ASX Market Announcements Office 23 August 2019

FINAL RESULTS CONFIRM HIGH GRADE LITHIUM DISCOVERY AT CAUCHARI

Wide 506m Interval Highlights Potential Size of Lithium Brine Project

- **Lithium brines intersected over 506m from 102m to a greater depth of 608m, the base of hole.**
- **Higher grades averaged 493 mg/L lithium in final results over a wide interval totaling 343m from Lake's Cauchari Lithium Brine Project, Argentina, with highest results of 540mg/L lithium.**
- **Results confirm a significant discovery interpreted as an extension to the neighbouring world-class project, which has similar results of 580mg/L lithium average grade in Indicated resource ([1]) and is under construction for production next year.**
- **Cauchari results boost confidence in pending drilling now being finalised for Lake's Olaroz project, aiming to repeat the success at Cauchari.**
- **Positive outlook follows an increased focus by downstream battery companies on the benefits of low-cost brine production from the Lithium Triangle.**

Lake Resources NL (ASX: LKE) announced today high-grade final results from its 100% owned Cauchari Lithium Brine Project which confirm a significant discovery, interpreted as an extension to the world-class neighbouring project moving to production next year in the heart of the Lithium Triangle.

The high-grade results averaged* 493 mg/L lithium over 343m (from 117m to 460m), up to 540 mg/L, with a Li/Mg ratio of 2.9. These results are similar to the adjoining major Cauchari project of Ganfeng/Lithium Americas (NYSE:LAC) which has a Measured and Indicated Resource of 17.9Mt LCE at 581 mg/L lithium (Apr 2019 NI 43-101) ([1]). Lake's results lead to an interpretation of an extension of the adjoining project, with a marginal difference in grade, in the same basin (refer table below with the range of lithium grades and intervals).

Brines were intersected over 506m from 102m to 608m. Lower flow rates below 465m depth led to the hole being completed at 608m. A test sample of almost the entire hole averaged 444 mg/L lithium over 476m from 132m down to 608m. The drillhole has had slotted casing installed to allow for future testing.

Lake's Managing Director Steve Promnitz commented: "*Independent assays and detailed sampling from Lake's Cauchari drilling has conclusively demonstrated it is an extension to the adjoining large resources - a project with the world's largest defined lithium brine resource. We are in the same basin and confident of growing the project with further drilling given we have a 7km strip along the salt lake. The approach to drill brines under alluvial cover around a salt lake has been proven and we aim to repeat that approach at our Olaroz project.*

"This boosts confidence in the planned drilling being prepared at our 100% owned Olaroz Lithium Brine Project, with the goal of extending the brines that hosts current production by Orocobre (ASX.ORE). Olaroz has the potential to be another standalone project, with Lake aiming to have three defined lithium brine projects in the heart of the Lithium Triangle from where low-cost lithium production comes. Significantly for investors, major Chinese producer Ganfeng Lithium invested a combined US$397 million to acquire a 50% stake in its Cauchari project, demonstrating the value of such large, low cost lithium brine producing projects. Our discussions continue with potential development partners for our 100% owned Kachi Lithium Brine Project where a pre-feasibility study is underway together with a pilot plant."

"Meanwhile, analysts including the Australian government forecaster, Benchmark Mineral Intelligence and Wood Mackenzie are all pointing to a looming supply deficit for lithium by the early to mid-2020s, while automakers continue to ramp up planned electric vehicle output. Investors that focus on the near-term market opportunity will be rewarded, particularly those projects that can benefit from the world's lowest cost lithium production."

Assay Interval (m)	Lithium (mg/L) 1st Packer
PACKER SAMPLE	
102m	421
121m	475
132m	422
156m	509
178m	506
190m	509
219m	461
231m	452
247m	522
256m	527
265m	540
289m	500
307m	495
367m	481
387m-460m	496
132m-608m	444

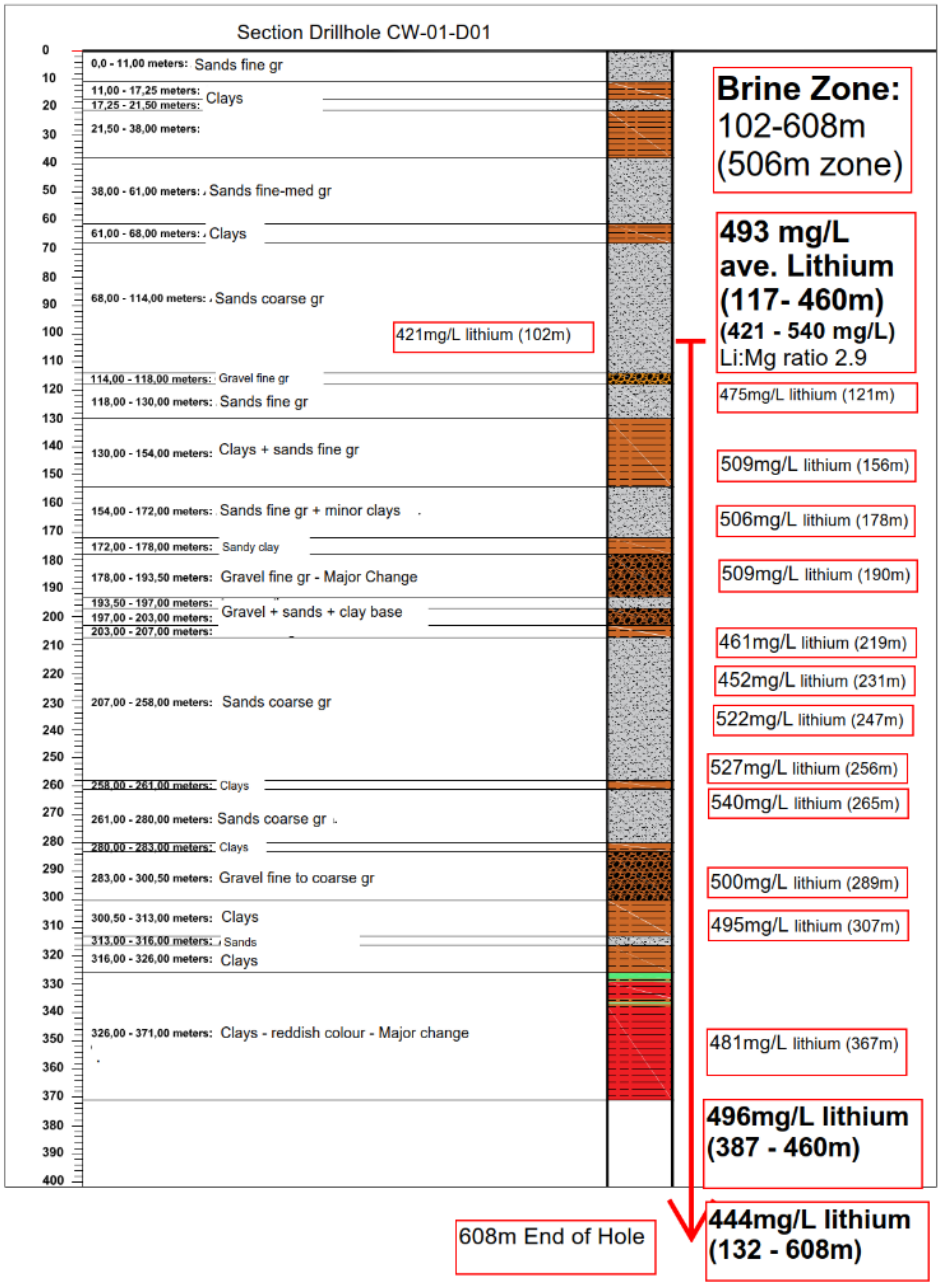

Fig 1: Summary lithium results/intervals with updated section from the drillhole at Cauchari with 506m brine zone.

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Footnotes:

(*) Arithmetic average of values across interval without consideration of total interval. Averagetotal interval values may change on future pump tests.

(*1): Cauchari-Olaroz Mineral Resource Statement of Lithium Americas/Ganfeng joint venture in a NI 43-101 Technical Report filed 1 April 2019 on the TSX-V, prepared by Ernest Burga (P.Eng), David Burga (P.Geo), Wayne Genck (P.Eng) and Daniel Weber (P.G., RM-SME) each of whom is a qualified person for the purposes of NI 43-101, available publicly on SEDAR.

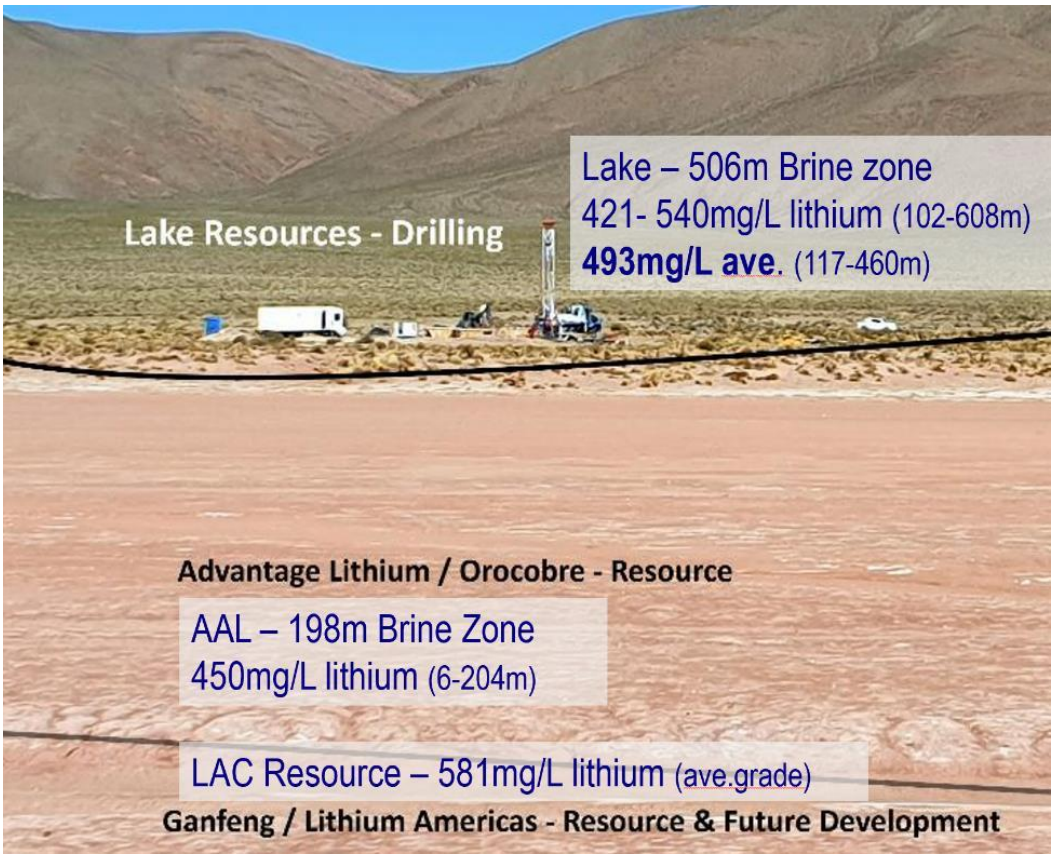

Figure 2,3: Location of LKE's drill operations at Cauchari in relation to Advantage Lithium/Orocobre & Gangfeng/Lithium Americas leases. (Note: The marked boundaries are indicative only. Please refer to Figure 4).

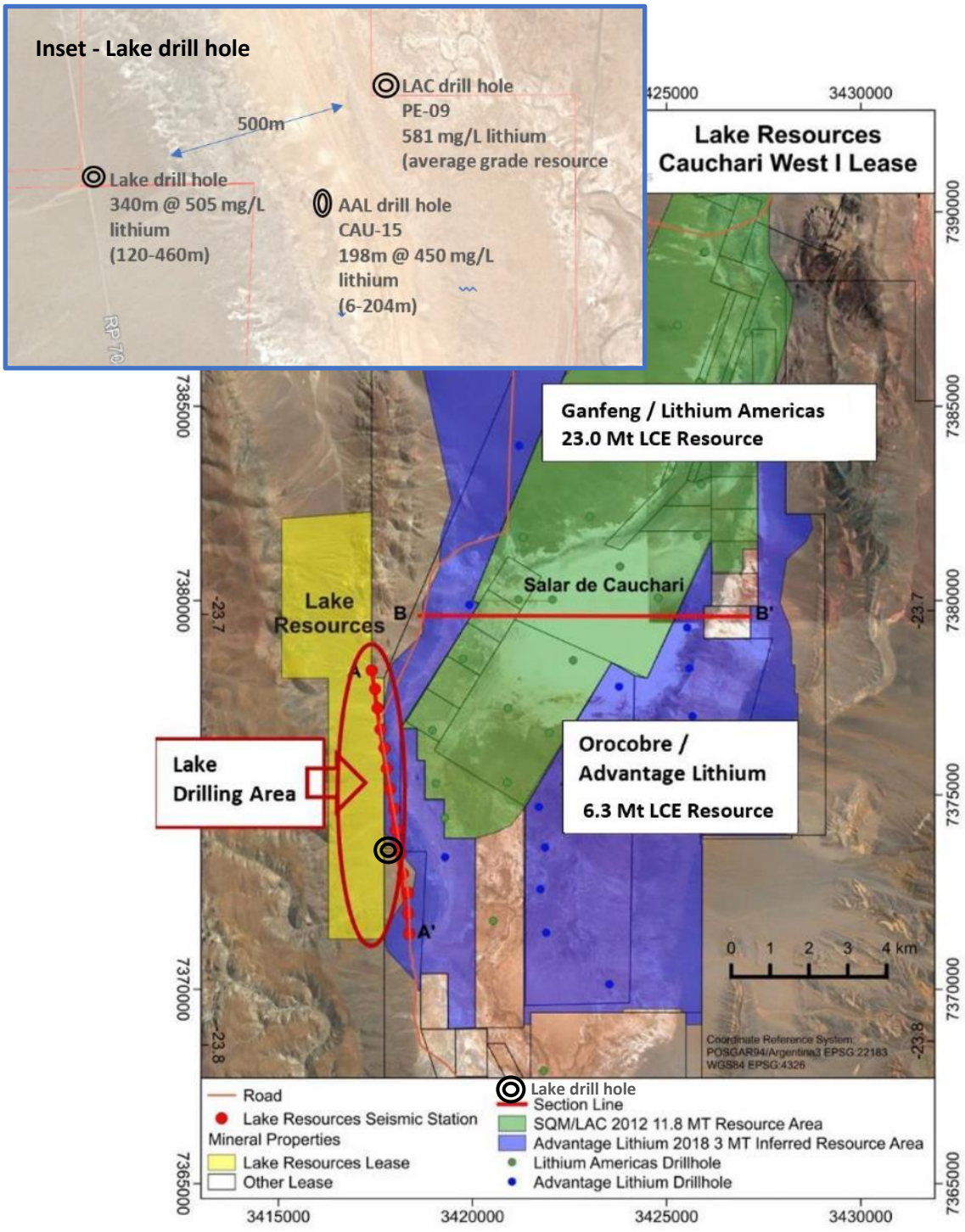

Figure 4: Cauchari Lithium Project, with adjoining Ganfeng / Lithium Americas combined resource and Orocobre / Advantage Lithium combined resource with (Orocobre announcements 7/11/2017, 4/12/2017, 18/01/2018, 15/03/19; Advantage Lithium announcement 5/3/2018, 10/01/2019, 7/03/19, 24/04/19). (Third Party Resource details summarised in LKE's ASX announcement dated 6 Sept 2018)

Figure 5: Cauchari Lithium Project of Ganfeng / Lithium Americas (NYSE:LAC) showing development aimed for production next year

Competent Person's Statement – Kachi 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.

About Lake Resources NL (ASX:LKE)

Lake Resources NL (ASX:LKE, Lake) is a lithium exploration and development company focused on developing its three lithium brine projects and 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, scalable as required, which is demanded by battery makers and electric vehicle manufacturers.

The Kachi project covers 70,000 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 16 drill holes, 3100m) has produced a maiden indicated and inferred resource of 4.4 Mt LCE (Indicated 1.0Mt and Inferred 3.4Mt) (refer ASX announcement 27 November 2018).

A direct extraction technique is being tested in partnership with Lilac Solutions, which has shown 80-90% recoveries and lithium brine concentrations over 50,000 mg/L lithium. Phase 1 Engineering Study results have shown operating costs forecast at US$2600/t LCE in the lowest cost quartile (refer ASX announcement 10 December 2018). This process is will be trialed on site with a pilot plant in tandem with conventional methods as part of the PFS underway, ready by year end. Discussions are advanced with downstream entities, mainly battery makers, to jointly develop the project.

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.

The Cauchari project has shown lithium brines over 506m interval with high grades averaging 493 mg/L lithium (117-460m) and high flow rates, with up to 540 mg/L lithium. These results are similar to lithium brines in adjoining pre-production areas under development and infer an extension and continuity of these brines into Lake's leases(refer ASX announcements 28 May, 12 June 2019). The Olaroz project is planned to be drilled for the first time in LKE's 100% owned Olaroz leases as soon as drilling is completed at Cauchari.

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, followed by a further US$160 million to increase Ganfeng's equity position to 50% on 1 April 2019, together with a resource that had doubled to be the largest on the planet. Ganfeng then announced a 10 year lithium supply agreement with Volkswagen on 5 April 2019. 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-Dec 2018. LSC Lithium was acquired in Jan-Mar 2019 for C$111 million by a mid-tier oil & gas company with a resource size half of Kachi. These transactions imply an acquisition cost of US$55-110 million per 1 million tonnes of lithium carbonate equivalent (LCE) in resources.

For more information on Lake, please visit http://www.lakeresources.com.au/home/

Table 1: Cauchari Lithium Project – details of drill-hole locations and assay results

Drill Hole	Drilling Method	Easting	Northing	Elevation	Total Depth (m)	Az / Dip (deg)	Assay Interval (m)	Lithium (mg/L) 1st Packer	Lithium (mg/L) 2nd Packer	Magnesium (mg/L)	Potassium (mg/L)
							PACKER SAMPLES				
CW01D01	Diamond	3418810	7373543	3948	608	90	**102m**	**421**	473	1330	3570
							121m	**475**	473	1450	3900
							132m	**422**		1370	3630
							156m	**509**	486	1490	4170
							178m	**506**	493	1500	4150
							190m	**509**	490	1510	4200
							219m	**461**		1440	4310
							231m	**452**		1400	4150
							247m	**522**	486	1520	4300
							256m	**527**	501	1540	4310
							265m	**540**	488	1520	4290
							289m	**500**	479	1510	3910
							307m	**495**	486	1400	4100
							367m	**481**	474	1380	3940
							387m-460m	**496**	483	1480	4080
							132m-608m	**444**		1410	3910
CW01R02	Rotary	3418801	7373545	3948	230 (*)	90					

** = Hole terminated early due to drilling issues without samples*

Coordinates are Argentine POSGAR Zone3 (UTM19)

Detailed sampling results with two passes of the packer instrument (with 2 assay results).

Previous preliminary results have been removed due to detailed packer sampling results.

APPENDIX 1 - JORC Code, 2012 Edition

Table 2 Report: Cauchari Lithium Brine Project

Criteria	Section 1 - Sampling Techniques and Data
Sampling techniques	• Brine samples were taken from the diamond drill hole with a bailer during advance and when the hole was completed, or paused at 460m, a single and double packer device was used 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 will be used as well. The fluid used for drilling is either brine sourced from the drill hole or nearby pumped water mixed into a brine. The return from drillhole passes back into the excavator dug pit lined to avoid leakage. Two passes of the packer were used to compare results. • 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 cuttings were collected each metre from the parts of the hole drilled with a tricone bit. • Drill core in the hole was recovered in 1.5 m length core runs in core split tubes when drilling was undertaken with a diamond bit. 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 with a bailer as drilling advanced. Deatiled brine samples were also collected once the drill hole wass completed, or paused at 460m, using a double packer over a 1.5 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, breccia, coarse sandstone/conglomerate and cemented rock types 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 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	• Preliminary brine samples were collected by bailer and detailed brine samples were collected by packer sampling methods, over 1.5 metres, when the drill hole is completed or paused at 460m. Low pressure airlift tests were used 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 lab 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 is used for both primary and check samples. They also analyzed 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.
Verification of sampling and assaying	• Field duplicates, standards and blanks are 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 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 pH/EC multiprobe. • Calibration using standard buffers is being undertaken at times.
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 in the Argentine POSGAR grid system Zone 3 (UTM 19) and in WGS84 Zone 19 south.
Data spacing and distribution	• Brine samples were collected over 1.5m intervals within brine producing aquifers, where possible. BPreliminary brine samples were collected were possible as the drill hole progressed with packer samples collected after the hole was paused at 460m and when the hole was completed.
Orientation of data in relation to geological structure	• The salt lake (*salar*) deposits generally have sub-horizontal beds and lenses that contain sand, gravel, salt, silt, clay, breccia and coarse sandstone/conglomerate. The vertical diamond drill holes 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 laboratory or SGS laboratory for chemical analysis in sealed 1-litre rigid plastic bottles with sample numbers clearly identified. Samples will be 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 location.
Review (and Audit)	• An audit of data has been conducted on site by the CP during August 2019 and has provided updated guidance to the technical people. The CP will be onsite periodically in the future as drilling progresses during the programme .
Criteria	**Section 2 - Mineral Tenement and Land Tenure Status**
Mineral tenement and land tenure status	• The Cauchari Lithium Brine project is located approximately 500m from the Ganfeng/Lithium Americas Cauchari pre-production area and 25km south of Orocobre's Olaroz lithium operation, and 23km north east of Catua in Jujuy province of north western Argentina at an elevation of approximately 3,900m asl. • The project comprises approximately 1936 Ha in one mineral lease (minas) granted for drilling. Cauchari is a part of the Cauchari-Olaroz project with 17,953 Ha in eleven mineral leases (minas) with 10 granted access for exploration, 5 granted for drilling and 5 in the last phase prior to drilling approval. • The tenements are believed to be in good standing, with statutory payments completed to relevant government departments.
Exploration by other parties	• Lithium Americas (Ganfeng Lithium 50% JV) has completed a series of drilling campaigns with rotary and diamond drill rigs since 2009 with drilling still continuing on production wells as part of the pre-production drilling. A combined resource of 23 million tonnes lithium carbonate equivalent (LCE) has been reported on 1 April 2019, comprised of 18.0 million tonnes LCE in the Measured & Indicated category and 5.0 million tonnes in the Inferred category. This resource doubled from the previous resource in July 2012 of 11.8 million tonnes LCE in the Measured & Indicated category. • Results were reported in an NI 43-101 report by Mark King, Roger Kelley and Daron Abbey in July 2012 and April 2019 for Lithium Americas. Cauchari-Olaroz Mineral Resource Statement of Lithium Americas/Ganfeng joint venture in a NI 43-101 Technical Report filed 1 April 2019 on the TSX-V, prepared by Ernest Burga (P.Eng), David Burga (P.Geo), Wayne Genck (P.Eng) and Daniel Weber (P.G., RM-SME) each of whom is a qualified person for the purposes of NI 43-101, available publicly on SEDAR.

	• Advantage Lithium (Orocobre 25% JV) has completed a series of drilling campaigns with one rotary hole and 25 diamond drill holes since 2011. A combined resource of 6.3 million tonnes lithium carbonate equivalent (LCE) has been reported in March 2019, released 19 April 2019, comprised of 4.8 million tonnes LCE in the Measured & Indicated category and 1.5 million tonnes in the Inferred category. This resource doubled from the previous combined resource in 2018 of 3 million tonnes LCE in the Measured & Indicated and Inferred categories. Gravity, VES, TEM and AMT ground geophysical surveys were completed prior to and following drilling campaigns. • Results were reported in an NI 43-101 report by Fritz Reidel in April 2019 and Fritz Reidel with P Ehren in June 2018 for Advantage Lithium and in December 2016 by M Brooker and P Ehren for Advantage Lithium and in April 2010 by John Houston for Orocobre. Cauchari Mineral Resource Statement of Advantage Lithium/Orocobre joint venture in a NI 43-101 Technical Report filed 19 April 2019 on the TSX-V and ASX, prepared by Fritz Reidel (CPG), who is a qualified person for the purposes of NI 43-101, available publicly on SEDAR..
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 and 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	• Results are final analytical laboratory results. No data aggregation has been undertaken. Assayresults have been provided without averages where multiple sampling occurs in the same sampling interval.
Relationship between mineralisation widths and intercept lengths	• Mineralisation interpreted to be horizontally lying and drilling is perpendicular to the horizons.
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	• Detailed information from the packer sampling together with preliminary brine assay results are available from the drilling.
Other substantive exploration data	• There is no other substantive exploration data available regarding the project.
Further work	• The company is undertaking an 600m maiden diamond drilling programme and 300m maiden rotary water well drilling programme which may be expanded based on results.