

ASX / TSX ANNOUNCEMENT

4 December 2017

CAUCHARI HOLE CAU16 - HIGH GRADE INTERVAL AVERAGES 529 MG/L LITHIUM

Orocobre Limited (ASX: ORE, TSX: ORL) ("Orocobre" or "the Company") is pleased to provide an update on the brine sampling of diamond drill hole CAU16 in the previously undrilled NW Sector of the Cauchari JV property located in Jujuy Province, Argentina.

The exploration program is being managed by JV partner **Advantage Lithium Corp.** ("Advantage Lithium") (TSX Venture: AAL) (OTCQX: AVLIF) who hold 50% of Cauchari, earning up to 75%. Orocobre owns 35% of Advantage Lithium's issued capital.

Highlights:

- Systematic brine sampling is now complete in hole CAU16 which intersected permeable sandy sediments that are expected to yield relatively high pumping rates
- The brine body extends over >284 metres vertically starting at 14 metres and includes a 81 metre high grade interval from 118-199 metres, similar to CAU07, 3 kilomtres north
- The high grade brine interval averages 529 mg/l Lithium and 4,306 mg/l Potassium, including four samples averaging 619 mg/l Lithium from 169 to 199 metres
- The brine has a low Mg/Li ratio of 2.5:1, similar to CAU07 and the brine being processed at the Olaroz Lithium Facility making it suitable for the same processing route
- Diamond drill hole CAU15 (6.5 km south of CAU16) is currently at 205 metres and encountering intervals of sand in the hole similar to CAU16 and CAU07
- Pumping tests have commenced on wells installed in rotary holes CAU08 and CAU10

Managing Director and CEO, Richard Seville commented, "We are very pleased with the results being generated by the drilling programs managed by JV partner, Advantage Lithium. The results from CAU16 confirm the continuation of the brine body south from CAU07 with good grades and good chemistry. The presence of sandy sediments throughout the hole is a very positive indicator for both porosity and potential flow rates and brine extraction. Drilling will continue in the SE and NW sectors into 2018 with three drill rigs now secured."

CAU16 Drilling Results

The average concentration over the sampled length of CAU16 (14 – 298 metres, total depth 321.5 metres) is 436 mg/l Lithium and 3,608 mg/l Potassium from 40 primary samples taken at systematic depth intervals.

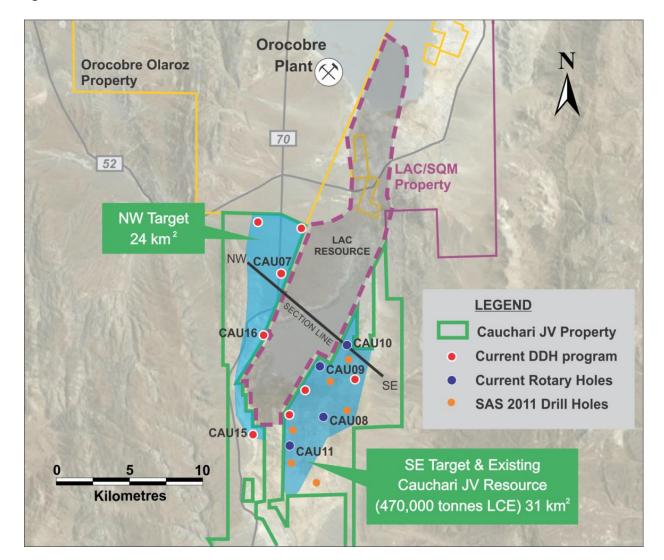
Sampling delineated a high-grade brine interval averaging 529 mg/l Lithium and 4,306 mg/l Potassium over 81 metres (118-199 metres) within the larger brine body. Four brine samples within the previously reported 169-199 metre interval average 619 mg/l Lithium and are part of the 81 metre interval average of 529 mg/l Lithium.

Table 1: Brine sample results from CAU16

Sample depth m	Li mg/l	K mg/l	Mg mg/l	Ca mg/l	Mg/Li
Average 14 to 114 m	307	2,544	816	628	2.7
Average 118 to 198.5 m	529	4,306	1,235	453	2.3
Average 204 to 297.5 m	411	3,588	1,052	533	2.6
Average all of hole	436	3,608	1,067	524	2.5

The brine body defined to date continues from CAU07 in the north, through CAU16 and further south to hole CAU15, which is currently being drilled. This is a distance of over 12.5 km approximately north-south. These diamond core holes have all intersected relatively permeable sandy sediments that are expected to yield relatively high pumping rates from the NW Sector, which is very positive for future brine extraction.

Figure 1: Location of CAU16 and other drill holes



Brine sampling was undertaken systematically at nominal six metre depth intervals using both bailer and packer sampling equipment, depending on the conditions encountered in the hole. The average concentration for the high-grade interval (118-199 metres) and average concentration over the entire length of CAU16 (to 298 metres) is based on both bailed and packer samples.

The Mg/Li ratio in all brine samples is consistently low, averaging 2.5:1 across all the samples, and 2.3:1 in the high-grade interval. The consistently low Mg/Li ratio confirms the suitability of the brine for conventional brine processing, as applied at the nearby Olaroz project.

Drill core samples from CAU07 and CAU16 have been sent to an experienced porosity laboratory in the United States, where they will be analysed for drainable porosity characteristics for use in the upcoming resource estimate.

SE Sector Drilling - CAU08 and CAU11 Progress

In the SE sector, well development and pump installations have been completed on rotary holes CAU08 and CAU11 in preparation for initial pumping tests and collection of composite brine samples.

Managing Director and CEO, Mr Richard Seville, also commented "These results give us further confidence to continue exploration efforts in the very strategic NW sector, located immediately south of our Olaroz properties. The CAU16 results suggest the brine body on the NW side has the potential to be an important part of the overall resource base with the potential to support a stand-alone processing facility."

Table 2: Drill hole location and details

Exploration Hole Number	Total Depth	Installed Depth (m)	Assay Interval	Lithium (mg/l avg)	Potassium (mg/l avg)	Drilling method	Coordinat Kruger Arger		Elevation mean sea	Azimuth	Dip
Number	(m)	(111)	(111)	(IIIg/I avg)	(Ilig/Tavg)	illetilou	Easting	Northing	level (m)		
CAU07*	274.5	To be deepened	236 m only	635	4,772	Diamond	3,421,199	7,383,989	3,940	0	-90
		Not yet	14-298	529 within	4,306 within	Diamond					
CAU16*	321.5	installed	14-296	436 interval	3,608 interval	Diairioliu	3,419,935	7,379,900	3,900	0	-90
CAU15*	In progress	In progress	NA	NA	NA	Diamond	3,419,288	7,373,385	3,900	0	-90

^{*}Planned coordinates to be confirmed by a surveyor

JORC Table 1 – Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
sampling techniques •	Nature and quality of sampling (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.	Drill core in holes CAU07 and CAU16 was recovered in 1.5 m length core runs in polycarbonate tubes where these were available, to minimize sample disturbance. Where these tubes were not available standard core split triple tubes were used, with core samples wrapped in cling-film and duct tape following recovery, to prevent moisture loss from the core before storage in core boxes. Drill core was undertaken to obtain representative samples of the sediments that host brine. Brine samples were collected at discrete depths during the drilling using a double packer or bailer device. Use of the packer device was limited by the extensive sand encountered in the drill hole and concerns regarding over inflation of the packer and by the experience of the drill crew with this equipment. In these intervals a simple bailer device was used for purging brine from the holes and for sampling. The holes are geophysically logged with simple resistivity and SP logs, to provide information on the lithology, in particular identifying units of halite (salt). The brine samples were collected in clean plastic bottles and filled to the top to minimize air space within the bottle. Each bottle was marked with the time and relabeled with a sample number before sending the sample to the laboratory.
Drilling • techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what	Diamond drilling with an internal (triple) tube was used for drilling. The drilling produced cores with variable and often poor core recovery, associated with extensive unconsolidated sandy material reported in both holes. Recovery of these more friable sediments is more difficult

Criteria	JORC Code explanation	Commentary
	method, etc).	with diamond drilling, as this material can be washed from the core barrel during drilling. • Fresh water has been used as drilling fluid for lubrication during recent drilling of CAU16, to minimize the possibility of contamination of natural formation brine with lithium-bearing fluids. Biodegradable additives are used to minimize the development of thick wall cake in the holes that could reduce the inflow of brine to the hole and affect brine quality.
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 (polycarbonate or 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. 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) or bailer device over an ~1 m interval at the base of the hole during drilling (sampling the brine inflow at the base of the hole where the drill rods were raised to allow brine inflow, following purging of the standing water – drilling fluid – in the hole). Use of the packer device was limited by the extensive sand encountered in the drill hole and concerns regarding over inflation of the packer and by the experience of the drill crew with this equipment. The simple bailer device was used for purging brine from the holes and for sampling in these circumstances. As the lithium 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

Criteria	JORC Code explanation	Commentary
		(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. 	 Diamond holes are logged by a senior geologist who also supervised taking of samples for laboratory porosity analysis. 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. Core recoveries are measured for the entire core recovered.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Core samples are systematically subsampled for laboratory analysis, cutting the lower 10-15 cm of core from the core sample either in the polycarbonate tubes or (using a saw) preserving the sample in cling wrap, tape and the plastic tubing for transportation to the laboratory. Sub-samples will be sent to the porosity laboratory for testing. Sampling is systematic, with samples taken at the base of core runs every 6 m to minimize any sampling bias. This is considered to be an appropriate sampling technique to obtain representative samples, although core recovery is noted to be variable. Duplicate samples of sediments are to be prepared in the laboratory for analysis of porosity characteristics. Characteristics of porosity sub-samples are compared statistically with the sample descriptions for each sub-sample. Brine samples were collected at irregular intervals in CAU07, due to difficulties using the packer equipment. Systematic

Criteria	JORC Code explanation	Commentary
		sampling has been undertaken in CAU16, with the objective of taking brine samples every 6 m. Field duplicate samples are taken for laboratory analysis. • Fluorescein tracer dye is used to distinguish drilling fluid from natural formation brine in the diamond drilling. • The brine samples were collected in new unused one-litre sample bottles which were filled with brine from the bailer or the packer discharge tube. Each bottle was marked with the drill hole number and details of the sample. Prior to sending samples to the laboratory they were assigned unique sequential numbers.
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	 The Norlab/Alex Stuart laboratory in Jujuy, Argentina is used as the primary laboratory to conduct the assaying of the brine samples collected as part of the drilling program. They also analyzed duplicates and standards, with blind control samples in the analysis chain. The laboratory is a commercially accredited laboratory specialized in the chemical analysis of brines and inorganic salts. QA/QC check samples will be sent to another independent laboratory but these samples have not yet been dispatched to the external laboratory. The quality control and analytical procedures used at the Norlab laboratory are considered to be of high quality and the laboratory is affiliated with the Alex Stuart international group of laboratories. Duplicate and standard analyses are considered to be of acceptable quality. Down hole geophysical tools were provided by the drilling contractor and these are believed to be calibrated periodically to produce consistent results.

Criteria	JORC Code explanation	Commentary
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. 	 Accuracy, the closeness of measurements to the "true" or accepted value, was monitored by the insertion of laboratory certified standards. Duplicate samples in the analysis chain were submitted as part of the laboratory batch and results are considered acceptable. The intention is to re-sample intervals to evaluate repeatability of sample results. Laboratory data (from spreadsheets) is loaded directly into the project database, to be verified periodically by the independent QP.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 The holes were located with a hand held GPS in the field and will be subsequently located by a surveyor on completion of the drilling program. Coordinates provided were located with a hand held GPS. The location is in zone 3 of the Gauss Kruger coordinate system, with the Argentine POSGAR.
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. 	 Lithological data was collected throughout the drilling. The 6 m vertical spacing of samples is considered sufficient to establish the degree of grade continuity. Compositing of samples has not been applied. More comprehensive geophysical logging of diamond holes is planned to provide higher quality data on formation porosity characteristics, in addition to laboratory porosity measurements.
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 	 The salar deposits that host lithium- bearing brines consist of sub-horizontal beds and lenses of halite, clay and minor sand and silt. The vertical holes are essentially perpendicular to these units, intersecting their true thickness.

Criteria	JORC Code explanation	Commentary
	material.	
Sample security	The measures taken to ensure sample security.	 Samples were transported to the laboratory (primary, duplicate and QA/QC samples) for chemical analysis in sealed rigid plastic bottles with sample numbers clearly identified. The samples were moved from the drill site to secure storage at the camp on a daily basis. All brine sample bottles are marked with a unique label.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	No audits or reviews have been conducted at this point in time.

Section 2 - Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria listed in ti	ne preceding section also apply to this section.) JORC Code explanation	Commentary
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 Cauchari JV properties are located approximately 20 km south of the Olaroz lithium project (operated by Orocobre/Sales de Jujuy) in the province of Jujuy in northern Argentina at an elevation of approximately 3,900 masl. The property comprises 28,000 ha in 22 mineral properties in Jujuy province in Argentina. Exploration activities are currently focused in the northern properties within the larger property package. The properties consist of a combination of exploration properties (Cateos) and exploitation properties (minas). The tenements/properties are believed to be in good standing, with payments made to relevant government departments.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Exploration was previously carried out in the SE Sector properties by Orocobre subsidiary SAS in 2011, with the drilling of 6 holes (5 diamond, 1 rotary), several of which were abandoned well short of the target depth due to problems with the drilling equipment. An initial resource was defined in accordance with the JORC code at the time of exploration. Immediately to the north of the Cauchari

Criteria	JORC Code explanation	Commentary
		 project Orocobre Limited has developed the Olaroz lithium project, which is the first new lithium brine project to produce lithium in 20 years. Significant exploration has been conducted immediately to the east and west of the JV properties by the company Lithium Americas Corp, who has defined a large resource and related reserve and who has completed a DFS on the project. This company is moving forward to project development with Industry major SQM.
Geology	Deposit type, geological setting and style of mineralisation.	 The sediments within the salar consist of halite, clay and some sand which have accumulated in the salar from terrestrial sedimentation and evaporation of brines within the salar. These units are interpreted to be essentially flat lying, with unconfined aquifer conditions close to surface and semi-confined to confined conditions at depth Brines within the salar are formed by solar concentration, with brines hosted within the different sedimentary units Geology was recorded during drilling of all the holes.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole 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. 	 Lithological data was collected from the holes as they were drilled and cores were retrieved. Detailed geological logging of cores has not been completed to date, and cores will be split to facilitate this. Brine samples were collected from the initial bailer and packer sampling and sent for analysis to the Norlab laboratory, together with quality control/quality assurance samples All drill holes are vertical, (dip -90, azimuth 0 degrees). CAU07 is 274.5 m deep and CAU16 321.5 m. Installation of well materials in both holes is pending. CAU16 intersected lithium-bearing brine. Holes are located at approximately 3900 m above sea level.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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. 	Brine samples taken CAU16 were averaged (arithmetic average) without weighting across the number of samples in each hole in the lithium brine zone and in what are interpreted as different brine zones.
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 (eg 'down hole length, true width not known'). 	 The higher grade lithium-bearing brine is interpreted to underlie an upper zone of less concentrated brine. The sediments hosting brine are interpreted to be essentially perpendicular to the vertical drill holes. The lengths reported for mineralisation (brine) intervals are from systematic sampling and definition of the actual extent of the brine. The brine samples are considered to represent true widths of brine.
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 diagram is provided in the text of the Advantage Lithium announcement showing the location of the properties and drill holes. A table is provided in this announcement shows the location of the drill holes.
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.	 This announcement presents representative data from drilling and sampling in the NW Sector of the Cauchari JV project, such as lithological descriptions, brine concentrations and information on the thickness of mineralisation. Additional information will be provided as it comes to hand.
Other substantive	 Other exploration data, if meaningful and material, should be reported including (but not limited 	 Refer to the information provided in Technical report on the Cauchari Lithium Project, Jujuy Province, Argentina, dated

Criteria	JORC Code explanation	Commentary
exploration data	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.	effective 5th December and amended 22nd December 2016 for previous geophysical and geochemical data from drilling in 2011 by the Orocobre subsidiary SAS.
Further work	 The nature and scale of planned further work (eg 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 is currently undertaking a drilling program, with the first five holes (CAU08, CAU09, CAU10, CAU11, CAU16) completed in this drilling program. The program is planned to include 5 rotary and 12 diamond holes. Additional results will be provided as they come to hand.

For more information please contact:

Andrew Barber

Investor Relations Manager

T: +61 7 3871 3985 M: +61 418 783 701

E: <u>abarber@orocobre.com</u>

Competent Persons Statement

The information in this report that relates to exploration reporting at the Cauchari JV project has been prepared by Mr Murray Brooker. Murray Brooker is a geologist and hydrogeologist and is a Member of the Australian Institute of Geoscientists. Mr Brooker is an employee of Hydrominex Geoscience Pty Ltd and is independent of Orocobre. Murray 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. Murray Brooker consents to the inclusion in this announcement of this information in the form and context in which it appears.

About Orocobre Limited

Orocobre Limited (Orocobre) is a dynamic global lithium carbonate supplier and an established producer of boron.

Orocobre is dual listed on the Australia and Toronto Stock Exchanges (ASX: ORE), (TSE: ORL). Orocobre's operations include its Olaroz Lithium Facility in Northern Argentina, Borax Argentina, an established Argentine boron minerals and refined chemicals producer and a 35% interest in Advantage Lithium.

For further information, please visit www.orocobre.com