LAKE RESOURCES N.L. (ASX:LKE)

ASX Market Announcements Office 7 November 2018

LAKE EXPANDS LEASES AS THE KACHI LITHIUM BRINE PROJECT CONTINUES TO GROW

- **New leases expand Lake's 100% owned Kachi Lithium Project to 69,000 Ha, an increase of over 25%, consolidating ownership in 36 mining leases. Lake now holds over 200,000 hectares of lithium leases in Argentina.**
- **Recent drilling on platform K08 confirms +300 mg/L lithium values are present in the south and are likely to continue beneath cover based on geophysical results.**
- **Maiden exploration target shows potential for 8 to 17 million tonnes lithium carbonate equivalent (LCE) over enlarged area of 20 km x 15km with brines from surface to 400+ metres depth. The awaited initial resource estimate will only cover a small portion of the exploration target.**
- **Kachi is the lowest point of a large drainage area covering 6800 square kilometres (2500 square miles) larger than most basins where lithium brine is being extracted. The lithium bearing brines at Kachi are hosted in high porosity, permeable sandy sediments.**
- **Lake has partnered with Lilac Solutions to advance a rapid, low cost method for direct extraction of lithium from Kachi brines. The process aims to enhance the grade, reduce the lead time to production, lower operating costs and significantly increase recoveries.**

Argentine-focused lithium exploration and project development company **Lake Resources NL (ASX: LKE)** is pleased to release new information regarding an expanded and consolidated package of mining leases covering the large maiden exploration target on Lake's 100% owned Kachi Lithium Brine Project (See Figure 1).

Lake is releasing an exploration target over the Kachi project, as the company wishes to provide information regarding the project, while deferring the maiden resource estimate to allow incorporation of additional drilling over what is an expanding area likely to host lithium-bearing brine. In recognition of the expanding footprint of the project, further mining leases have been applied for, increasing holdings by more than 25% to 36 mining leases covering 69,000 hectares (170,000 acres) from 54,000 Ha to extend and consolidate the 100% lease holding over the southern part of the salt lake at Kachi. Lake now holds over 200,000 hectares of lithium leases in Argentina, one of the largest listed lithium lease holdings.

The maiden exploration target released over the Kachi Project, which was only drilled for the first time a year ago, shows potential for 8.0 to 17 million tonnes of lithium carbonate equivalent (LCE) over an equivalent area of 20 kilometres x 15 kilometres, based on containing brines from near surface to 400 metre depths within approximately 13 cubic kilometres of brine (13,000 gigalitres). Table 3 provides the details of the geological exploration potential, with details of the exploration target provided below. The anticipated initial resource statement will cover a small portion of this total exploration target, centred on the western part of the basin.

An exploration target is not a mineral resource. The potential quantity and grade of the exploration target is conceptual in nature, and there has been insufficient exploration to define a Mineral Resource in the volume where the Exploration Target is outlined. It is uncertain if further exploration drilling will result in the

determination of a Mineral Resource in this volume, although an initial resource statement is in the process of being prepared. The exploration target is, based on the available geological evidence, where there is the possibility of defining a mineral resource. Importantly the exploration target is not to be considered a resource or reserve. The exploration target is based on a series of assumptions and future drilling is required to determine the brine grade and formation drainable porosity values to establish whether a resource can be defined.

Lake drilling at Kachi has returned positive lithium values in the southwest of the project, where the passive seismic geophysics suggests the basin is the deepest. Further interpretation of the seismic lines suggests the basin continues to the south, significantly extending the exploration target to the south under cover where further positive results are anticipated from future drilling.

Kachi is the lowest point (around 3000 m altitude) of a large drainage area of approximately 6800 square kilometres (2500 square miles), larger than most basins producing lithium brine. The basin drains the lithium bearing volcanic rocks of Cerro Galan, which is interpreted to provide the lithium for the FMC Lithium (Livent) production at Hombre Muerto, together with hot springs. The lithium bearing brines at Kachi are hosted in high porosity, permeable sandy sediments.

Lake has partnered with Lilac Solutions to advance a rapid, low cost method for direct extraction of lithium from Kachi brines. The process aims to enhance the grade, reduce the lead time to production, lower operating costs and significantly increase recoveries.

Managing Director Steve Promnitz said**:** "The massive potential of this lithium brine is impressive. To use the analogy of the contained fluid in Sydney Harbour, this is equivalent to twenty five times that volume. The anticipated resource statement will only cover a small portion of this total potential."

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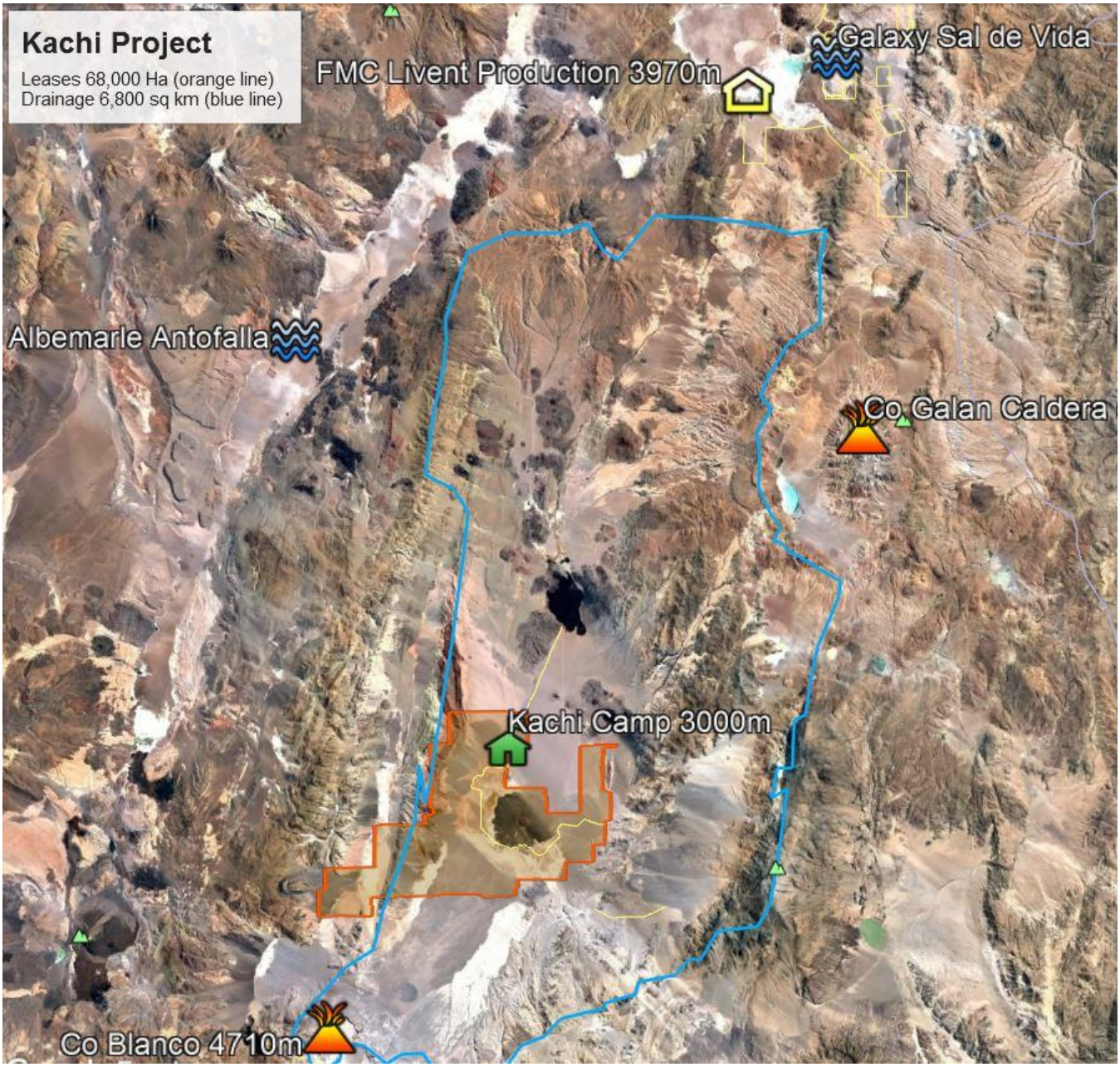

Figure 1: Lake's Kachi Lithium Project showing the large drainage area (blue line) and the expanded leases (orange line) covering the project. The Kachi Project is shown in relationship to nearby lithium production, at FMC-Livent's Hombre Muerto and lithium brine development projects, Galaxy's Sal de Vida and Albemarle's Antofalla projects.

Drilling Results

Drilling currently progresses at Kachi with a rotary hole and large diameter deep screen at platform K02. Table 1 provides drill hole installation details and assay results for drill holes completed to date with associated lithium results which are averaged where multiple samples have been taken at a single interval. Figure 1 shows drilling locations, details of the drill hole layout at each location and lithium concentrations

Recent drilling at K08 intersected intercalated sand and silts lithologies which are dominated by sandy sediments. Results from K08 indicate that Lithium concentration at in excess of 300mg/L lithium occupy a large portion of the salt lake area. Drilling locations and details of the drill hole layout at each location/platform are set out in Table 1 and Figure 2.

Additional samples have been collected for porosity tests in a laboratory in the USA with extensive experience in analysing salt lake sediments for their porosity characteristics, in particular the specific yield (also known as drainable porosity).

Analytical results for lithium to date have been highest in drill-hole K08R14 and K03R03 with 326 and 306mg/L lithium respectively. Brine samples in this hole display encouraging densities with a favourable Mg/Li ratio of 3.8 to 4.3. These areas are a key target for ongoing investigation.

Table 1: Kachi Lithium Project – details of drill-hole locations

Exploration Hole	Drilling Method	Easting	Northing	Total Depth (m)	Assay Interval (m)	Lithium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)
Northern Area								
K07D01	Diamond	643829	7073100	76.25	10 - 34	157		3330
K03D02	Diamond	644880	7073149	150.5	74 - 92	180	1740	4435
K03R03	**Rotary**	**644898**	**7073147**	**242**	**213 - 237**	**306***	**1307***	**5998***
K03R12	**Rotary**	**644885**	**7073132**	**400**	**358 - 400**	**267***	**1180***	**5180***
K02D13	Diamond	646432	7074897		60	217	3557	4438
					64 - 108	182	2884	3620
					269 - 298	204	2163	4100
					313 - 343	**252**	**1411**	**4987**
Southern Area								
K06D04	Diamond	655320	7065352	167.5	95 - 113	203	766	3321
K06R05	Rotary	655273	7065354	87	68 - 85	167	1000	3160
K06R06	Rotary	655307	7065374	180	Not Sampled			
K06R07	Rotary	655326	7065362	189	159 – 179	191	1009	961
K06D08	Diamond	655326	7065362	405	69 -70	194	958	3171
					120 - 121	191	873	3199
					165-166	170	880	3650
					205-206	164	894	3590
					258-259	164	888	3560
					354-405	170	877	3670
K05D09	Diamond	648899	7067469	139	62	83	1229	965
					108	222	1325	4360
K05D11	Diamond	648902	7067491	391	157	95	1460	1926
					188	215	919	3596
					224 - 248	175	876	3065
					289	143	1088	2251
					300.5	116	1035	1782
					291 - 334	234	3199	4980
					349 - 391	185	1955	3892
K08R14	**Rotary**	**644218**	**7070750**	**364**	**301 - 361**	**326***	**1232***	**6038***
K04R15	**Rotary**	**646454**	**7070594**	**350**	**290 - 350**	**265***	**1154***	**4993**

Coordinates are WGS84 Z19 South

* Average for multiple samples during extended air lift

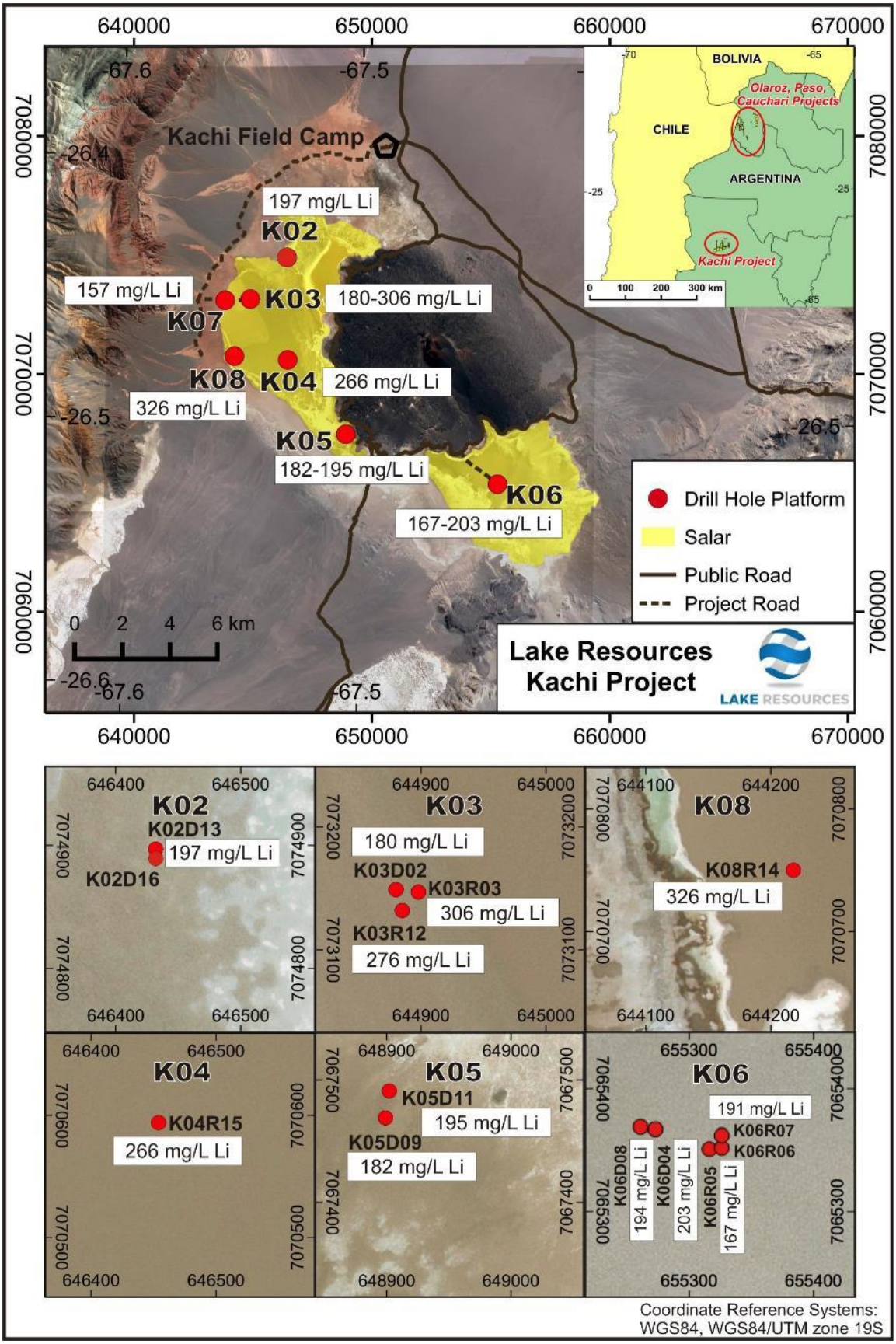

Figure 2. Kachi Lithium Project showing drilling locations, details of the drill hole layout at each location and lithium concentrations for each drill hole which are averaged where multiple brine samples have been taken at various depths.

KACHI GEOLOGY

THE TARGET AREA AND THICKNESS

Drilling by Lake to date has encountered a thin surficial zone of halite which extends to a maximum depth of 5 m. Beneath this diamond drilling intersected a thick sequence of intercalated sands, gravels and sandy clays with some clay horizons. The predominant litho-type of lake sediments is sand-dominant, and poorly consolidated, with relatively low core recoveries in sandy material. To date, drilling to depths of 400m has shown this to be a consistent feature of the stratigraphy of the Kachi Lake sediments.

The passive seismic geophysical technique has been used to map the basin geometry and thickness of the sediments hosting the brine. This method distinguishes lithologies with highly contrasting seismic velocities such as unconsolidated lake sediments and harder cemented sediments, basement rocks or ignimbrites (compact volcanic ash units) and has been used very successfully on a number of salt lake projects in South America and Australia.

Figure 3 shows a selection of seismic profiles undertaken at Kachi. The distinct reflectors identified in the survey correlate well with dense lithologies such as a number of ignimbrite units within the predominantly sandy sediments and probable basement rocks intersected at 300m depth in K06D08 in the south east of the project area. Drilling at K06 provides a correlation with the seismic survey and indicates the presence of unconsolidated sediments to a depth in excess of 500m under gravel cover away from the areas of surface salt. The seismic information suggests the basin is 700-800 m deep in the western area. The basement surface from the seismic lines has been contoured and the surface applied across the target area to assign the thickness of the sediments. The significant thickness of the basin echoes observations from other explorers in the highly prospective lithium basins in Argentina.

Figure 4 shows a combination of the Lake Resources lease boundaries at Kachi, a further 2-dimentional areal interpretation of lake sediment infill depths which is based on the complete set of passive seismic point locations and also the exploration target zonal areas which is based on the combination of drill hole and seismic data (discussed later).

Importantly the seismic survey suggests the majority of the basaltic volcanic material visible at surface forms a thin veneer overlying lake sediment (mushroom shaped), so that brine extends below the basaltic volcano and lake sediments extend to the north, west and south outside the bounds of the salt lake surface. This has led to the initial brine target area being expanded to the north, west and south of the visible salt lake area with lake sediments evident in seismic lines to significant depths below alluvial fans and relatively thin ignimbrites.

It is also noteworthy that based on this geological and geophysical interpretation the area of 295 km^2 has been applied to the exploration target and that there is a significant volume of lake sediments below the 400m depth of drilling which is used as a cut off depth for the exploration target estimate and the base of the sedimentary basin over a large proportion of the project area.

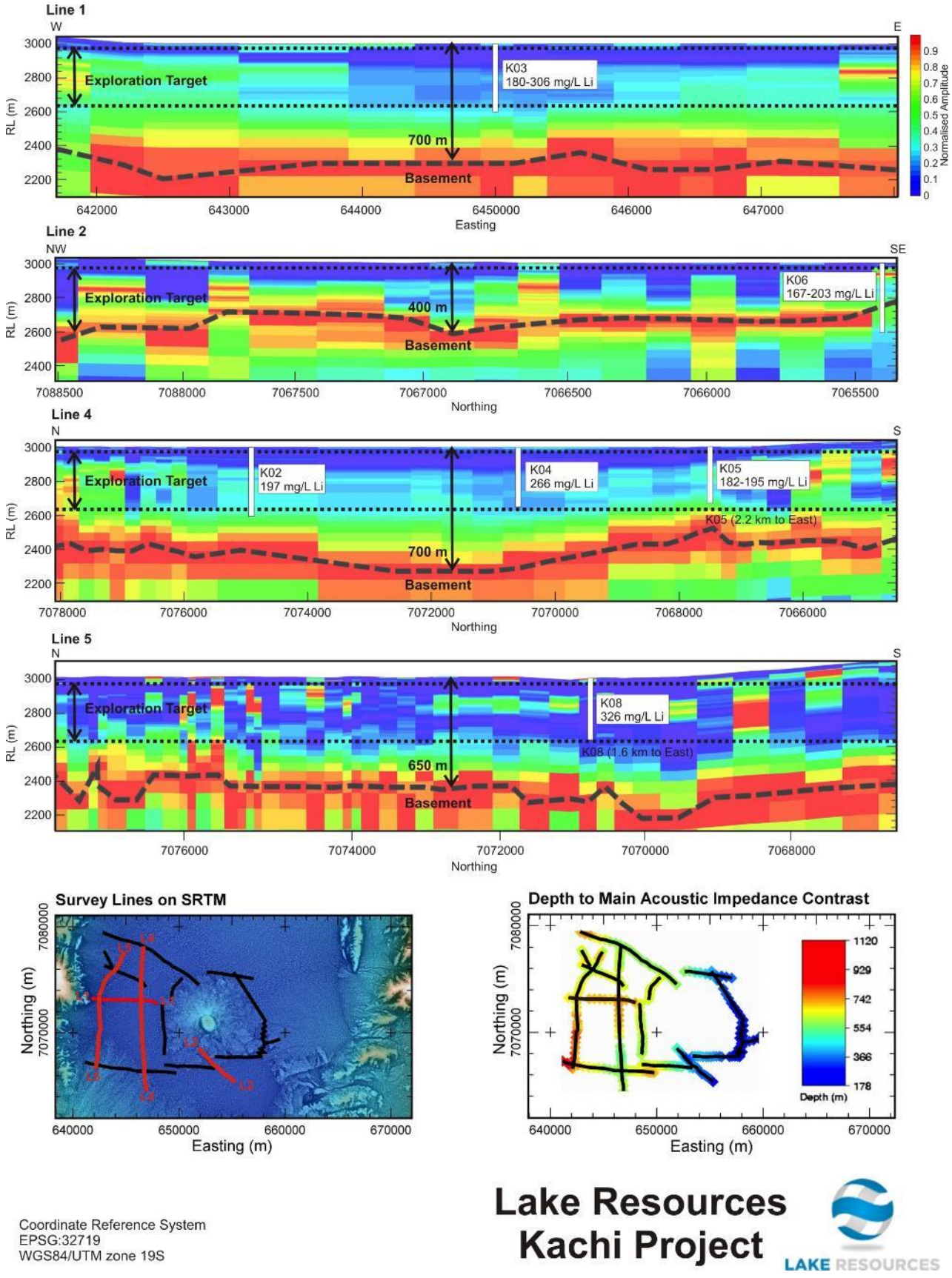

Figure 3. Kachi Lithium Project Seismic Profiles showing location and depth to basement together with the depths used in the exploration target calculation (Red line is the basement reflector)

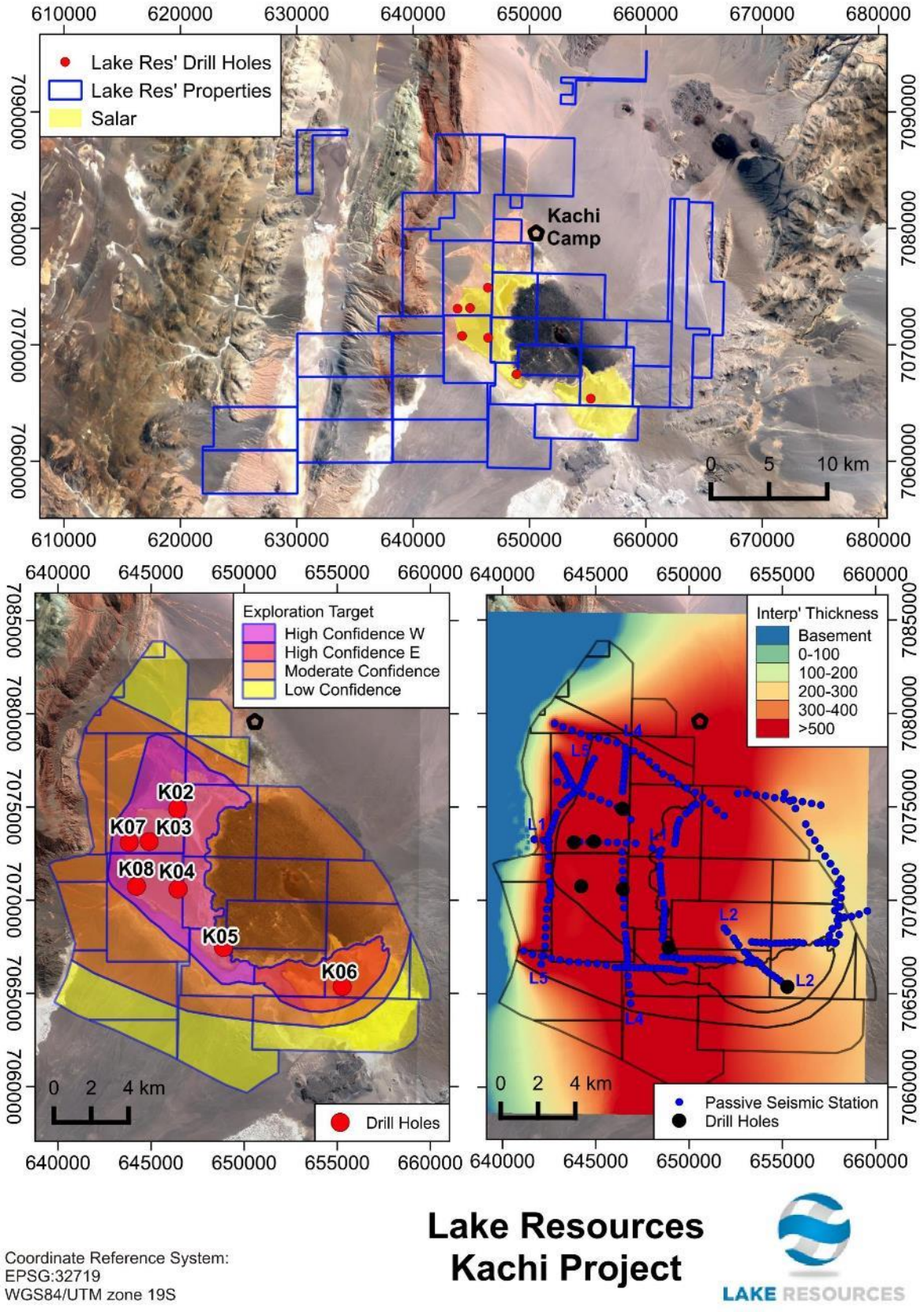

Figure 4. Kachi Lithium Project showing mining lease boundaries and areas defined by levels of confidence to the exploration target and Seismic Survey Results.

SEDIMENT POROSITY AND PERMEABILITY

Initial indications from field hydraulic testing indicate high permeabilities for the sandy material which is the predominant sediment, which will be further tested with the installation of large diameter production test bores. Samples have been collected for physical property testing from HQ diamond drilling. Drilling issues resulted in conversion to rotary (rock roller) methods within horizons dominated by sandier fractions which has resulted in a sample set which is skewed towards finer grain size fractions. This will likely result in an over estimation of average bulk porosity due to the higher clay fractions, but more importantly an under estimation of average specific yields. Figure 5 shows typical lithology variation, with finer sand in a clay matrix and unconsolidated lithic sands.

Samples have been sent for porosity tests in the Geosystems Analysis laboratory in the USA who have extensive experience in analysing salt lake sediments for their porosity characteristics, in particular the specific yield (also known as drainable porosity). Results have been received for this laboratory for 43 samples to date, which average 13% drainable porosity, varying between 2% and 31% with samples collected to date having a near normal distribution. Considering the presence of some clay intervals in the sediments and uncertainty given the relatively small number of samples the exploration target, an upper limit value of 10% drainable porosity value has been applied.

Figure 5 Typical sandy lithology variation in the Kachi sediments

Analytical Chemistry Results

Analytical results for lithium to date have been highest (more than 300mg/L lithium) in drill-holes K03R03 in the northern area of western high confidence zone and K08R14 in the northern area of western high confidence zone. Brine samples in these holes display encouraging densities with a favourable Mg/Li ratio of 3.8 to 4.3. Continuation of this area further south and west is a key target for ongoing investigation. There is a very high correlation of Lithium with Potassium.

Other brine samples from drill holes and surficial grid-based pit sampling ,shows a high variability of lithium concentrations with a higher relative magnesium concentration in locations that show lower lithium results. This suggests shallower samples are more variable, and potentially reflects the influence of more dilute surficial brine the shallow stratigraphy.

Based on analysis of the brine results, lithium values of between 210 and 310 mg/L lithium are used as the upper and lower lithium concentrations for the exploration target. This represents a variation in results to date of one standard deviation from the average in the western high confidence zone (150 and 250 mg/L in the eastern high confidence zone). Similarly, the presented potassium results used within the target area includes concentrations between 4180 mg/L and 5880 mg/L potassium, which represents one standard deviation from the average in the western high confidence zone.

GEOLOGICAL EXPLORATION TARGET

The geological exploration target area has been generated based on the following lines of logic.

A limited amount of drilling activity has been undertaken within the central area of the basin and predominantly within what has been called the western sector of the high confidence zone. Drilling to date has been limited to a maximum depth of 403m.

Additionally, a passive seismic survey has been undertaken over a large portion of the basin and this has provided a critical insight into basin delineation with summary data presented above showing basin depths in the west extending beyond 700m depth. The seismic profiles show a strong reflection boundary which has shown good correlation with drilling data from Platform K06 in the south east. This reflection boundary corresponds to partially cemented conglomerates, ignimbrites and basement lithologies. Above this are basin infill sediments with lower sediment density, which are sandy and relatively uniform in nature. These correlate to intercalated sands and clays to 400m depth in the drilling to date.

The exploration target area has three primary zones. An inner zone with the highest concentration of seismic survey lines and in which all drilling has currently been undertaken. This is the high confidence volume given the data collected to date.

A second, moderate confidence zone, which has seismic profile data but no drilling, surrounds the central high confidence zone where trends from geological analysis indicate considerable thicknesses of lake sediments are present. The brine may also continue outside of this zone as geological and geophysical evidence suggests it is open to the north and south into the low confidence zone.

The inner high confidence zone is further delineated into an Eastern Sector and Western Sector, based around the drilling results and differences in sediment thickness. The western Sector occupies a zone west of the basaltic shield volcano where indicated depths are more than 700m.

The key parameters in generating an estimate of the exploration target includes:

- a surface representing the base of the basin, as the primary reflection depth from the passive seismic results was generated representing the basin geometry
- Surface topography from SRTM99
- Upper 25m removed based on surface topography
- Maximum drilling depths to date; and
- Lake Resources property boundaries

An upper layer of 25m has been removed from the estimate. This has been based on geochemical data which indicates variable lithium grades and higher magnesium signature in the shallow zone. A volumetric model was built using raster mathematics within QGIS software and separated aerially based on the zones of confidence defined.

A range of specific yields was applied to the resulting volumetric zones, 7% and 10% respectively. Although the average data from physical property testing to date suggests a higher potential value (bulk average Sy = 13%), there is some uncertainty of higher value results as these tend to be sand dominated and are disturbed. Validation of composite specific yield data will improve validation with aquifer test pumping planned at a later date. The resulting volume represents pore space that is potentially recoverable and occupied by brine.

Lithium and potassium concentrations were applied to the brine volumetric estimates for each zone. The upper and lower concentration estimate is based on analytical geochemistry to date and the range represents one standard deviation from the overall average.

Conversion factors were applied to the resulting mass of Lithium to produce an estimate of Lithium Carbonate (5.32) and for Potassium to Potassium Chloride (1.91). The results are presented in Table 2.

The geological exploration target is estimated to range between **8 Mt and 17 Mt LCE**. This includes between **1.6 Mt and 3.4 Mt LCE** within the area nominated as the High Confidence Western Zone. Table 2 provides the details of the geological exploration potential in the confidence sectors defined The upper and lower ranges of the geological potential were bounded by one standard deviation around the calculated average lithium concentration of the limited data collected to date. All indications are that the typical lake infill stratigraphy of the salar system has excellent hydraulic characteristics. The geology of the Kachi basin suggests there is good potential to convert brine within the exploration target to a defined resource. The exploration target is based on completed exploration within the high probability zone, with the moderate probability zone subject to future exploration.

Table 2: Kachi Project Potential – Exploration Target Estimate

KACHI EXPLORATION TARGET ESTIMATE										
Subarea	**Area km²**	**Average Thickness m**	**Specific yield %**	**Brine volume million m³**	**Lithium Concentration mg/L**	**Contained Lithium metric tonnes**	**Lithium Carbonate tonnes***	**Potassium Concentration mg/L**	**Contained Potassium metric tonnes**	**Potassium Chloride tonnes***
UPPER RANGE SCENARIO										
High Confidence Western Sector	55.2	375	10%	2,801	310	641,000	**3,412,000**	5,880	16,470,000	31,457000
High Confidence Eastern Sector	16.7	338	10%	873	250	141,000	752,000	5,880	5,133,000	9,804,000
Moderate Confidence Sector	150.7	350	10%	6,631	310	1,633,000	8,689,000	5,880	38,990,000	74,471,000
Low Confidence Sector	72.6	321	10%	2,733	310	723,000	3,849,000	5,880	16,070,000	30,694,000
					Total	3,139,000	**16,700,000**			
LOWER RANGE SCENARIO										
High Confidence Western Sector	55.2	375	7%	2,801	210	304,000	**1,618,000**	4,180	6,053,000	32,204,000
High Confidence Eastern Sector	16.7	338	7%	873	150	83,000	442,000	4,180	1,655,000	8,803,000
Moderate Confidence Sector	150.7	350	7%	6,631	210	774,000	4,120,000	4,180	15,415,000	82,009,000
Low Confidence Sector	72.6	321	7%	2,733	210	343,000	1,825,000	4,180	6,828,000	36,327,000
					Total	1,480,000	**7,878,000**		29,951,000	159,342,000

Numbers may not add, due to rounding

An exploration target is not a mineral resource. The potential quantity and grade of the exploration target is conceptual in nature, and there has been insufficient exploration to define a Mineral Resource in the volume where the Exploration Target is outlined. It is uncertain if further exploration drilling will result in the determination of a Mineral Resource in this volume. The exploration target is where, based on the available geological evidence, there is the possibility of defining a mineral resource. Importantly the exploration target

is not to be considered a resource or reserve. The exploration target is based on a series of assumptions and future drilling is required to determine the brine grade and formation drainable porosity values to establish whether a resource can be defined.

Competent Person's Statement – Cauchari Lithium Brine Project

The information contained in this ASX release relating to Exploration Results has been compiled by Mr Andrew Fulton. Mr Fulton is a Hydrogeologist and a Member of the Australian Institute of Geoscientists and the Association of Hydrogeologists. Mr Fulton has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a competent person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Andrew Fulton is an employee of Groundwater Exploration Services Pty Ltd and an independent consultant to Lake Resources NL. Mr Fulton consents to the inclusion in this announcement of this information in the form and context in which it appears. The information in this announcement is an accurate representation of the available data from initial exploration at the Cauchari project.

About Lake Resources NL (ASX:LKE)

Lake Resources NL (ASX:LKE, Lake) is a lithium exploration and development company focused on developing its 3 lithium brine projects and 1 hard rock project in Argentina, all owned 100%. The leases are in a prime location among the lithium sector's largest players within the Lithium Triangle where half of the world's lithium is produced. Lake holds one of the largest lithium tenement packages in Argentina (~200,000Ha) secured in 2016 prior to a significant 'rush' by major companies. The large holdings provide the potential to provide consistent security of supply demanded by battery makers and electric vehicle manufacturers.

The Kachi project covers 69,000 Ha over a salt lake south of FMC's lithium operation and near Albemarle's Antofalla project in Catamarca Province. Drilling at Kachi has confirmed a large lithium brine bearing basin over 20km long, 15km wide and 400m to 800m deep. Drilling over Kachi (currently 15 drill holes, 3000m) has produced an exploration target and is anticipated to produce a resource statement in late 2018. A direct extraction technique is being tested in partnership with Lilac Solutions, which has shown 80-90% recoveries and lithium brine concentrations in excess of 3000 mg/L lithium and is planned to be trialled on site in tandem with conventional methods as part of a PFS to follow the resource statement. Scope exists to unlock considerable value through partnerships and corporate deals in the near-term.

The Olaroz-Cauchari and Paso brine projects are located adjacent to major world class brine projects either in production or being developed in the highly prospective Jujuy Province. The Olaroz-Cauchari project is located in the same basin as Orocobre's Olaroz lithium production and adjoins Ganfeng Lithium/Lithium Americas Cauchari project, with high grade lithium (600 mg/L) with high flow rates drilled immediately across the lease boundary.

Two drill rigs are currently drilling at Cauchari with results anticipated to extend the proven resources in adjoining properties into LKE's area with results anticipated from November into December 2018. This will be followed by drilling extensions to the Olaroz area in LKE's 100% owned Olaroz leases.

Significant corporate transactions continue in adjacent leases with development of Ganfeng Lithium/Lithium Americas Cauchari project with Ganfeng announcing a US$237 million for 37% of the Cauchari project previously held by SQM. Nearby projects of Lithium X were acquired via a takeover offer of C$265 million completed March 2018. The northern half of Galaxy's Sal de Vida resource was purchased for US$280 million by POSCO in June 2018. These transactions imply an acquisition cost of US$55-70 million per 1 million tonnes of lithium carbonate equivalent (LCE) in resources.

The demand for lithium continues to be strong for lithium ion batteries in electric vehicles, according to recent data from the leading independent battery minerals consultant - Benchmark Mineral Intelligence. Supply continues to be constrained suggesting good opportunities for upstream lithium companies for many years.

APPENDIX 1 - JORC Code, 2012 Edition

Table 2 Report: Kachi Lithium Brine Project

Criteria	Section 1 - Sampling Techniques and Data
Sampling techniques	• Brine samples were taken from the diamond drill hole with a bottom of hole spear point during advance and using a 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 lined to avoid leakage. • The brine sample was collected in a clean plastic bottle (1 litre) and filled to the top to minimize air space within the bottle. A duplicate was collected at the same time 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.
Drilling techniques	• 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. • Brine has been used as drilling fluid for lubrication during drilling.
Drill sample recovery	• 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 recoveries were measured from the cores 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 sediments within the packer). • 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	• Sand, clay, silt, salt and cemented rock types was 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 senior geologist who also supervised taking of samples for laboratory porosity analysis 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. When cores are split for sampling they are photographed.
Sub-sampling techniques and sample preparation	• Brine samples were collected by packer and spear sampling methods, over a metre. Low pressure airlift tests are used as well to purge test interval and gauge potential yields. • 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.
Quality of assay data and laboratory tests	• The Alex Stewart Argentina/Nor lab SA in Palpala, 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 analyzed blind control samples and duplicates in the analysis chain. The Alex Stewart/Norlab SA 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/Norlab SA laboratory or SGS laboratory are considered to be of high quality and comparable to those employed by ISO certified laboratories specializing in analysis of brines and inorganic salts.
Verification of sampling and assaying	• 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,

	will be 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/Norlab SA 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. • Regular calibration using standard buffers is being undertaken.
Location of data points	• The diamond drill hole sample sites and rotary drill hole sites were located with a hand-held GPS. • The properties are located at the junction of the Argentine POSGAR grid system Zone 2 and Zone 3 (UTM 19) and in WGS84 Zone 19 south.
Data spacing and distribution	• Brine samples were collected over 1m intervals every 6 m intervals within brine producing aquifers, where this was possible.
Orientation of data in relation to geological structure	• The salt lake (*salar*) deposits that contain lithium-bearing brines generally have sub-horizontal beds and lenses that contain sand, gravel, salt, silt and clay. The vertical diamond drill holes will provide a better understanding of the stratigraphy and the nature of the sub-surface brine bearing aquifers
Sample security	• Samples were transported to the Alex Stewart/Norlab SA laboratory or SGS laboratory 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. • 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 not related to the location.
Review (and Audit)	• No audit of data has been conducted to date. However, the CP has been onsite periodically during the programme. The review included drilling practice, geological logging, sampling methodologies for water 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.
Criteria	**Section 2 - Mineral Tenement and Land Tenure Status**
Mineral tenement and land tenure status	• The Kachi Lithium Brine project is located approximately 100km south-southwest of FMC's Hombre Muerto lithium operation and 45km south of Antofagasta de la Sierra in Catamarca province of north western Argentina at an elevation of approximately 3,000m asl. • The project comprises approximately 69,047 Ha in thirty six mineral leases (minas) of which five leases (9,445 Ha) are granted for drilling, twenty two leases are granted for initial exploration (51,560 Ha) and nine leases (8042 Ha) are applications pending granting. • The tenements are believed to be in good standing, with statutory payments completed to relevant government departments.
Exploration by other parties	• Marifil Mines Ltd conducted sparse near-surface pit sampling of groundwater at depths less than 1m during 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 drillholes 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	• The known sediments within the *salar* consist of salt/halite, 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	• 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).
Data aggregation methods	• Assay averages have been provided where multiple sampling occurs in the same sampling interval.
Relationship between mineralisation widths and intercept lengths	• Mineralisation interpreted to be horizontally lying and drilling perpendicular to this.

Diagrams	• A drill hole location plan is provided showing the locations of the drill platforms. Individual drill locations are provided in Table 1.
Balanced reporting	• Brine assay results are available from 13 drill holes from the drilling to date, reported here. Information will be provided as it becomes available.
Other substantive exploration data	• There is no other substantive exploration data available regarding the project.
Further work	• The company is undertaking a 1000m maiden diamond drilling programme and 2000m maiden rotary water well drilling programme which may be expanded based on results.