11 January 2023

Kachi M&I resource doubled to 2.2 million tonnes Lithium Carbonate Equivalent with 3.1 million tonnes Inferred resource

Clean lithium developer Lake Resources NL (ASX: LKE; OTC: LLKKF) ("LAKE" or "the Company") is pleased to provide an updated resource for the Kachi lithium brine project in Catamarca Province, Argentina. This updated resource is based on drilling activities that have been underway throughout the year, with the company having multiple drilling rigs on site to expedite drilling activities and related studies for the project. The company is currently in the process of installing test production wells for pumping and reinjection aquifer testing as part of the project DFS.

Highlights

- Additional drilling has upgraded and increased confidence in the resource in the central area of the salar, with Measured and Indicated (M&I) resources of 2.2 Mt of lithium carbonate equivalent (LCE) defined, to a depth of 400 m over 81 km^2.
- Surrounding the M&I resources are Inferred resources of 3.1 Mt LCE defined over 117 km^2. The resource remains open to a depth of approximately 700 m and open laterally, where drilling is underway to better define the resource extent.
- The lithium grade of the Measured resource (0-400 m) across the salar is 212 mg/L lithium, the Indicated resource immediately southeast is 178 mg/l lithium, and the surrounding Inferred resource (0-400 m) has a concentration of 198 mg/L lithium.
- Properties are 100% owned by Kachi Lithium PTY Ltd, in which Lake has a 90% interest and Lilac has a 10% interest.
- Additional assays are awaited to expand the area of high confidence (M&I) resources.

<u>Project background</u>

The maiden resource estimate at Kachi was undertaken in 2018 as part of the project Pre-feasibility Study. That estimate identified an Indicated Resource of 1.05 Mt of LCE over an area of 61 km^2, surrounded by an Inferred resource of 3.19 Mt over an area of 114 km^2. The resource was defined from 50 m to an average of 334 m depth, with the upper 50 m excluded from the resource due to uncertainties about lithium concentrations over that interval at the time of the estimate.

With further diamond and rotary drilling and geophysical logging of wells the confidence in the geological and resource models has increased and the resource classification has been upgraded to reflect this. Drilling has been conducted to 400 m depth across the Measured and Indicated resource area. Geophysics was previously undertaken to define the base of the unconsolidated sediments hosting brine. Additional geophysics will shortly commence to define extensions of the brine body and to define in more detail the geometry of the contacts between the brine and areas of brackish water, to support the development of pumping simulations and a reserve model for the project.

Location

The Kachi Lithium Brine Project is located in the Puna region of north-western Argentina, in the Province of Catamarca. It is approximately 520 km northwest of the capital of Catamarca Province, San Fernando de la Valle de Catamarca. It is 22 km west of the town of El Peñon, and 50 km south of Antofagasta de Sierra, which is the regional administrative centre (Figure 1). In addition, it is at an altitude of approximately 3,000 metres above sea level, a major advantage for the project.

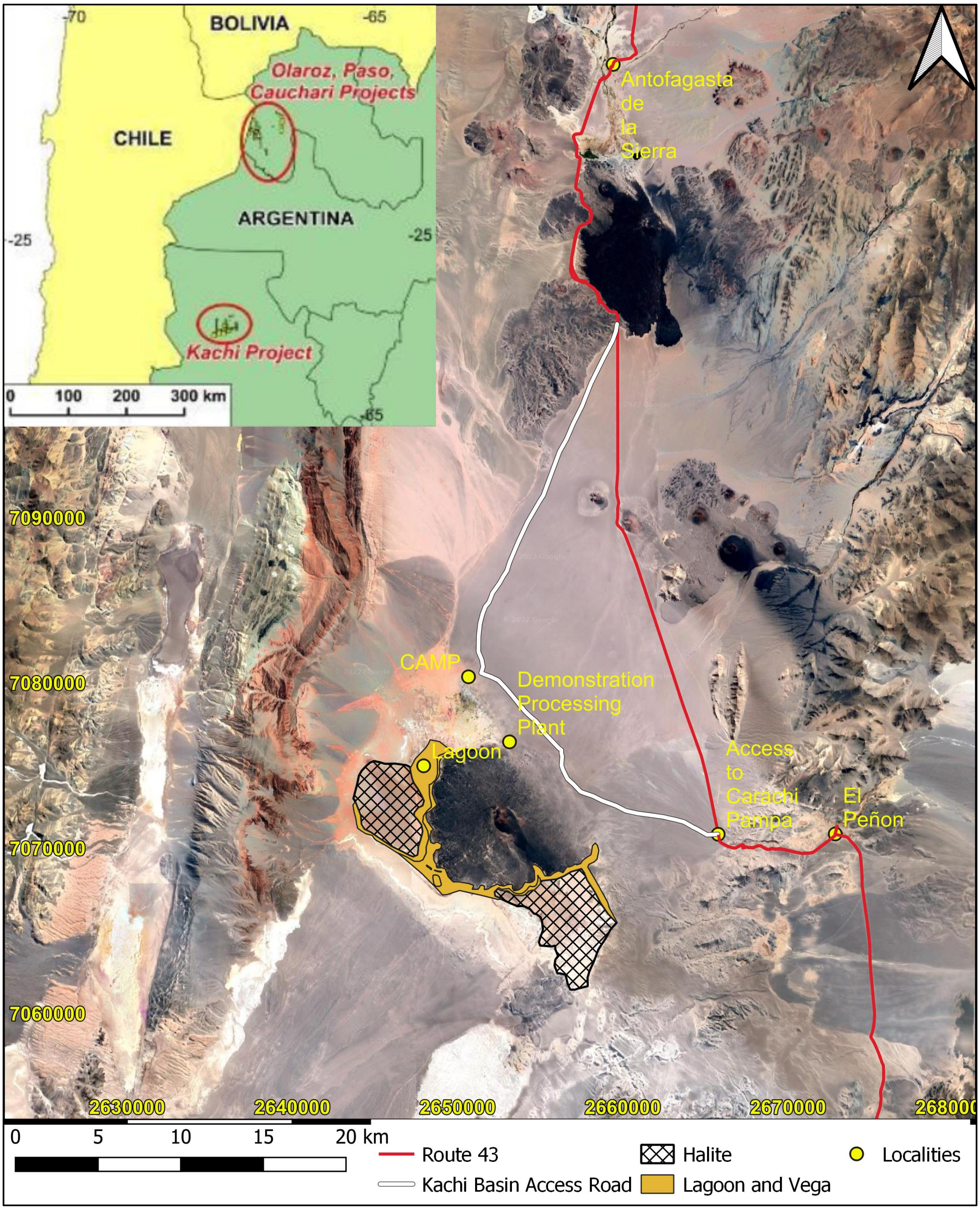

Figure 1: Kachi project Location in Western Catamarca province

Work program

Drilling of 20 new diamond and rotary drill holes has been completed since the maiden resource. All holes have been geophysically logged to provide additional information, except where the condition of holes prevented this. Holes have been drilled with a spacing of 1.5 km, to provide a high level of confidence in correlation of the geology between holes.

Samples from the diamond and rotary drill holes were sent to external laboratories for porosity and chemical analysis. This information and downhole geophysics were used to revise the geological model for the resource estimate update. The geological model, sample results, and soon to be initiated pumping tests will be used to develop a groundwater model for the project, to define the project reserve.

Property holding

Lake Resources holds 52 properties (Minas) in the Basin covering the surface of the salt lake and surrounds (Figure 2). The Mining Concessions are summarised in Table 4 below (following the text), with the property names, file numbers and details of the approvals related to each of the concessions.

All properties are granted to Morena Del Valle Minerals under a Mining titles (Minas). The only property that is not yet within this category is Morena 10 and as of writing this report, this approval of concession is still in progress.

Additionally, a selection of these properties is in the process of detailed resurveying to provide a level of precision of the boundary locations, however any changes will be minor. Of these, Kachi Inca I and Morena 12 has been completed with details presented. Submission is pending for Kachi Inca VI, Pampa III and Debbie I.

All information regarding the legal status of the properties was provided by the members of the Legal Department Morena del Valle Minerals (MVM), the local subsidiary of Lake Resources in the province of Catamarca. The status of properties has not been independently verified by the CP, who takes no responsibility for the legal status of the properties.

Kachi project geology

The Kachi salt lake is located within a large hinterland drainage basin of approximating 6,800 km^2. The basin is bounded to the east and west by north south trending mountain ranges that have been raised by reverse faults that expose a basement sequence of rocks that rise to an elevation of 5100m. The ranges are formed from Ordovician Falda Cienaga Formation, green-grey turbidites in outcrop; Permian Pataquia Formation, red-brown unit in satellite imagery; and beige-green Eocene aged Geste Formation (50-100 m thick).

The Kachi salt lake is rhomboid in shape with a NW-SE long axis with surficial halite and surrounding lagoon and Vega areas covering an area of approximately 53 km^2. A Pliocene basaltic volcano penetrates basin sediments to the east of the salt lake, with flow and air fall basalts creating a veneer over the lake sediments, covering an area of approximately 55km^2. The basaltic shield volcano has a NW-SE striking fissure vent that is interpreted to be underlain by a NW-SE aligned intrusive dyke or plug of much smaller dimensions than the basalt cone has at surface. This orientation in combination with N-S trending regional reverse faulting has provided an extensional tectonic regime, allowing accumulation of extensive infill sediments in the salt lake basin.

To the south of the salt lake, pale grey Pliocene, Pleistocene and Holocene welded ignimbrites and unconsolidated pyroclastic sediments of the Cerro Blanco Pyroclastic Complex are interpreted to cover brine bearing Kachi basin sediments. Ignimbrites are also exposed east of the basaltic cone and form deformed terraces heavily influenced by structural complexity. To the northeast of the Kachi project the Carachi Pampa basin is covered by extensive SSW dipping, faulted, and eroded sand and gravel terraces.

Exploration activities since 2017 have consisted of passive seismic and Vertical Electrical Sounding geophysics and drilling. An extensive TEM (Transient Electromagnetic) geophysical survey is to commence at the project in the next weeks.

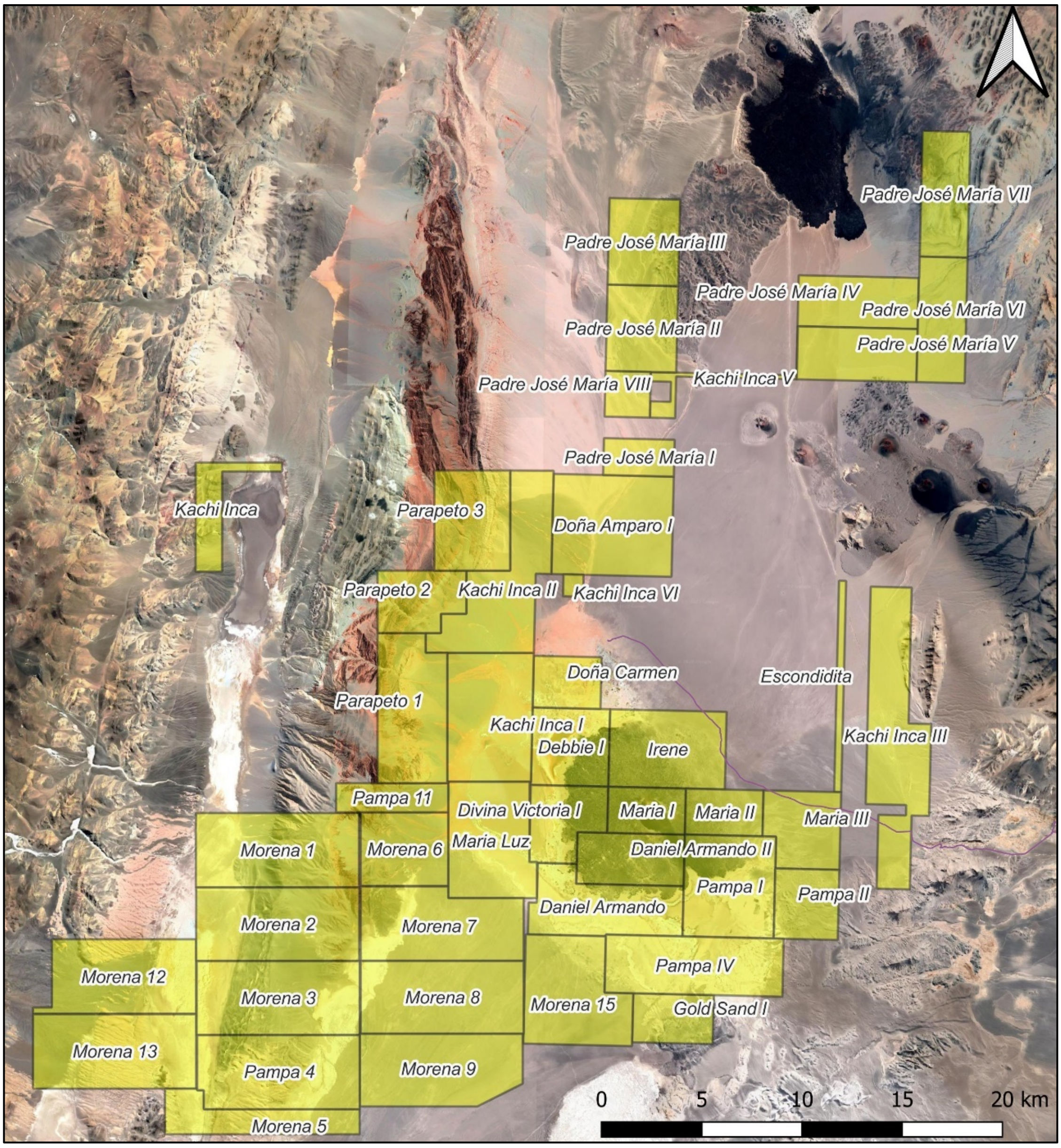

Figure 2: Kachi project Location in Western Catamarca province

Passive Seismic Survey

Basin geometry delineation was undertaken using a passive seismic geophysical technique (Moho Tromino) with data processing undertaken by Resource Potentials Limited of Perth, collecting 500+ stations across the basin. This proved to be effective in developing an understanding of basin geometry, with a strong seismic velocity contrast detected between unconsolidated and weakly consolidated basin sediments hosting the brine and the underlying high seismic velocity harder volcanics and other facies. This formed a basis for selecting drill hole sites and provided a foundation for conceptualisation of the basin.

Figure 3 shows seismic profiles of the Carachi Pampa salar. The distinct reflectors identified in the survey correlate well with dense lithologies such as ignimbrite units within the predominantly unconsolidated sandy sediments, and probable basement rocks intersected at 300 m depth in K06D08 in the south east of the project area.

Drilling at site K06 provided a correlation with the seismic survey and indicated the presence of unconsolidated sediments to a depth in excess of 500 m under gravel cover, away from the areas of surface salt crust. The seismic information suggests the basin is 700-800 m deep in the western area.

Since the exploration drilling conducted for the 2018 maiden Resource estimation, more extensive drilling undertaken to 400 m depth and down hole geophysics have better defined the basin geology. Drilling allowed development of a salar basin model, with three separate geological and hydrogeological (hydrostratigraphic) units to 400 m depth as follows (Figure 4):

- Unit A – Intercalated sand, silts and clays. High frequency of thin clay bands. Up to 200m thickness.
- Unit B - Higher sand proportion. Interpreted as higher permeability zone, lower natural gamma ray response, located below prominent gamma peak.
- Unit C – Similar to Unit A with higher frequency of clay bands.
- Unit D – Undefined unconsolidated sediment characteristics beneath Unit C, between 400 m and the base of the salar, as defined by geophysics. The characteristics of this unit have not been defined, with Unit C likely to continue below 400 m, as this was the maximum depth of drilling.

Geophysical Logging

Drill holes were geophysical logged with a number of geophysical tools (natural gamma, resistivity, conductivity, borehole magnetic resonance – Figure 5) to maximise collection of data from the drilling. Borehole Magnetic Resonance (**BMR**) is a geophysical tool developed by the oil industry to measure porosity and permeability in-situ in wells, to assist reservoir studies.

The BMR tool used for the drilling campaign is purpose built for logging of exploration diameter drill holes and was designed and built in Australia to operate in highly saline environments like salars. The tools are factory calibrated in Australia and maintained regularly by the service provider. The data acquisition and processing methodology gives information on the total porosity, drainable porosity (specific yield), specific retention and provides a computation of permeability and hydraulic conductivity with a vertical resolution varying from 5-15 cm, providing much more information than individual core samples analysed for porosity with a spacing of greater than 10 metres. Drill hole collars are presented in Table 5.

Porosity cores were analysed in the Geosystems Analysis (GSA) laboratory in the USA. Porosity values from the laboratory sampling were compared to the BMR porosity logs. Some differences are noted, with the ranges of porosity values for the different hydrostratigraphic units considered comparable.

Salar sediments show rapid vertical variability, on a scale of metres to 10's of metres, due to variations in the salar depositional environment. This results in vertical and lateral changes in drainable porosity. The Specific yield measurements from the BMR are often lower than corresponding laboratory measurements, as cores may become disturbed during transportation to the laboratory (see further correlation commentary below). The BMR drainable porosity values are believed to be more conservative than laboratory measurements.

Figure 5 below shows the Geophysical Log for K15R31 and the general concept of delineating the stratigraphic column into the 3 major components, Units A through C. Spectral gamma peaks likely indicate volcanic tuff horizons, possibly reworked, were keys to correlation between drill holes along with textural differences observed (Figure 6).

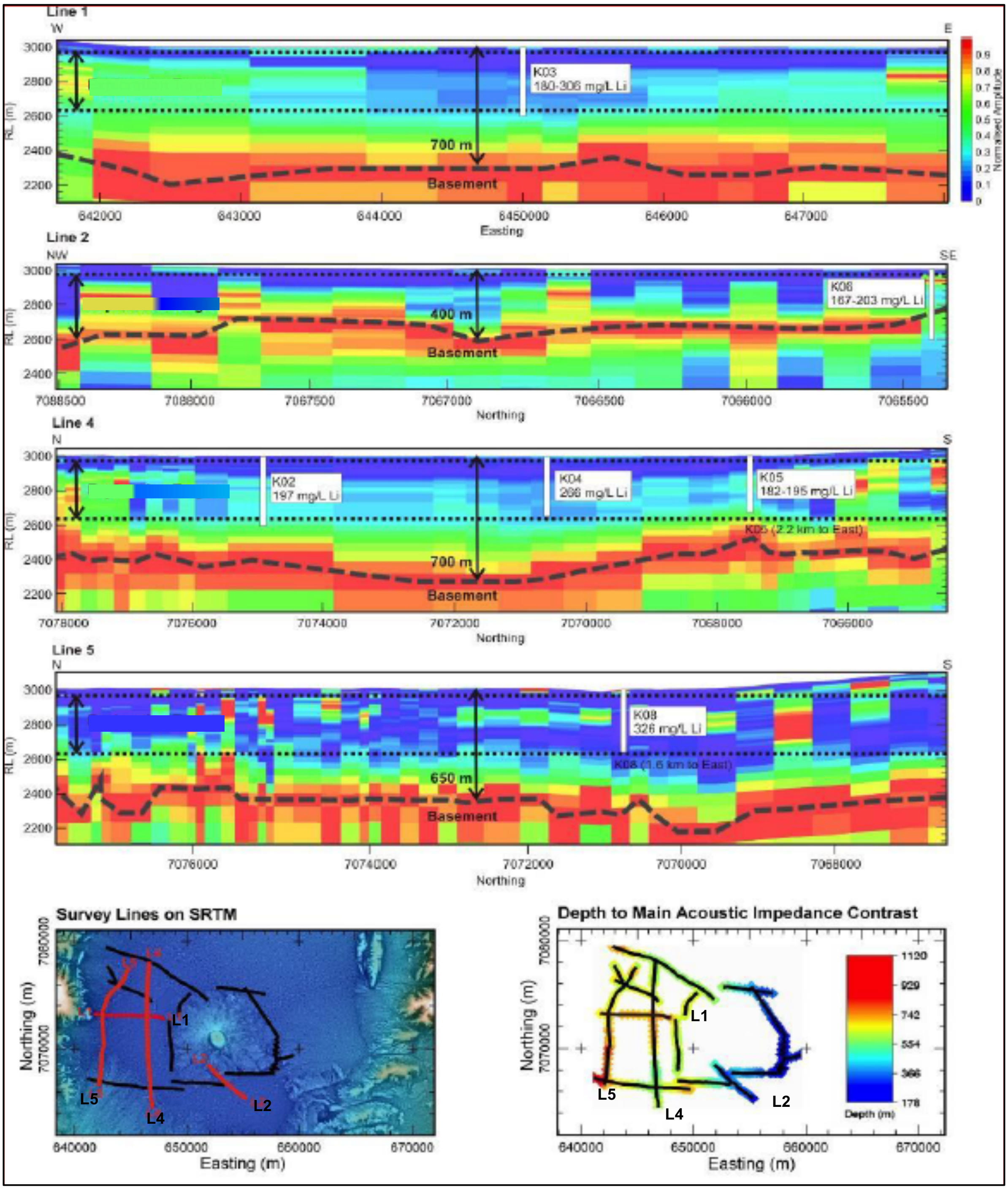

Figure 3: Seismic profiles showing location and depth to basement together with the depths used in the exploration target calculation (red band is the basement reflector)

Brine sampling

Kachi is a mixed salar predominantly consisting of clastic sediments, with a very limited surficial salt layer (maximum several metres). The sediments are predominantly intercalated sands, silts and clays, 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 (Unit B) and higher permeability, with the brine grades generally comparable between geological units based on the diamond drill sampling. Despite small scale variability in the sedimentation the three hydrostratigraphic units show relatively consistent porosity characteristics, based on the geophysical logging and laboratory porosity analyses.

Brine sampling and quality control

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

- Spearpoint
- Bailer
- Packer
- Installed piezometer screens

Packer sampling from diamond and rotary drill holes and sampling from installed piezometers have been the principal methods used to acquire geochemical brine samples.

Samples were taken in triplicate, with primary sample analyses split between two analytical laboratories. In the earlier days of the project the Alex Stuart laboratory was used as the primary laboratory, this was later changed to the SGS laboratory. Samples were analysed at the SGS laboratory in Salta (45%), Argentina, and the secondary laboratory the Alex Stuart laboratory in Jujuy, Argentina (55%). Samples were analysed with ICP equipment for cations and anions were analysed with a number of standard techniques. Sample results (averaged across the two laboratories) are provided in Table 6 below the text.

Bulk samples were taken from an early borehole (K03R12) and used as a standard to check the performance of the laboratories, submitted for analysis along with primary samples. The brine standard was analysed by both external laboratories, as part of a "round robin" check on performance of the laboratories. The SGS and Alex Stewart laboratories are ISO 9001 accredited.

Porosity sample quality control

Cores have been collected systematically through these holes, with samples collected in transparent polycarbonate tubes. These tubes were retrieved from the core barrel and stored in core trays prior to the laboratory sample being cut from the base of the tube, with 30 cm core subsamples sent to the Geosystems Analysis (**GSA**) laboratory in the USA. The GSA laboratory has extensive experience analysing salar cores, working on salar projects.

GSA uses the Rapid Brine Release method (Yao et al., 2018) to measure drainable porosity and total porosity. The Rapid Brine Release (**RBR**) method is based on the moisture retention characteristics (**MRC**) method for direct measurement of total porosity (Pt, MOSA Part 4 Ch. 2, 2.3.2.1), specific retention (Sr, MOSA Part 4 Ch3, 3.3.3.5), and specific yield (Sy, Cassel and Nielson, 1986). A simplified Tempe cell design (Modified ASTM D6836-16) was used to test the core samples. Brine release was measured at 120 mbar and 330 mbar of pressure for reference (Nwankwor et al., 1984, Cassel and Nielsen, 1986). Bulk density, particle size analyses and specific gravity are also determined on selected core samples.

For quality control paired samples, representative of the range in lithology types, were selected and tested using other laboratory techniques also used to measure drainable porosity. These are the Relative Brine Release Capacity (RBRC, Stormont et. al., 2011) method of the DB Stephens Laboratory and the Centrifuge Moisture Equivalent of Soils (Centrifuge, ASTM D 6836-16) method by Core Laboratories (Houston, Texas). These methods provide an estimate of variability in the definition of the drainable porosity across different laboratory methods.

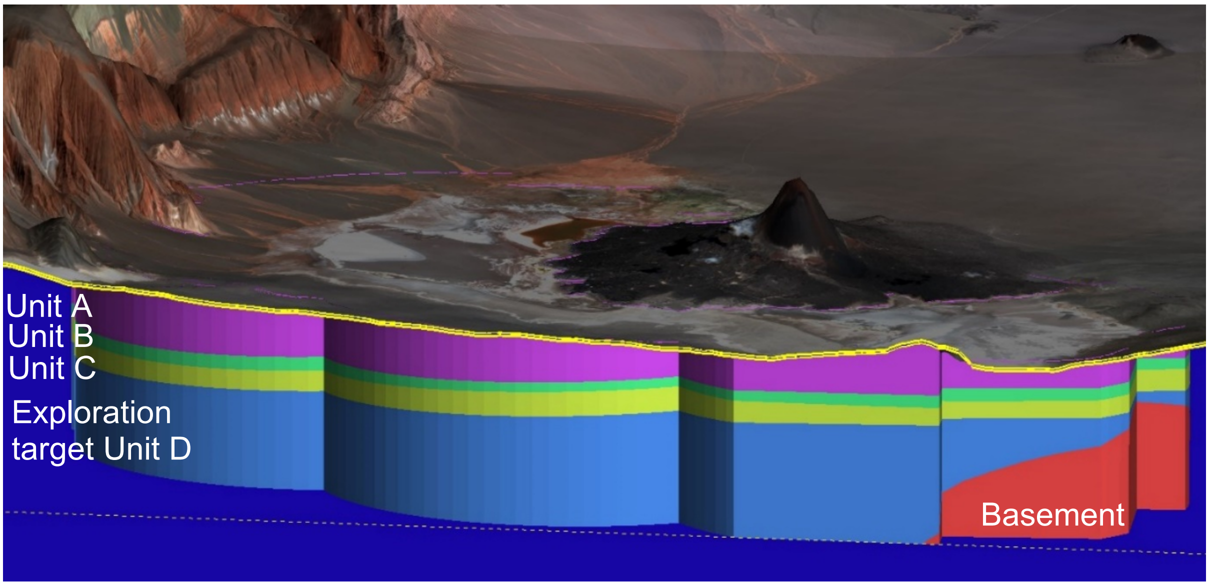

Figure 4: Geological cross section looking north through the project area, shown with 4 times vertical exaggeration

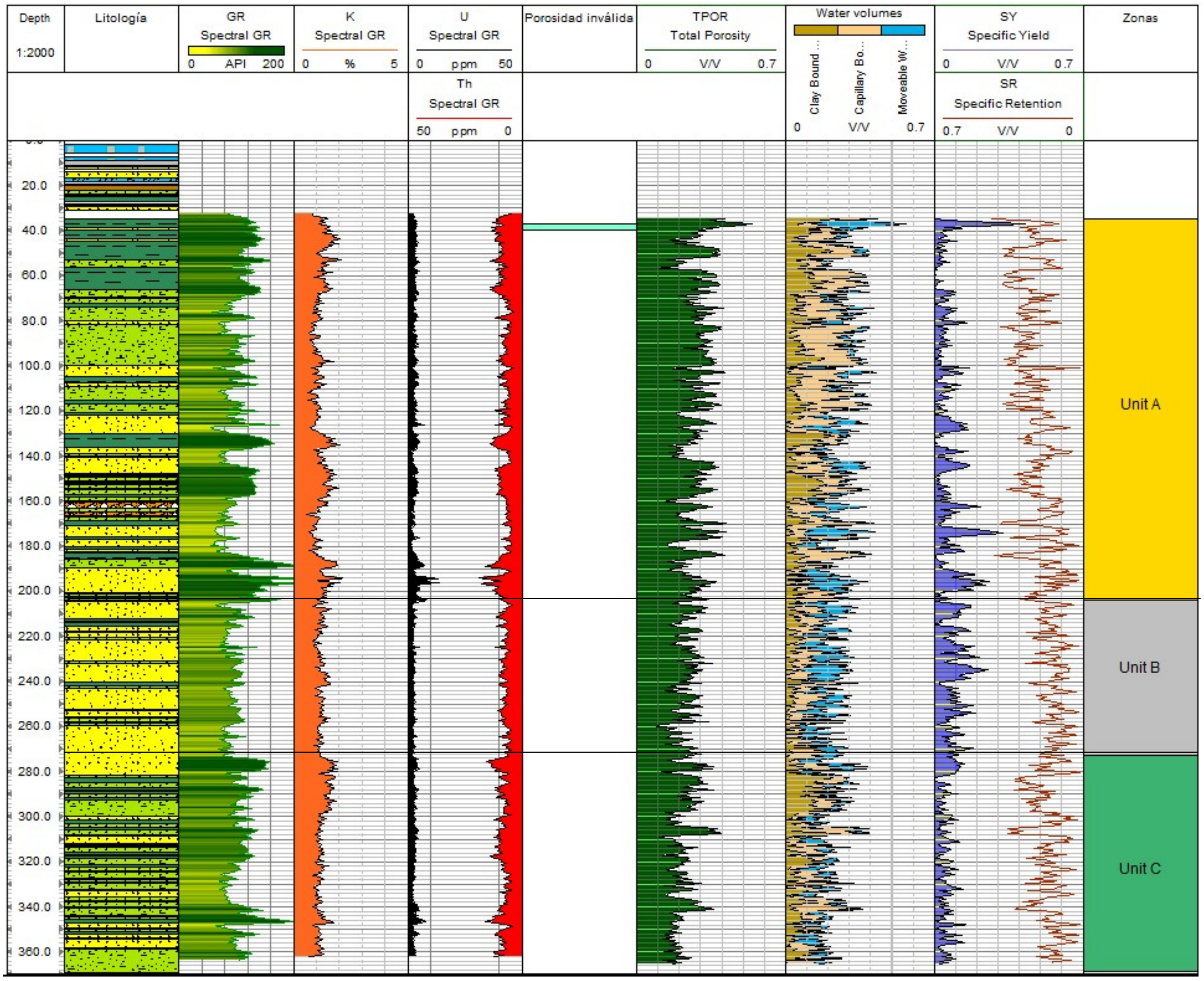

Figure 5: Geophysical log of hole K15R31, in the centre of the salar, showing Units A to C

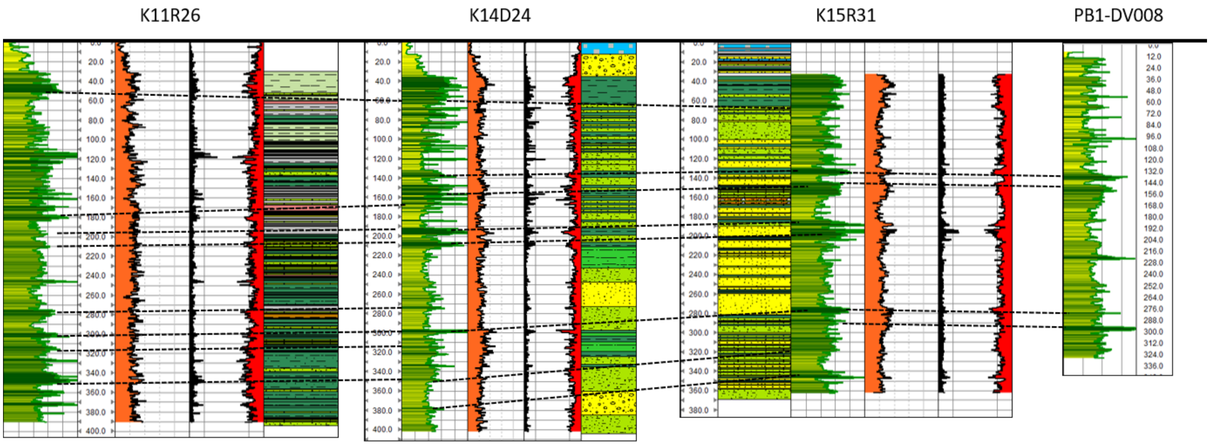

Figure 6: Geological Correlation Between Drill Holes through the centre of the salar

Resource estimate inputs

Brine samples were taken with an average vertical spacing of 28 m over the number of drill holes to the moment of reporting. The location of the holes is shown in Figures 7 and 8. Note that drill holes are labelled by platform and sequential hole number (i.e. in the format KxxDyy). Individual brine packer sample and other chemistry results have been used as inputs for the resource estimation. This is considered an acceptable approach in this situation, given the level of information available in the salar, the drill spacing, lithological and brine concentration continuity between drill holes. Brine samples were not composited, given the paucity of data and spacing between individual samples.

Drainable porosity data collected from BMR downhole geophysical logging was composited to a 10 m scale, to provide information at a scale more consistent with that of brine samples, and to remove the small-scale changes in porosity that are a feature of the sediments. The composite results were compared with the original data, to ensure it was adequately respected, and with the resource estimation blocks coincident with the drill hole data.

The thickness of the individual lithological units was defined by the geophysical logs into Units A, B and C and supported by observations from the logging of cores and cuttings.

Mineral Resources

Estimation of a brine resource require 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, defined by drilling
- 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 2022 Measured, Indicated and Inferred resource covers 186.7 km^2 (Figure 7), similar to the 2018 Resource area (175 km^2) which had indicated and inferred status. Brine saturated sediments are believed to extend beneath the shield volcano east of the salar. Brine is also expected to continue at depth beneath 400 m, but to date drilling has been carried out in these areas to support resource estimation there.

The resource estimate is limited by the depth of drilling, the area of influence applied around drill holes, the presence of the volcano in the east of the area and the presence of the mountain range in the east. At depth the passive seismic geophysical survey basement topography is calibrated with one drill hole to date and provides a limit to the exploration target (unit D) beneath the resource.

Within the salar the three-dimensional distributions of the different hydrostratigraphic units were defined using Leapfrog software, with these units based on geological and geophysical logging observations and correlation between resource drillholes.

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. The BMR data was compared with laboratory test results for physical properties, and provides a more data intensive, but conservative data source.

The distribution of lithium was estimated from point sampling data from surface to 400 m. Samples were nominally spaced at 20 m intervals, but actual sampling depended on conditions of the holes and samples have an average spacing of 28 m (based on total drilling and the number of primary samples).

The assay data contained several sites where multiple samples were taken (installed piezometers with fixed screen intervals, in addition to packer sampling) and these were averaged, and the mean used within the resource calculations. There was also a high degree of duplication undertaken with sample analyses. This occurred following realisation of systematic differences in the results between the primary and secondary check laboratories. 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 by 200 blocks, with 10 m vertical extent (Figure 9 and Figure 10). The resource estimate was undertaken using Leapfrog software, with variograms developed for the porosity point samples and the lithium concentrations. Estimation was undertaken using ordinary kriging for the much higher number of BMR porosity samples and Inverse Distance Squared estimation for brine samples, which are much more limited. The resource results were rerun under a kriging estimation and a nearest neighbour estimate for lithium concentration and the differences for individual units were approximately 2.5 %, with the largest difference with the Nearest Neighbour estimation, which had an estimate of +6.4%.

The porosity data was estimated in two passes for the Measured and Indicated resources within a 2.5 km radius and three 3 passes for the model including Inferred material up to 5 km from drill holes, 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, though the area classified as Measured is within Passes 1 and 2, restricted to within a 2.5 km radius from drill holes, in keeping with the suggestion of Houston et. al., (2011). For estimation of the lithium concentration the Inverse Distance Squared method was used, 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 porosity and lithium concentration estimation was calculated by Leapfrog and displayed in the Edge statistics module.

Indicated resources have been included in the resource estimate (Figure 7) to the south of the basaltic volcanic shield and have been upgraded from Inferred classification in the 2018 maiden resource estimate (also with a radius of 2.5km), reflecting the increased knowledge and the consistence of stratigraphy seen across the Kachi basin salt lake area.

Between a distance of 2.5 and 5 km around drill holes the resource is classified as Inferred, reflecting the suggestion of Houston et. al., (2011). Additional drilling information should provide sufficient increased confidence to reclassify Inferred resources following additional future drilling.

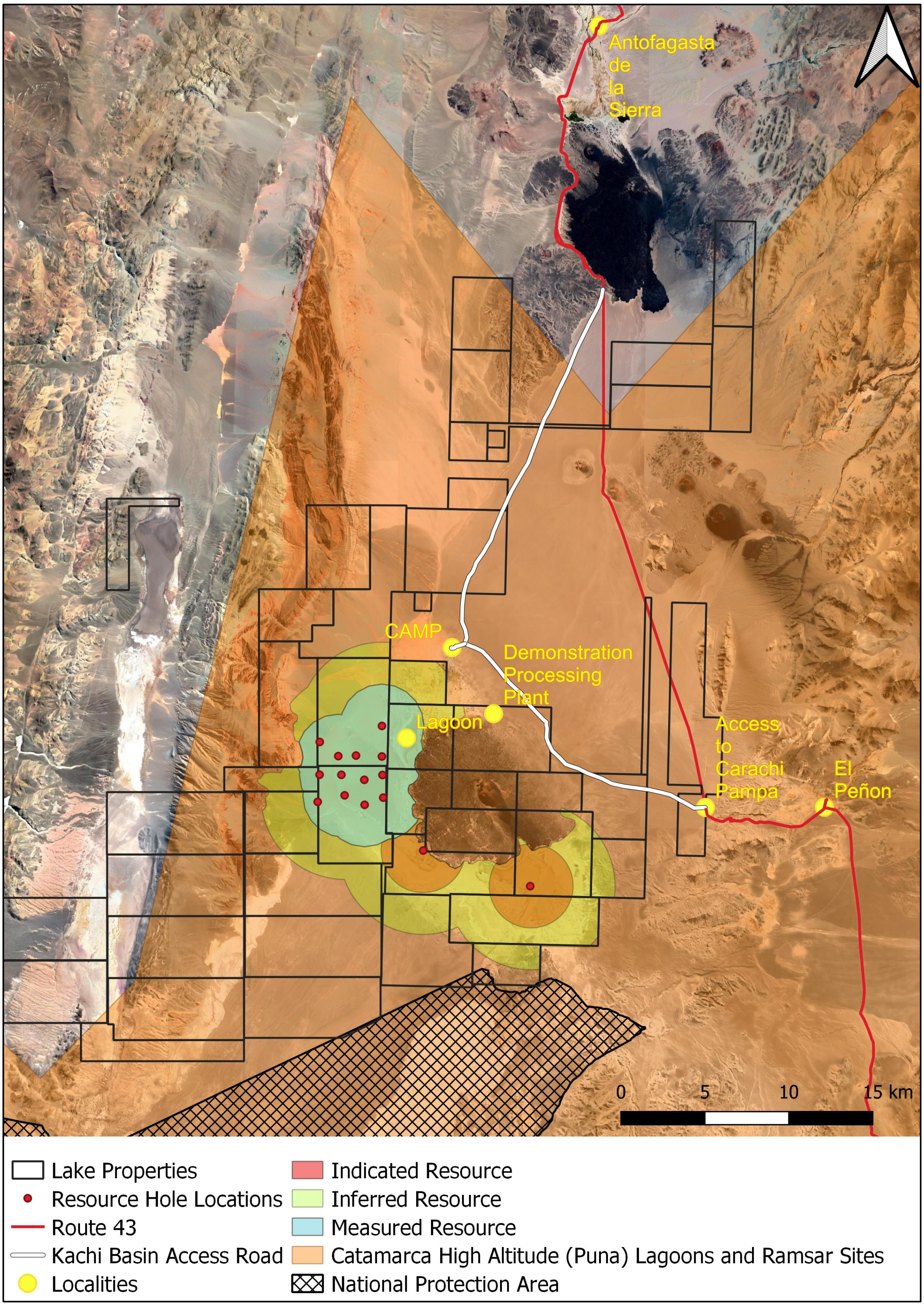

Figure 7: Kachi resource areas, showing Measured and Indicated resources (2.5 km radius) and Inferred resource (5 km radius), limited by the volcano to the east, mountain range to the west and the distance from holes

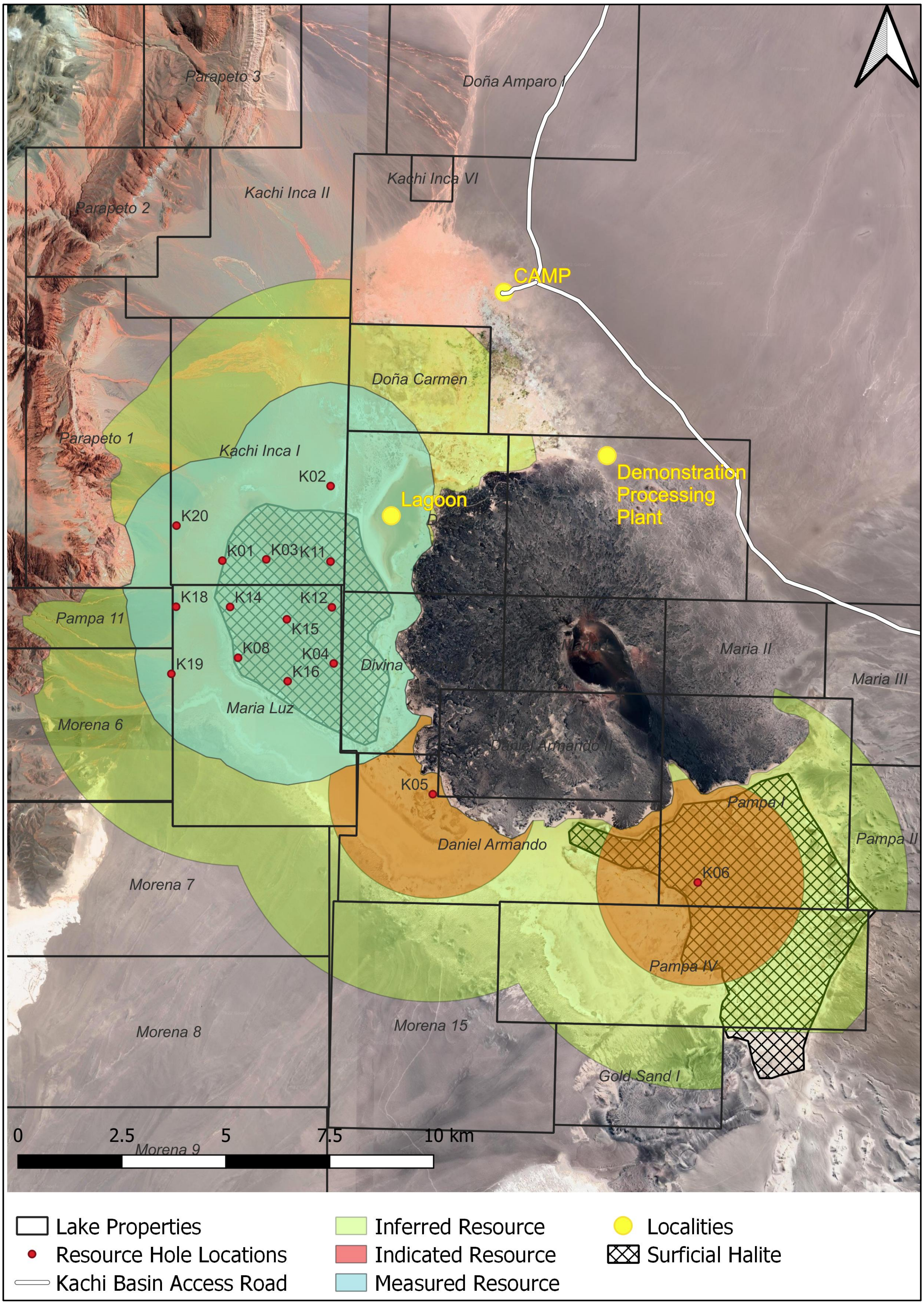

Figure 8: Lake Resources properties and drill platform locations, showing drilling concentrated over the salar area, with the resource outlines shown

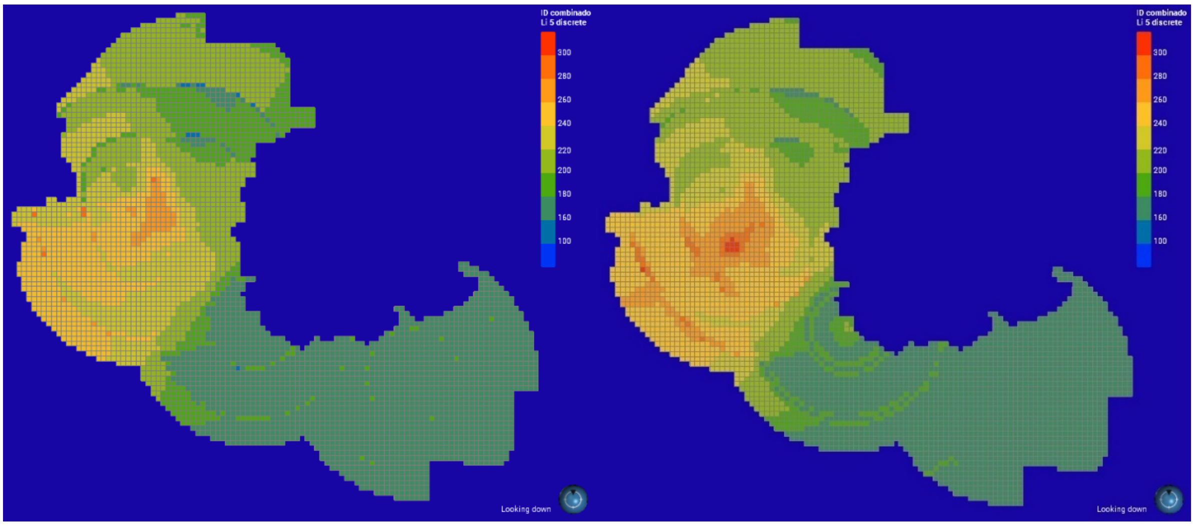

Figure 9: Lithium block model plans at elevations of 2820 m (left image, predominantly in Unit B) and 2700 m (right image in Unit C), the result of three estimation passes

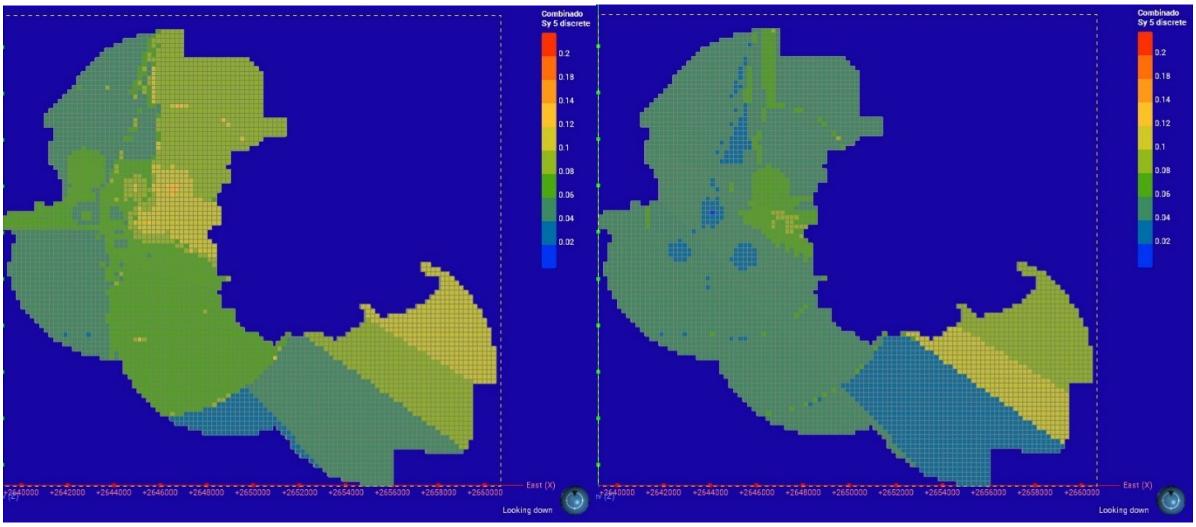

Figure 10: Specific yield block model plans at elevations of 2820 m elevation (left image, predominantly in Unit B) and 2700 m (right image in Unit C), the result of three estimation passes

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 drill holes, 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 Proved Ore Reserve or under certain circumstances to a Probable Ore Reserve.

The Measured resources (Figure 11) are all within 2.5 km from drill holes across the salar, as suggested by Houston et. al., 2011 as an appropriate drilling spacing for Measured resources in clastic salars. In fact, the actual spacing between holes in the salar area classified as Measured is between 1.1 and 1.9 km, averaging approximately 1.5 km and the lithological description, geophysical logging and brine assays provide a high level of confidence in the resource in this area.

The resource is reported at a zero mg/l lithium cut-off, as the future economic cut-off for brine extraction is has not been confirmed from process testing and economic studies.

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 drill holes, 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.

Indicated resources are defined around drill holes at sites K05 and K06, where characteristics from these holes provide confidence in correlation with the area of higher drilling density in the Measured resources.

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 drill holes.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

The Inferred Mineral Resource (Figure 11) is defined laterally to the M&I resources, to a depth of 400 m. The limits of the Inferred resource are areas of outcropping rocks and the limit of the M&I Resource over the salar.

Taking account of the distribution of brine grade and porosity to date (as determined by BMR geophysics) there is a sufficient level of confidence to classify the resources extending to the edge of the basin as Inferred Resources. It is likely that additional drilling could convert these to a higher confidence resource classification.

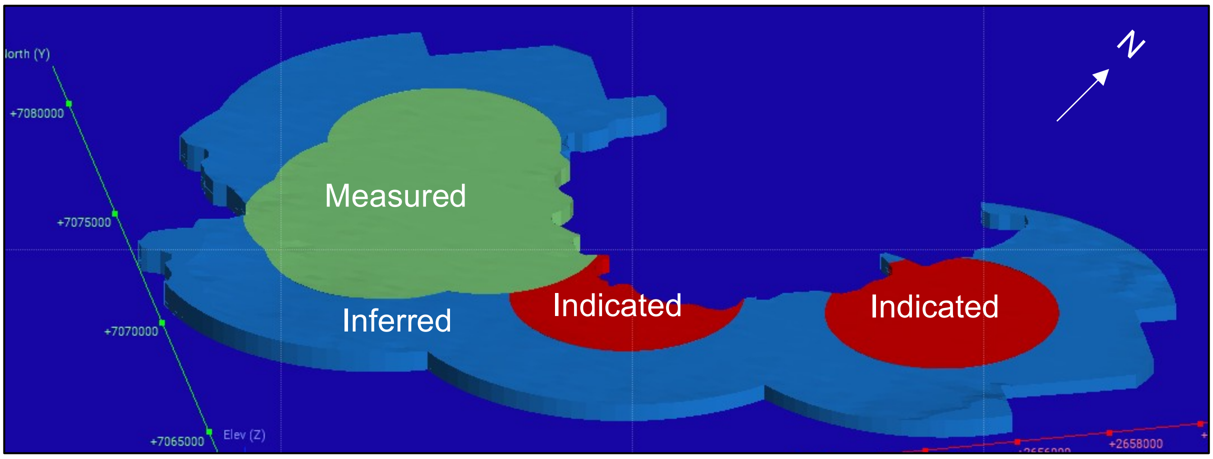

Figure 11: Block diagram showing the Measured and Indicated resources, in two separate areas, with the surrounding area of Inferred resources

Estimated Resources

The resource estimate is outlined in the following tables presenting the lithium and lithium carbonate tonnages.

Variograms were developed for porosity and lithium data for the estimation process, with the results of the variograms used to develop the search ellipses used for the estimation. Two passes of ordinary kriging with expanded search ellipse were used for the estimation of porosity, followed by a larger search ellipse in pass 3, using a nearest neighbour estimation. For the estimation of lithium content three expanding passes (Table 3) were applied using an inverse distance squared methodology, as there are substantially less lithium analyses than porosity data.

The search ellipse for the first two passes of the porosity evaluation used a near isotropic search ellipse, based on the variograms. Dimensions are shown in Table 3. For the third pass the search ellipse was expanded considerably and a more anisotropic ellipse was used for the nearest neighbour estimation. For the estimation of lithium concentration 3 search passes were used and the ellipse was expanded considerably, to allow estimation of grade into the southern area, with an isotropic ellipse used in each pass.

The block model results were compared with composite and original drill hole data at the drill hole locations, to check the estimation reasonably reflects the original drill hole data. Data was considered to adequately reflect the original data.

<u>Mineral Reserve</u>

A groundwater model is being developed for the basin, which will allow the estimation of a mineral reserve for the project, based on pumping and reinjection testing, with the test wells for this program currently being installed.

Table 1: Updated resource estimate of contained lithium

Unit	Sediment Volume m^3	Porosity	Brine volume m^3	Litres	Li g/l	Li grams	Li Tonnes	Tonnes LCE
MEASURED (2.5 km Radius)								
A	10,182,800,000	0.071	724,624,594	724,624,594,358	0.201	145,904,502,744	145,905	780,000
B	3,811,600,000	0.079	302,159,329	302,159,329,253	0.224	67,744,268,441	67,744	360,000
C	6,395,200,000	0.061	392,074,073	392,074,072,637	0.224	87,657,488,884	87,657	470,000
TOTAL	20,389,600,000	0.070	1,418,857,996	1,418,857,996,248	0.212	301,306,260,069	301,306	**1,610,000**
INDICATED (2.5 km radius)								
A	4,226,400,000	0.058	246,042,461	246,042,460,863	0.175	43,068,160,880	43,068	230,000
B	1,720,000,000	0.084	144,467,347	144,467,347,479	0.178	25,648,731,291	25,649	140,000
C	3,111,600,000	0.072	223,484,154	223,484,154,136	0.178	39,741,611,867	39,742	210,000
TOTAL	9,058,000,000	0.068	613,993,962	613,993,962,478	0.177	108,458,504,038	108,459	**580,000**
COMBINED MEASURED + INDICATED								
Units A, B, C	29,447,600,000	0.069	2,032,851,959	2,032,851,958,726	0.202	409,764,764,107		**2,190,000**
INFERRED 2.5 TO 5 KM RADIUS								
A	24,126,000,000	0.067	1,627,523,072	1,627,523,071,800	0.192	313,215,187,645	313,215	1,650,000
B	7,222,000,000	0.073	525,466,220	525,466,220,200	0.202	106,035,930,439	106,036	565,000
C	13,121,600,000	0.061	805,721,351	805,721,350,720	0.206	166,120,405,206	166,120	880,000
TOTAL	44,469,600,000	0.067	2,958,710,643	2,958,710,642,720	0.198	585,371,523,290	585,372	**3,095,000**

- 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 zero mg/l cut-off, given the consistent grade of the deposit
- Numbers may not add due to rounding
- Lithium is converted to lithium carbonate (Li_2CO_3) with a conversion factor of 5.32.

This 2022 Resource update supersedes the 2018 Resource completed as part of the Pre-Feasibility study.

Exploration Target

The resource is open laterally off the salar to the north and south. The resource may also extend eastward under the volcanic rocks of the extinct Kachi strata volcano, which is interpreted to have a mushroom-like geometry forming a veneer overlying basin sediments. A geophysical program will shortly begin to explore for brine under these volcanic rocks, in addition to better defining the distribution of brine away from the salar. There is potential to define additional resources in this area, immediately east of the salar, and between the 400 m deep base of the resource and the contact of the sediments infilling the basin, with the underlying basement rocks (Figure 12).

These two different volumes are presented as an exploration target (Targets 1 and 2) for these respective areas, with the potential range in contained lithium shown in the table below. The potential quantity and grade of the exploration target is conceptual in nature, and there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource in the volumes defined as exploration targets.

Future exploration drilling aims to convert at least part of the exploration target volume to resources. *Note that insufficient exploration has been conducted to conclude with any certainty that the exploration target could be converted to resources. Drilling is required to evaluate whether the exploration targets can be converted to resources, which may not be possible for different reasons. It is important to note the exploration target contains a range of possible parameters, that are considered to represent the likely range of conditions in this volume, but the results should be considered to have a high uncertainty and are not to be considered resources or to be confused with resources.*

Table 2: Exploration target, covering possible extension beneath the volcano and beneath the resource area

Unit	Sediment Volume m^3	Porosity	Brine volume m^3	Litres	Li g/l	Li grams	Li Tonnes	Tonnes LCE
EXPLORATION TARGET 1 (Range below resource 400 to ~700 m depth)								
High	75,330,000,000	0.070	5,273,100,000	5,273,100,000,000	0.200	1,054,620,000,000	1,054,620	**5,600,000**
Low	75,330,000,000	0.040	3,013,200,000	3,013,200,000,000	0.150	451,980,000,000	451,980	**2,400,000**
EXPLORATION TARGET 2 (Range below western half of stratovolcano 100 to 400 m depth)								
High	11,500,000,000	0.070	805,000,000	805,000,000,000	0.194	156,170,000,000	156,170	**800,000**
Low	11,500,000,000	0.040	460,000,000	460,000,000,000	0.150	69,000,000,000	69,000	**400,000**
TOTAL EXPLORATION TARGET (1+2) RANGE								
Total Exploration Target High	86,830,000,000	0.070	6,078,100,000	6,078,100,000,000	0.199	1,210,790,000,000	1,210,790	**6,400,000**
Total Exploration Target Low	86,830,000,000	0.040	3,473,200,000	3,473,200,000,000	0.150	520,980,000,000	520,980	**2,800,000**

- Numbers may not add due to rounding
- Lithium is converted to lithium carbonate (Li2CO3) with a conversion factor of 5.32.

Table 3: Search criteria for resource estimation

Kachi Block Model	**X**	**Y**	**Z**
Block Size	200	200	10
Number of blocks model 2.5 km	73,915		
Number of blocks model 2.5 - 5 km	111,174		
Easting Extents	2,639,186	2,660,388	3,050
Northing Extents	7,061,122	7,080,724	2,225
Method porosity	**X Dimension m**	**Y Dimension m**	**Z Dimension m**
Ordinary Kriging	3,444	3,718	229
Ordinary Kriging	7,005	5,928	229
Nearest neighbour	13,855	6,030	359
Method Li grade	**X Dimension m**	**Y Dimension m**	**Z Dimension m**
Inverse distance squared	2,000	2,000	400
Inverse distance squared	4,000	4,000	600
Inverse distance squared	7,000	7,000	600

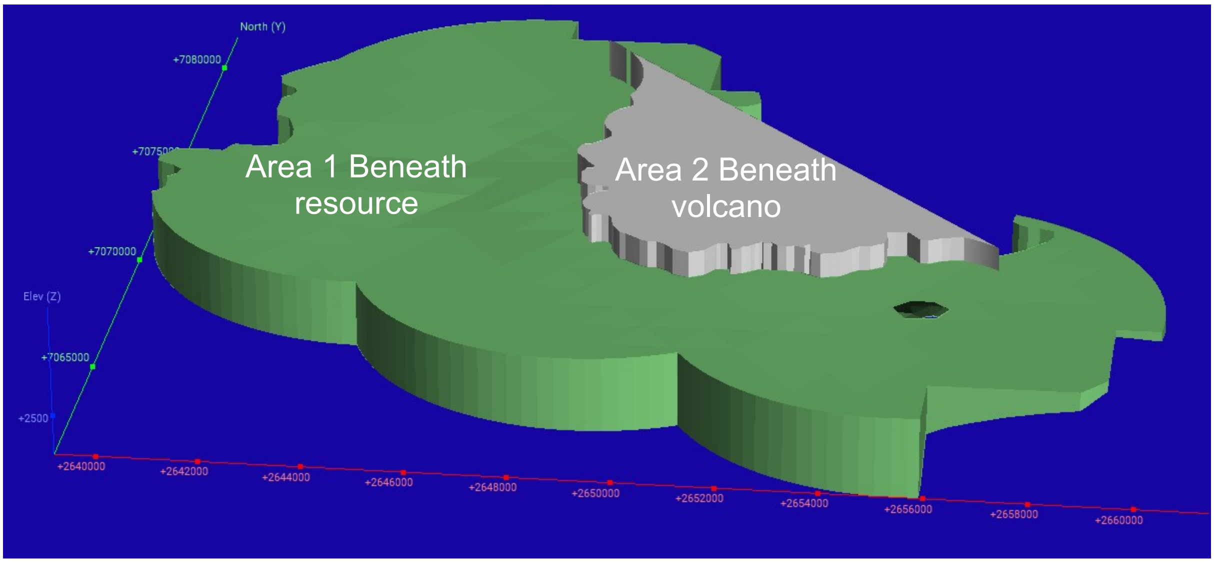

Figure 12: Exploration target areas. Area 1 underlies the exploration target from 400 to approximately 700 metres depth. Area 2 is defined below the western half of the volcano and defined from a depth of 100 to 400 m depth, allowing for the presence of brackish water, to a depth of 100 m overlying the target. Planned geophysics will evaluate the presence of brine and depth in this area

Environmental Context and Permitting

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" Figure 7) 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.

Competent Persons Statement

The information in this report that relates to resource reporting at the Kachi project has been prepared by Mr Andrew Fulton. Mr Fulton is a hydrogeologist and is a Member of the Australian Institute of Geoscientists. Mr Fulton is an employee of Groundwater Exploration Services and is independent of Lake Resources. Mr Fulton has sufficient relevant experience to qualify as a competent person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. He is also a "Qualified Person" as defined in NI 43-101. Mr Fulton consents to the inclusion in this announcement of this information in the form and context in which it appears.

Historical references:

In February 2017, Lake's team in Argentina announced completion of a near-surface systematic brine sampling programme over the salt lake covering approximately 8,500 Ha within over 106,000 Ha in the Kachi Lithium Brine Project in Catamarca province. Forty samples taken from shallow hand auger drill holes and surface water revealed elevated lithium results up to 322 mg/L.

In November 2017, Lake Resources announced the commencement of diamond drilling over its 100%-owned Kachi Lithium Brine Project in Catamarca

In February 2018, Lake Resources announced an expansion of the drilling program to include an additional rotary drilling program to accelerate access to lithium brines within porous sands being encountered.

In May 2018, the first positive results were revealed following drilling at three locations with a range of Lithium results ranging from 156 – 306 mg/L which was further reinforced in June 2018 where the scale of the project was highlighted. The program culminated in November 2018 with a maiden mineral resource estimate of 4.4 million tonnes of contained lithium carbonate equivalent in inferred and Indicated categories extending as deep as 400m below ground level in porous, permeable sediments, with an average depth extent of around 320 m.

The Indicated Mineral Resource estimate contained 1.0 million tonnes of Lithium Carbonate Equivalent (LCE) in the central area of Kachi. An inferred mineral resource estimate of 3.4 million tonnes LCE was defined in the surrounding area. The estimate was based on results of 15 drill holes. It was also acknowledged that brine bearing sediments remain open at depth and laterally with opportunity for resource expansion from additional deeper drilling and extending the area of exploration drilling.

Throughout 2020, focus shifted to processing with bulk samples sent to direct lithium extraction company Lilac for a range of test work, which resulted in sample product made available to battery manufacturers (Novinox: August 2020) and tested independently with Hazen (October 2020).

In January 2021, Lake Resources announced that funding was in place for a DFS and that planning for additional drilling was underway with a 4 well 1600m program revealed in May 2021. Exploration drilling for the new campaign got underway in early July 2021 and the program has evolved beyond the original 1600m program with 3200m completed at the time of this report. 2000m of drilling are included in this resource assessment with a further 1200m (3 drillholes) waiting for assay results.

Table 4: 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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	No
MORENA 3	EX - 2021 - 00361695 – CAT (74/2016)	MVM / Lake	10/7/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	3007.1366	31	Not yet submitted	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	Not yet submitted	No
MORENA 5	EX - 2021 - 00221381 – CAT (97/2017)	MVM / Lake	11/29/2019	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1415.8752	15	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	No
MORENA 10	EX - 2022 - 00508476 - CAT	MVM / Lake	EN TRAMITE	Registered	Exploration Concession	Not Granted	N/A	Lithium Salts	2712.9283	28	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	No
PAMPA I	EX - 2021 - 00233741 – CAT (129/2013)	MVM / Lake	11/24/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	690	7	Not yet submitted	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	Not yet submitted	No
PAMPA 11	EX - 2021 - 00372498 – CAT (201/2018)	MVM / Lake	2/7/2020	Registered	Exploration Concession	Granted	N/A	Lithium Salts	815	9	Not yet submitted	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	Not yet submitted	No
IRENE	EX - 2021 - 00212993 – CAT (28/2018)	MVM / Lake	9/6/2018	Registered	Exploration Concession	Granted	N/A	Lithium Salts	2052.2562	21	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	No
PARAPETO III	EX - 2021 - 00854749 – CAT	MVM / Lake		Registered	Exploration Concession	Granted	N/A	Lithium Salts	1949.1255	20	Not yet submitted	No
PARAPETO 4	EX - 2021 - 01651926 – CAT	MVM / Lake	EN TRAMITE	Registered	Exploration Concession	Granted	N/A	Lithium Salts	1948.9079	20	Not yet submitted	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	Not yet submitted	No
TORNADO VII	EX - 2021 - 00208328 – CAT (48/2016)	MVM / Lake	11/24/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	6628.842	67	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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	Not yet submitted	No
ESCONDIDIT A	EX - 2021 - 00143141 – CAT (131/2018)	MVM / Lake	9/24/2018	Registered	Exploration Concession	Granted	N/A	Lithium Salts	373.4346	4	Not yet submitted	No

Title					Tenure Type	STATUS	MINING CONCESSION	Minerals	AREA (Hectares)	Status		
TENEMENT	NUMBER - GDE	Title Owner	Title Acquisition	Registration						Claims	EIA pending Approval	Royalty
GALAN OESTE	EX - 2021 - 00153718 – CAT (43/2016)	MVM / Lake	10/14/2016	Registered	Exploration Concession	Granted	N/A	Lithium Salts	3166.9356	32	Not yet submitted	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	Not yet submitted	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	Not yet submitted	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

Table 5: Table of Resource Drill Hole Collars

Hole ID	Easting	Northing	Elevation	Depth (m)	Azimuth	Dip
K01D01	2643885	7073895	3005.25	76.25	0	-90
K02D16	2646491	7075691	3006.28	300	0	-90
K02D13	2646493	7075690	3006.28	404	0	-90
K02P01	2646499	7075676	3005.68	10.5	0	-90
K02P02	2646565	7075674	3005.61	35.5	0	-90
K03D02	2644953	7073947	3005.12	150.5	0	-90
K03R03	2644936	7073943	3005.09	242	0	-90
K03R12	2644942	7073926	3005.15	401	0	-90
K04P01	2646565	7071419	3004.87	36	0	-90
K04R15	2646513	7071387	3004.97	360	0	-90
K05D09	2648943	7068270	3006.92	139	0	-90
K05D11	2648950	7068270	3006.52	330	0	-90
K06D04	2655328	7066144	3005.17	113	0	-90
K06D05	2655380	7066141	3005.17	167.5	0	-90
K06R06	2655379	7066147	3005.70	87	0	-90
K06R07	2655384	7066158	3005.58	180	0	-90
K06R10	2655398	7066156	3005.50	173.76	0	-90
K06R08	2655338	7066149	3005.44	405	0	-90
K08P01	2644254	7071571	3004.81	50.5	0	-90
K08P02	2644261	7071562	3004.68	10.5	0	-90
K08R14	2644275	7071546	3005.13	364	0	-90
K08R17	2644263	7071556	3004.79	226	0	-90
K11D20	2646488	7073873	3004.65	400	0	-90
K11P01	2646522	7073067	3004.55	35.5	0	-90
K11R26	2646549	7073913	3005.13	217	0	-90
K11R29	2646550	7073911	3005.23	255	0	-90
K12D21	2646520	7072801	3004.69	400	0	-90
K12D27	2646513	7072806	3004.59	410	0	-90
K12P01	2646522	7072770	3004.68	35.5	0	-90
K14D23	2644072	7072780	3004.72	353.5	0	-90
K14D24	2644050	7072783	3004.68	410	0	-90
K14P01	2644059	7072767	3004.90	35.5	0	-90
K15D25	2645438	7072482	3004.70	400	0	-90
K15P01	2645434	7072497	3004.64	35.5	0	-90
K16D28	2645457	7070992	3004.80	405	0	-90
K15R31	2645431	7072450	3008.72	400	0	-90
K12R34	2646573	7072757	3004.49	400	0	-90
K19R33	2642658	7071169	3010*	400	0	-90
K18D32	2642771	7072785	3009*	410	0	-90
K20R35	2642781	7074739	3010*	410	0	-90

- Coordinates are in Zone 2 of the Argentine Gauss Kruger grid system, using the Posgar 94 datum. The project is located at the boundary of zones 2 and 3, with the most important properties located in zone 2
- All holes are drilled vertically
- Holes are located by a surveyor*, although this is pending for the three more recent holes, which were located handheld GPS, with accuracy expected to be within 5 m of the final surveyed location

Table 6: Table of assay results

Hole id	Easting	Northing	Drilling Method	From	To	Resource Unit	Li (mg/l)	Mg (mg/l)	K (mg/l)
K02D13	2646493	7075690	Diamond HQ	59.5	60	A	217.0	3557.5	4437.7
				64	108	A	181.7	2884.5	3620.3
				138	190.5	A	144.4	1589.9	3077.9
				269	298.4	B	203.5	2163.1	4099.7
				301	319	C	200.4	2172.6	4182.7
				319	343	C	251.7	1411.2	4987.2
				346	388	C	206.2	1814.6	4380.9
K02P01	2646499	7075676	Rotary	10	16	A	93.7	1378.3	1778.3
K02P02	2646565	7075674	Rotary	31	35	A	175.7	2525.1	3762.2
K03R03	2644936	7073943	Rotary	213.08	236.08	B	287.5	1243.4	5880.5
K03R12	2644942	7073926	Rotary	349.16	391.44	C	275.7	1140.0	5403.6
K04P01	2646565	7071419	Rotary	13	16	A	200.7	3854.5	4320.7
				16	28	A	198.6	4169.7	4144.7
				31	34	A	184.9	3154.2	4329.1
K04R15	2646513	7071387	Rotary	295	343	C	242.2	1240.7	5336.8
K05D11	2648950	7068270	Diamond HQ	61	62	A	76.6	1202.6	1257.1
				107.5	108.5	A	213.1	1301.1	4163.5
				157	157.5	A	95.2	51412.2	1460.4
				188	190	B	215.3	96986.6	919.3
				200	201	B	204.0	919.7	3669.5
				242	243	C	176.0	889.6	3115.8
				280	289	C	142.9	61861.5	1087.7
				290	300.5	C	116.3	46232.3	1035.4
				301	334.5	C	286.4	108779.0	1164.0
K06D04	2655328	7066144		95	113	A	187.0	879.1	3294.2
K06D08	2655338	7066149	Diamond HQ	69	70	A	187.6	99804.5	999.4
				120	121	A	181.9	101124.3	933.4
				165	166	A	170.0	108000.0	880.0
				205	206	B	164.0	891.0	3575.0
				258	259	C	189.0	108000.0	962.0
				354	405	R	161.5	911.0	3415.0
K06R10	2655398	7066156	Rotary	150	173.5	B	191.9	1119.0	3420.8
K08D14	2644275	7071546		300	360	C	326.5	1231.9	6038.5
K08P01	2644254	7071571	Rotary	39	41	A	181.4	2385.4	3836.9
				41	50	A	175.6	2193.9	3514.0
K08P02	2644261	7071562	Rotary	7	10	A	185.1	4352.6	3545.4
K08R14	2644275	7071546	Rotary	45	46	A	226.7	3666.0	4855.4
				301	361	C	311.8	1076.1	5744.9
K08R17	2644263	7071556	Rotary	20	46	A	224.2	3818.9	4738.2
K11D20	2646488	7073873		83	130	A	187.8	2651.2	4039.8

Hole id	Easting	Northing	Drilling Method	From	To	Resource Unit	Li (mg/l)	Mg (mg/l)	K (mg/l)
			Diamond HQ	117	165	A	215.9	1838.2	4840.5
				214	215	B	211.8	1571.0	4693.6
				248	325	B	190.1	2677.4	4394.9
				356	357	C	218.4	1148.7	4486.3
				364	380	C	222.3	831.7	4525.7
				380	400	C	197.9	1004.7	4244.4
K11P01	2646522	7073067	Rotary	10	13	A	181.5	2896.9	4242.6
				25	28	A	174.8	2434.7	3790.7
				31	34	A	183.6	2736.5	4202.5
K012P01	2646522	7072770	Rotary	13	16	A	150.8	2520.1	3781.6
				25	28	A	178.4	2918.1	4338.2
K12D21	2646520	7072801	Diamond HQ	55	73	A	176.6	2641.9	3863.1
				73	84	A	168.2	2584.8	3741.7
				94	109	A	219.2	1508.6	4254.9
				109	124	A	172.4	2329.9	3912.6
				124	139	A	224.5	1418.1	4721.8
				144	154	A	223.2	1486.2	4579.6
				156	169	A	232.2	1347.4	4827.0
				171	184	A	233.5	1353.0	4992.0
				195	199	B	223.6	1383.6	4521.1
				202	211	C	221.2	1408.5	4036.4
K14D23	2644072	7072780	Diamond HQ	7	16	A	167.6	3135.4	3373.7
				15	28	A	177.2	2747.7	3739.8
				31	40	A	153.9	2687.3	3578.5
				43	46	A	152.1	2683.2	3462.5
				46	55	A	139.8	2630.5	3333.7
				66	75	A	145.4	2004.6	4525.9
				75	86.5	A	227.5	1923.7	4796.9
				87	100	A	247.7	2230.0	4731.1
				100	115	A	266.5	2191.2	4737.7
				115	130	A	249.6	2722.3	4884.8
				130	145	A	217.8	2087.3	4110.3
				159	175	A	217.7	1196.7	4448.9
				250	295	B	294.1	1695.1	5472.9
K14D24	2644050	7072783	Diamond HQ	70.3	71.3	A	231.4	2273.8	4624.7
				88.3	89.3	A	208.0	2773.6	3796.7
				124.3	125.3	A	249.3	2507.4	4284.5
				145.3	146.3	A	195.4	2212.8	3917.4
				181	182	A	254.4	1414.1	4711.7
				221	222	B	277.5	1302.1	5254.5
				273	274	B	312.5	1365.9	6192.3

Hole id	Easting	Northing	Drilling Method	From	To	Resource Unit	Li (mg/l)	Mg (mg/l)	K (mg/l)
				330	331	C	281.1	988.2	4995.6
				364	365	C	280.4	864.9	4861.8
				396.3	397.3	C	201.0	1839.1	4241.8
K14P01	2644059	7072767	Rotary	31.9	35.86	A	200.6	2764.2	3806.4
K15D25	2645438	7072482	Diamond HQ	175	176	A	230.5	2115.5	5500.2
				199	200	B	241.6	1563.8	5777.2
				267	268	B	283.5	2047.6	5313.2
				280	281	B	322.8	1421.1	5459.7
				301	302	C	323.1	1230.0	5480.0
				358	359.5	C	287.4	946.2	4981.8
				374.5	405	C	230.4	1047.7	4591.3
K15P01	2645434	7072497	Rotary	30.9	33.9	A	164.4	2268.5	3744.2
K16D28	2645457	7070992	Diamond HQ	56.3	57.3	A	210.4542	2579	60564.5
				82.3	83.3	A	211.8581	2564.5	61687
				121.3	122.3	A	207.1639	2337	64501.5
				166.3	167.3	A	207.7051	2545.5	60495.5
				208.3	209.3	B	205.1263	1985.5	59852
				221.3	222.3	B	275.0399	2004	59982.5
				265.3	266.3	B	204.2701	2459.5	65773.5
				322.3	323.3	C	295.5663	1166	61313
				377.3	378.3	C	260.2421	855	64176.5
				387.3	388	C	265.6143	886.5	65394.5

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 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. Straddle 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 • 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 split 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,*	• 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.

	whether core is oriented and if so, by what method, etc).	• Brine has been used as drilling fluid for lubrication during drilling, for mixing of additives and muds.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *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.*	• Diamond drill core was recovered in 1.5m length intervals in the drilling triple (split) tubes. Appropriate additives were 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 a 1 m interval (to isolate intervals of the sediments and obtain samples from airlifting brine from the sediment interval isolated between the packers). 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.*	• 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). • 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.

	• *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *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.*	• The laboratory services of Alex Stewart International Argentina Jujuy, Argentina, is used as the primary laboratory to conduct the assaying of the brine samples collected as part of the sampling program. The 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*	• 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.

	other locations used in Mineral Resource estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• 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.
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 1m intervals from straddle packers, 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 is approximately 28 m. • 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 salt lake (*salar*) deposits that contain lithium-bearing brines generally have horizontal to sub-horizontal beds and lenses that contain sand, gravel, salt, silt and clay. The vertical diamond drill and rotary holes provide the best understanding of the stratigraphy and the nature of the sub-surface brine bearing aquifers • 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

Criteria		Section 2 - Mineral Tenement and Land Tenure Status
		review of the database by independent personnel recommended.
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 100km south-southwest of Livent's Hombre Muerto lithium operation and 45km south of Antofagasta de la Sierra in Catamarca province of northwestern Argentina, at an elevation of approximately 3,000m asl. • The project comprises approximately 103,898 Ha in fifty two (52) mineral leases (minas), including two leases (4,662 Ha) which are applications pending granting. Details of the properties are provided in a table at the back of this announcement. • 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. • 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 solar concentration, 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:* o *easting and northing of the drill hole collar*	• 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.

	○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *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.*	
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 down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width*	• 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 Kachi 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 has yet to be defined for the project.

	not known').	
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. Individual drill hole coordinates are provided in a Table above.
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 26 drill holes from the drilling to date, reported here. 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.
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 approximately 9,300 m of diamond and rotary drilling to date. Currently drilling is underway to continue resource classification upgrade and expansion. Drilling is also underway to install test production and reinjection wells for flow testing.
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 no lack of 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 covers approximately 187 km^2 to date. • 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 400 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 400 m below surface, with the exploration target extending beyond the areal extend 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.*	• 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 1500 and 4000 m respectively. • The resource between 2.5 and 5 km of drill holes was estimated using three expanding search ellipses of 1500, 4000 and 7000 m, to encompass all of the data. • Three essentially horizontal hydrostratigraphic units were defined 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. Differences between the estimates were generally <5%, with the largest difference with the RBF function and the way it interpolates grades. • 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. The vertical spacing of brine samples averaged approximately 28 m between samples, with the distance between holes of approximately 1.5 km, within the central 2.5 km radius of influence zone used to define Measured Resources. • 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 three-layer model, with essentially horizonal layers, was used to define the search ellipses to control the resource estimation. • Visual comparison has been conducted of drill hole results and the block model, together with a comparison of sample

	• *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 drill hole data, and use of reconciliation data if available.*	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.*	• No cut-off grade has been applied.
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*	• 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 operating. • Lithium will be produced via a selective extraction technology developed by Lilac Solutions, designed to produce high purity lithium product.

	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.	• 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 fresh water aquifers regionally. • The project is conducting pumping and reinjection testing to evaluate flow rates, with the intention of reinjecting brine once lithium has been extracted in more peripheral areas of the project.
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • • 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	• The resource has been classified into two possible resource categories based on confidence in the estimation. • The Measured resource, within a 2.5 km radius of drill holes, reflects the predominance of drilling with a spacing of approximately 1.5 km between holes. This classification

	(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.	reflects the suggestion of Houston et. Al., 2011 regarding the classification of resources. Porosity measurements have been made in these diamond and rotary holes with the BMR porosity tool, providing 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. • The Inferred resource surrounding the Measured resource in the properties reflects more limited drilling in the surrounding area, and locations closer to the border of the basin. Some additional lithium assay data will be incorporated into the next resource that is likely to result in conversion of part of the Inferred resource to Measured or Inferred resources. 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. • There are currently no Indicated resources defined in the project. 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
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	• 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

	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.	

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About Lake Resources NL (ASX:LKE OTC:LLKKF) –

Cleaner high purity lithium using efficient disruptive clean technology - in demand by EV makers and lithium-ion batteries

Lake Resources NL (ASX:LKE, OTC: LLKKF) is a clean 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 among three other projects covering 220,000 ha.

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.

1. **Climate-Tech**: Efficient, disruptive, clean, cost-competitive technology using well-known water treatment re-engineered for lithium (not mining). Technology partner, Lilac Solutions Inc, is supported by the Bill Gates led Breakthrough Energy fund, MIT's The Engine fund, Chris Sacca's

Lowercarbon Capital, BMW, Sumitomo, and SK Materials. Lilac will earn in to the Kachi Project, up to a 25% stake, based on certain milestones and then be expected to fund their c.US$50 million pro-rata share (refer ASX announcement 22 September 2021)

2. **High Purity**: 99.97% purity lithium carbonate samples for a premium price. Demonstrated high quality in nickel rich NMC622 lithium-ion batteries (refer ASX announcement 20 October 2020; 2 March 2021).

3. **Sustainable /ESG**: Far smaller environmental footprint than conventional methods, that returns virtually all water (brine) to its source with a low CO2 footprint.

4. **Finance Indicatively Available**: Long duration, low-cost project debt finance for the Kachi Lithium Project is indicatively available from the United Kingdom's Export Credit Agency UKEF and Canada's EDC with Expressions of Interest to support approx. 70% of the total finance required for Kachi's development, subject to standard project finance terms (refer ASX announcements 11 August 2021; 28 September 2021).

An innovative ion exchange extraction technology, based on a well-used ion exchange water treatment method, has been tested for over 18 months in partnership with Lilac Solutions, with a pilot plant module in California operating on Kachi brines and has shown 80-90% recoveries. Battery quality lithium carbonate (99.97% purity) has been produced from Kachi brine samples with very low impurities (refer ASX announcement 20 October 2020). The first samples of high purity (99.97% purity) battery quality lithium carbonate were tested in a NMC622 battery by Novonix with excellent results (2 March 2021).

This method of producing high purity lithium can revolutionise and disrupt the battery materials supply industry as it's scalable, low cost, and delivers a consistent product quality with a significant ESG benefit.

Lake's other projects include the Olaroz and Cauchari brine projects, located adjacent to major world class brine projects in production or construction, including Allkem's Olaroz lithium production and adjoins the impending production of Ganfeng Lithium/Lithium Americas' Cauchari project. Lake's Cauchari project has shown lithium brines over 506m interval with high grades averaging 493 mg/L lithium (117-460m) with up to 540 mg/L lithium. These results are similar to lithium brines in adjoining leases and infer an extension and continuity of these brines into Lake's leases (refer ASX announcements 12 June 2019, 23 March 2021).

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 arenecessarily 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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