packer
				124	125	A	218	3456	4239	Double packer
				167.5	169.5	A	219	3424	4163	Double packer
				193	195	A	215.5	3360	4220.5	Double packer
				298	300	B	231	1749.5	4364	Double packer
				323	325	C	254	1514	4613.5	Double packer
				362	364	C	333	950	5542	Double packer
				397	399	C	241	1464.5	4460	Double packer
				382	383	C	251.5	1535.5	4314.5	Double packer
K18P01	2642767	7072787	Diamond HQ	31	37	A	203	3163	3984.7	Airlift
K19R33	2642787	7070796	Diamond HQ	58	59	A	216	3922	4154	Double packer
				112	114	A	197	3266	3866	Double packer
				202	203	A	162	2461	3186	Double packer
				323	324	C	171.5	20.4	3081.5	Double packer
				373	374	C	218	1286	4251	Double packer

K20R35	2642787	7074735	Diamond HQ	43	45	A	133	2251	2368	Double packer
				67	69	A	137	2260	2377	Double packer
				86	88	A	161	2836	2800	Double packer
				124	126	A	171	2926	3406	Double packer
				178	180	A	187	2607.5	4278.5	Double packer
				277	279	C	204	2198	3808.5	Double packer
				361	363	C	266.5	708	4893	Double packer
				393	411	C	273	781	4814	Double packer
				205	217	B	196.5	2253	3596	Airlift
K21D38	2641814	7067547	Diamond HQ	175	177	A	155	1490	3102	Double packer
				202	204	A	155.5	1629	3006	Double packer
				295	430	C	176.6	1758.33	3676	Simple packer
				395	407	C	229	1426	4911	Airlift
K22R39	2646323	7080044	Diamond HQ	350	424	C*	253	1126	4365	Simple packer
				385	403	C	271	1140	4650	Airlift
K23D40	2645574	7083439	Diamond HQ	288	322	C	254	1011.5	4601	Simple packer
				350	360	C	213	893	4150	Simple packer
				360	390	C*	210	922.5	4116.5	Simple packer
				409	420	D	228	1053.5	3817	Simple packer
				436	445	D	243	944	4401	Simple packer
				461	470.5	D	240	947.5	4456	Simple packer
				485	496	D	241	962	4478	Simple packer
				521	530.5	D	229	901	4116.5	Simple packer
				538	550	D	235	937.5	4282	Simple packer
				566	575.5	D	229	917.5	4233.5	Simple packer
				587	601	D	224	911	4146.5	Simple packer
				602	610	D	209	907.5	3893.5	Simple packer
				371.96	383.76	C	212	982.5	4280.5	Airlift

K24D41	2646495	7068815	Diamond HQ	166	175	A	271	895	6259	Simple packer
				191	200	A	266	941.5	6762.5	Simple packer
				215	226	B	309.5	1165.5	6750.5	Simple packer
				242	250	B	348	1170.5	6803	Simple packer
				265	277	B	346	710.5	5738	Simple packer
				289	300	C	278.5	718	4864	Simple packer
				315	325	C	269	680	4884.5	Simple packer
				341	350	C	260.5	606.5	4844.5	Simple packer
				379	391	C	273	654	4835.5	Simple packer
				389	400	C	276	595	4801.5	Simple packer
				415	426	D	325	566	4939	Simple packer
				440	450	D	275	568.5	4718.5	Simple packer
				466	475	D	237	835	4483	Simple packer
				490	500	D	231	811.5	4496.5	Simple packer
				518	526	D	217.5	806.5	4679	Simple packer
				539	550	D	205	812	4419	Simple packer
				565	575	D	234.5	813	4610.5	Simple packer
				599	610	D**	211.5	957	4427	Simple packer
				395	410	C	385	709	5249	Airlift
K25D42 (40 to 250 m) **K25D44 (330 m to 622 m)**	2644190	7069157	Diamond HQ	65	75	A	113.5	1638	3190	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	Simple packer
				215	226	A	243.5	929.5	5773	Simple packer
				239	250	B	302.0	907.5	6197.5	Simple packer
				330	331	B	269.0	727.5	5105	Double packer
				380	381	B	280.5	739	5175	Double packer
				418	430	B*	261.5	871	4737	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	4785	Simple packer
				486	500	C	260.5	638	4707.5	Simple packer
				530	541	C	253.0	477.5	4576	Simple packer
				542	553	C	243.5	437	4504	Simple packer
				561	575	C	235.0	558.5	4393.5	Simple packer
				587	601	C	235.5	681	4646	Simple packer
				605	622	C	229.5	776	4626.5	Simple packer

Notes: 1) Easting and northing are provided in Posgar 94 / Argentina 2; 2) Where sample results are available from the primary and check laboratories, the values are averaged; 3) Samples from pumping tests are averaged for the various times.:4) *Samples not included in resource estimate due to overlapped sample intervals; 5) *Sample K25D44 418-430 included in the resource model as 418 – 424 to remove overlap. 6) Previously reported samples from 40 to 50 m in K25D42 was removed because of chemistry indicative of a non-representative sample.

JORC Table 1

SECTION 1

Sampling Techniques and Data related to Kachi drilling.

(Criteria in this section apply to all succeeding sections)

Criteria	Section 1 – Sampling Techniques and Data	

Sampling techniques	▪ Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.
	▪ Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.
	▪ Aspects of the determination of mineralisation that are Material to the Public Report.
	▪ In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.
		▪ Brine samples were taken from multiple sampling methods from diamond core and rotary drilling methods including:
		  ▪ Bottom of hole spear point during HQ diamond core drilling advance
		  ▪ Straddle and single packer device to obtain representative samples of the formation fluid by purging a volume of fluid from the isolated interval, to minimize the possibility of contamination by drilling fluid then taking the sample. Low pressure airlift tests are used as well. The fluid used for drilling is brine sourced from the drill hole and the return from drillhole passes back into the excavator dug pit, which is lined with black plastic to avoid leakage. Single packer sampling is the current standard form of sampling.
		  ▪ Installed standpipes with discrete screening intervals.
		  ▪ Bailer sampling during advance, removing significant brine volumes to draw formation fluids into the base of the drill stem.
		▪ Development of test wells and during pumping test of varying durations.
		▪ The brine sample was collected in clean plastic bottles (1 litre) and filled to the top to minimize 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.
		▪ Drill core in the hole was recovered in 1.5 m length core runs in core lexan tubes to minimize sample disturbance.
		▪ Drill core was undertaken to obtain representative samples of the sediments that host brine, being collected and stored in Lexan Tubes, in order to collect samples that are as little disturbed as possible.

Drilling techniques	▪ Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	▪ Diamond drilling with an internal (triple) tube was used for drilling. The drilling produced cores with variable core recovery, associated with unconsolidated material, in particularly sandy intervals. Recovery of these more friable sediments is more difficult with diamond drilling, as this material can be washed from the core barrel during drilling. ▪ Rotary drilling has used 8.5" or 10" tricone bits and has produced drill chips, which have been logged and holes geophysically logged. ▪ Brine has been used as drilling fluid for lubrication during drilling, for mixing of additives and muds.
Drill sample recovery	▪ Method of recording and assessing core and chip	▪ Diamond drill core was recovered in 1.5 – 3m length intervals in the drilling triple (split) tubes. Appropriate additives were

	sample recoveries and results assessed. ▪ Measures taken to maximise sample recovery and ensure representative nature of the samples. ▪ 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.	used for hole stability to maximize core recovery. The core recovered from each run was measured and compared to the length of each run to calculate the recovery. Chip samples are collected for each metre drilled and stored in segmented plastic boxes for rotary drill holes. ▪ Brine samples were collected at discrete depths during the drilling using a double packer over variable intervals dependent on calliper logs at interval between 1 - 6 m intervals (to isolate intervals of the sediments and obtain samples from airlifting brine from the sediment interval isolated between the packers) and single packer configurations typically with 10 m intervals open at the base of the hole. This equipment is from Geopro, a reputable international supplier. ▪ Additives and muds are used to maintain hole stability and minimize sample washing away from the triple tube. ▪ As the brine (mineralisation) samples are taken from inflows of the brine into the hole (and not from the drill core – which has variable recovery) they are largely independent of the quality (recovery) of the core samples. However, the permeability of the lithologies where samples are taken is related to the rate and potentially lithium grade of brine inflows.
Logging	▪ 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. ▪ Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. ▪ The total length and percentage of the relevant intersections logged.	▪ Sand, clay, silt, and minor occurrences of ignimbrite were recovered in a triple tube diamond core drill tube, or as chip samples from rotary drill holes, and examined for geologic logging by a geologist and a photo taken for reference. ▪ 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. ▪ Logging is both qualitative and quantitative in nature. The relative proportions of different lithologies which have a direct bearing on the overall porosity, contained and potentially extractable brine are noted, as are more qualitative characteristics such as the sedimentary facies and their relationships. Cores are photographed for reference, prior to storage.
Sub-sampling techniques and sample preparation	▪ If core, whether cut or sawn and whether quarter, half or all core taken. ▪ If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. ▪ For all sample types, the nature, quality and appropriateness of the sample preparation technique. ▪ Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. ▪ Measures taken to ensure that the sampling is representative of the in-situ material collected,	▪ Brine samples were collected by inflatable packer, bailer and spear sampling methods, over a variable interval. Low pressure airlift tests are used as well to purge test interval and gauge potential yields (brine flows). Samples have also been collected during development of piezometers and test wells and during pumping tests of variable durations. ▪ The brine sample was collected in one-litre sample bottles, rinsed and filled with brine. Each bottle was taped and marked with the sample number. Duplicates were taken and submitted with standards as part of the QA/QC protocols.

	including for instance results for field duplicate/second-half sampling. ▪ Whether sample sizes are appropriate to the grain size of the material being sampled.	
Quality of assay data and laboratory tests	▪ The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. ▪ 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. ▪ 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.	▪ Analytical laboratory services are currently split between Alex Stewart International Argentina Jujuy, Argentina, and SGS laboratory in Buenos Aires has also been used for both primary and check samples. They also analysed blind control samples and duplicates in the analysis chain. The Alex Stewart laboratory and the SGS laboratory are ISO 9001 and ISO 14001 certified and are specialized in the chemical analysis of brines and inorganic salts, with experience in this field. This includes the oversight of the experienced Alex Stewart Argentina S.A. laboratory in Mendoza, Argentina, which has been operating for a considerable period. ▪ The quality control and analytical procedures used at the Alex Stewart 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. ▪ QA/QC samples include field duplicates, standards and blank samples.
Verification of sampling and assaying	▪ The verification of significant intersections by either independent or alternative company personnel. ▪ The use of twinned holes. ▪ Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. ▪ Discuss any adjustment to assay data.	▪ Field duplicates, standards and blanks will be used to monitor potential contamination of samples and the repeatability of analyses. Accuracy, the closeness of measurements to the "true" or accepted value, has been monitored by the insertion of standards, or reference samples, and by check analysis at an independent (or umpire) laboratory. ▪ Duplicate samples in the analysis chain were submitted to Alex Stewart or SGS laboratories as unique samples (blind duplicates) during the process. ▪ Stable blank samples (distilled water) were used to evaluate potential sample contamination and will be inserted in future to measure any potential cross contamination. ▪ Samples were analysed for conductivity using a hand-held Hanna pH/EC multiprobe on site, to collect field parameters. ▪ Regular calibration of the field equipment using standards and buffers is being undertaken.
Location of data points	▪ Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. ▪ Specification of the grid system used. ▪ Quality and adequacy of	▪ The diamond drill hole sample sites and rotary drill hole sites were located with a hand-held GPS and later located by a surveyor, with the majority of hole collars defined by the surveyor. ▪ The properties are located at the junction of the Argentine POSGAR grid system Zone 2 and Zone 3 (within UTM 19) and in WGS84 Zone 19 south. The Project is using Zone 2 as the reference zone, as the critical infrastructure is located on the edge of Zone 2.

	topographic control.	
Data spacing and distribution	▪ Data spacing for reporting of Exploration Results. ▪ 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. ▪ Whether sample compositing has been applied.	▪ 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. ▪ 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 different sampling techniques. The average distance between samples varies statistically based on duplicity. ▪ Compositing has been applied to porosity data obtained from the BMR geophysical tool, as data is collected at closer than 10 cm intervals, providing extensive data, particularly compared to the available assay data.
Orientation of data in relation to geological structure	▪ Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. ▪ 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.	▪ The saltlake (salar) deposits that contain lithium-bearing brines generally have horizontal to sub-horizontal beds and lenses that contain sand, gravel, salt, silt and clay. The vertical diamond drill and rotary holes provide the best understanding of the stratigraphy and the nature of the sub-surface brine bearing aquifers. ▪ Geological structures are important for the formation of salar basins, but not as a host to brine mineralization.
Sample security	▪ The measures taken to ensure sample security.	▪ Samples were transported to the Alex Stewart/Norlab SA 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. ▪ The samples were moved from the drillhole sample site to secure storage at the camp on a daily basis. All brine sample bottles sent to the laboratory are marked with a unique label.
Review (and Audit)	▪ The results of any audits or reviews of sampling techniques and data.	▪ An audit of the database has been conducted by the CP and another Senior Consultant at different times during the Project and prior to finalization of the samples to be used in the resource estimate. The CP has been onsite periodically during the sampling program. The review included drilling practice, geological logging, sampling methodologies for brine quality analysis and, physical property testing from drill core, QA/QC control measures and data management. The practices being undertaken were ascertained to be appropriate, with constant review of the database by independent personnel recommended. Additionally, an external review of field sampling procedures and data collection was undertaken by Geoff Baldwin in April 2023. An external peer review of the November 2023 resource update was performed by John Houston.

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	▪ 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. ▪ The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	▪ The Kachi Lithium Brine Project 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, at an elevation of approximately 3,000 m asl. ▪ The Project comprises approximately 104,375.6 Ha in fifty-three (53) mineral leases (minas), including one lease (Morena 10 – 2712.9 Ha) with a pending application. Details of the properties are provided in **Table 7- Properties Details**. ▪ The tenements are believed to be in good standing, with statutory payments completed to relevant government departments.
Exploration by other parties	▪ Acknowledgment and appraisal of exploration by other Parties.	▪ Marifil Mines Ltd conducted sparse surface pit sampling of groundwater at depths less than 1m in 2009. ▪ Samples were taken from each hole and analysed at Alex Stewart laboratories in Mendoza Argentina. ▪ Results were reported in an NI 43-101 report by J. Ebisch in December 2009 for Marifil Mines Ltd. ▪ NRG Metals Inc commenced exploration in adjacent leases under option. Two diamond drill holes intersected lithium-bearing brines. The initial drillhole intersected brines from 172-198m and below with best results to date of 15m at 229 mg/L Lithium, reported in December 2017. The second hole, drilled to 400 metres in mid-2018, became blocked at 100 metres and could not be sampled. A VES ground geophysical survey was completed prior to drilling. A NI 43-101 report was released in February 2017. ▪ A 375 m deep borehole on the Luz María tenement drilled by the former owner NRG Metals, which published the lithium concentration data, as between 141 and 144 mg/L lithium. 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. ▪ No other exploration results were able to be located.
Geology	▪ Deposit type, geological setting and style of mineralisation.	▪ The known sediments within the salar consist of a thin (several metre thick) salt/halite surficial layer, with interbedded clay, sand and silt horizons, accumulated in the salar from terrestrial sedimentation and evaporation of brines. ▪ Brines within the Salt Lake are formed by evapoconcentration, interpreted to be combined with warm geothermal fluids, with brines hosted within sedimentary units. ▪ Geology was recorded during the diamond drilling and from chip samples in rotary drill holes.

Drill hole Information	▪ A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: ▪ easting and northing of the drill hole collar ▪ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ▪ dip and azimuth of the hole ▪ down hole width and depth (length and interception depth) ▪ end of hole (hole length). ▪ If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	▪ Refer to Table 8 above. ▪ Lithological data was collected from the holes as they were drilled and drill cores or chip samples were retrieved. Detailed geological logging of cores is ongoing. ▪ All drill holes are vertical, (dip -90, azimuth 0 degrees). ▪ 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. ▪ Assay results are provided in a table above in the report. ▪ Drill hole information is shown in plans included. ▪ Refer to previous ASX announcements for detailed lithological descriptions (e.g., October 4, 2023; August 22, 2023; November 22, 2023.) ▪
Data aggregation methods	▪ In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. ▪ 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. ▪ The assumptions used for any reporting of metal equivalent values should be clearly stated.	▪ Assay averages have been provided where multiple sampling occurs in the same sampling interval. A considerable number of samples were sent to the two laboratories, and averages of these results were used for the resource estimation. ▪ No cutting of lithium concentrations was justified nor undertaken. ▪ Lithium samples are by nature composites of brine over intervals of metres, due to the fluid nature of brine.
Relationship between mineralisation widths and intercept lengths	▪ These relationships are particularly important in the reporting of Exploration Results. ▪ If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. ▪ If it is not known and only the	▪ Mineralisation is interpreted to be horizontally lying and drilling perpendicular to this, so intersections are considered true thicknesses Brine is likely to extend to the base of the Carachi Pamap basin, although this has yet to be confirmed by drilling. ▪ Mineralisation is continuous and sampling, despite intersecting intervals of lower grade in places within the resource has not identified volumes of brine with what are likely to be sub-economic concentrations within the resource. However, the reader is advised that a reserve

	down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	has yet to be defined for the Project.
Diagrams	▪ Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	▪ A drill hole location plan is provided showing the locations of the drill platforms (Figure 2 and Figure 3) ▪ Drill hole information is showing in plans included. ▪ Refer to October 4, 2023, August 22, 2023 and June 15, 2023 ASX announcement for recent detailed lithological descriptions.
Balanced reporting	▪ Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	▪ Brine assay results are available from 39 resource drill holes from the drilling to date, reported here as shown in Table 8. Additional information will be provided as it becomes available.
Other substantive exploration data	▪ Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	▪ There is no other substantive exploration data available regarding the Project. Additional surface geophysics is planned for the Project. A pilot plant is currently operating at the Project to assess extraction of lithium. ▪ Positive extraction and injection test results were reported in the August 16, 2023 ASX announcement. ▪ Hydrogeologic modelling has demonstrated that large scale extraction and injection wellfields are viable, and an Ore Reserve for the Project has been defined.[26]
Further work	▪ The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). ▪ Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	▪ The Company has drilled over 13,000 m of diamond and rotary drilling to date.

[26] See 19 December 2023 Lake Resources ASX Announcement - Maiden Ore Reserve Defined Lake Resources Flagship Kachi Project

Drill-hole information

Table setting out information for material drill-holes:[27]

Drill hole Information	▪ A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: ▪ easting and northing of the drill hole collar ▪ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ▪ dip and azimuth of the hole ▪ down hole width and depth (length and interception depth) ▪ end of hole (hole length). ▪ If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	▪ Refer to Table 8 above. ▪ Lithological data was collected from the holes as they were drilled and drill cores or chip samples were retrieved. Detailed geological logging of cores is ongoing. ▪ All drill holes are vertical, (dip -90, azimuth 0 degrees). ▪ 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. ▪ Assay results are provided in a table above in the report. ▪ Drill hole information is shown in plans included. ▪ Refer to previous ASX announcements for detailed lithological descriptions (e.g., October 4, 2023; August 22, 2023; November 22, 2023.)

[27] This information is the same information contained in the table in Section 2 above but set out in a separate table in accordance with ASX Listing Rule 5.7.2.

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	▪ 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. ▪ Data validation procedures used.	▪ Data was transferred directly from laboratory spreadsheets to the database. ▪ Data was checked for transcription errors when in the database, to ensure coordinates, assay values and lithological codes were correct. ▪ Data was plotted to check the spatial location and relationship to adjoining sample points. ▪ Duplicates and Standards have been used in the assay process. ▪ Brine assays and porosity test work have been analysed and compared with other publicly available information for reasonableness. ▪ BMR geophysical log data has been compared with laboratory porosity values and provides a more continuous but more conservative estimate of drainable porosity (Sy). ▪ Comparisons of original and current datasets were made to ensure data integrity.
Site visits	▪ Comment on any site visits undertaken by the Competent Person and the outcome of those visits. ▪ If no site visits have been undertaken indicate why this is the case.	▪ The Competent Person visited the site multiple times during the drilling and sampling program. ▪ Procedures have been modified throughout the project to date aimed at improving data and sample recovery, working closely with the drilling superintendent to achieve this.

Geological interpretation	▪ Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. ▪ Nature of the data used and of any assumptions made. ▪ The effect, if any, of alternative interpretations on Mineral Resource estimation. ▪ The use of geology in guiding and controlling Mineral resource estimation. ▪ The factors affecting continuity both of grade and geology	▪ There is a high level of confidence in the geological interpretation of for the Project, with the three units identified in logging and down hole geophysics. There are relatively consistent sub horizontal geological units with intercalated clastic sediments consisting of sands, sits clays and minor gravel. ▪ 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. ▪ Data used in the interpretation includes rotary and diamond drilling methods. ▪ Drilling depths and geology encountered has been used to conceptualize hydro-stratigraphy and build the model units. ▪ Sedimentary processes affect the continuity of geology with extensive lateral continuity in the salar area, and the presence of additional overlying gravels further from the salar, whereas the concentration of lithium and other elements in the brine is related to water inflows, evaporation and brine evolution in the salt lake.
Dimensions	▪ The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	▪ 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^2. ▪ 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 have been intersected in drilling from the SE of the salar. ▪ The resource is defined to a depth of 600 m below surface, with the exploration target extending beyond the areal extent of the resource, under the volcano and also between the base of the resource and the interpreted depth of the basement.

Estimation and modelling techniques	▪ The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. ▪ The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. ▪ The assumptions made regarding recovery of by-products. ▪ Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). ▪ In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. ▪ Any assumptions behind modelling of selective mining units. ▪ Any assumptions about correlation between variables. ▪ Description of how the geological interpretation was used to control the resource estimates. ▪ Discussion of basis for using or not using grade cutting or capping. ▪ The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	▪ Ordinary Kriging was applied to the composited BMR porosity date, to reduce the 200,000 individual measurements to a smaller number. The Inverse Distance Squared method was used to estimate the distribution of lithium through the resource, given the much smaller number of assays available. ▪ The resource with a 2.5 km radius was estimated in two passes with a search ellipse of 2000 and 4000 m respectively. ▪ The resource between 2.5 and 5 km of drillholes was estimated using three expanding search ellipses of 2000, 4000 and 12918 m, using ID2 to encompass all of the data. ▪ 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. ▪ 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 relatively slight. ▪ No grade cutting or capping was applied to the model. ▪ Check estimates were conducted using different estimators, with a version of the model estimated entirely with Inverse Distance Squared methodology and another with ordinary kriging and one using the Leapfrog Radial Basis Function. ▪ No assumptions were made about correlation between variables or recovery of by-products. Lithium is the value proposition of the project. ▪ 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. ▪ Model blocks are defined as 200 by 200 m blocks in an east and north direction and 10 m in the vertical direction. ▪ Extraction of brine permits limited control of selective mining and selective mining units are not considered, as the resource is relatively homogeneous. ▪ The development of the inner three-layer model and outer homogeneous layer in the alluvial gravels/fans, with essentially horizonal layers, was used to define the search ellipses to control the resource estimation. ▪ Visual comparison has been conducted of drillhole results and the block model, together with a comparison of sample statistics and the block model statistics. The result is considered to be acceptable.

Moisture	▪ Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	▪ Moisture content of the cores was not Measured with regards to consideration of density and moisture content. In brine projects the contained content of brine fluid is an integral part of the project and porosity, drainable porosity (Sy) and sediment density measurements were made. As brine will be extracted by pumping not mining moisture content (in regard to density) is not relevant for the brine resource estimation. ▪ Tonnages are estimated as metallic lithium dissolved in brine. ▪ Tonnages are then converted to a Lithium Carbonate Equivalent tonnage by multiplying by the factor of 5.32, which takes account of the presence of carbon and oxygen in Li2CO3, compared to metallic lithium.
Cut-off parameters	▪ The basis of the adopted cut-off grade(s) or quality parameters applied.	▪ A 100 mg/L external cut-off grade has been applied to the resource, which is large and uniform.
Mining factors or assumptions	▪ Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	▪ The resource has been quoted in terms of brine volume, concentration of dissolved elements, contained lithium and lithium carbonate. ▪ No mining or recovery factors have been applied (although the use of the specific yield = drainable porosity is used to reflect the reasonable prospects for economic extraction with the proposed mining = pumping methodology). ▪ 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 will be estimated in the groundwater model simulating brine extraction. ▪ The conceptual mining method is recovering brine from the salt lake via a network of wells, the established practice on existing lithium brine projects. ▪ Detailed hydrologic studies of the lake are being undertaken (water balance, groundwater modelling) to define the natural recharge to the basin, the extractable resources and potential extraction rates

Metallurgical factors or assumptions	▪ The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	▪ Lake resources has provided bulk metallurgical samples to a number of technology providers to extract lithium with Direct Lithium Extraction technologies. From this initial test work Lake Resources selected Lilac Solutions as the process company to carry out operation of an onsite pilot plant. This plant is currently on site and continues operating, subsequent to the extended trial production previously announced by the company. ▪ Lithium will be produced via a selective extraction technology developed by Lilac Solutions, designed to produce high purity lithium product. ▪ It is noted that the Lilac Process and Direct Lithium Extraction are relatively new processes and further development of these processes is expected as they are applied at commercial scale to this and other projects. ▪
Environmental factors or assumptions	▪ Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	▪ Impacts of a lithium operation at the Kachi project would include: surface disturbance from the creation of extraction/processing facilities and associated infrastructure, accumulation of various salt tailings impoundments and extraction from brine and freshwater aquifers regionally. ▪ The project has conducted pumping and reinjection testing to evaluate flow rates, with the intention of reinjecting spent. As a result of inection of spent brine changes to the hydrogeological system over the Life-of-Mine are considered insignificant.

Bulk density	▪ Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. ▪ 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. ▪ Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	▪ Density measurements were taken as part of the drill core assessment. This included determining dry density and particle density as well as field measurements of brine density. ▪ 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. ▪ No bulk density was applied to the estimates because resources are defined by volume, rather than by tonnage.

Classification	▪ The basis for the classification of the Mineral Resources into varying confidence categories. ▪ Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). ▪ Whether the result appropriately reflects the Competent Person's view of the deposit.	▪ The resource has been classified into resource categories based on confidence in the estimation. ▪ The Measured resource, within a 2.5 km radius of drillholes, reflects the predominance of drilling with a spacing of approximately 1.5 km between holes. Porosity measurements have been made in these diamond and rotary holes with the BMR porosity tool, providing over 200,000 individual measurements. Any measurements that were related to washouts in holes were removed and porosity data was composited to 10 m data points. Physical porosity samples were also taken and compared with BMR porosity data, with samples from drill cores well constrained within the holes. These samples have an overall higher average porosity, but sampling was less systematic than the BMR porosity data, which was used in preference, with the laboratory data as a check on this data source. ▪ 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 have lead 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. ▪ 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 has been classified more conservatively as Inferred resources than the suggestion of Houston et. Al., 2011 regarding the classification of resources. It is expected that with further drilling much of the Inferred resources can be converted to Indicated resources although this is not guaranteed.
Audits or reviews	▪ The results of any audits or reviews of Mineral Resource estimates.	▪ Estimation of the Mineral Resource was supervised by the Competent Person. An audit has not been carried out, although discussions about different scenarios and search criteria was held and check estimates reviewed by the CP.

Discussion of relative accuracy/ confidence	▪ Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. ▪ The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. ▪ These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	▪ An additional estimate of the resource was completed using an Inverse Distance Squared estimate and a Nearest Neighbour estimate. The comparison of the results with the ordinary kriging/Inverse Distance estimate suggests the latter is a more conservative estimate and is considered to be acceptable. ▪ 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. ▪ *References:* ▪ *Houston, J., Butcher, A., Ehren, P., Evans, K., and Godfrey, L. The Evaluation of Brine Prospects and the Requirement for Modifications to Filing Standards. Economic Geology. V 106.* ▪ *AMEC Guidelines for Resource and Reserve Estimation for Brines*

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ABOUT LAKE RESOURCES NL (ASX:LKE OTC:LLKKF)

Lake Resources NL (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.

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