



# ASX/TSX ANNOUNCEMENT

Quarterly Report of Operations  
for the Period Ended 30 September 2017



*The only ASX listed company producing high value lithium chemicals for the growing battery and industrial markets*

# SEPTEMBER QUARTER 2017 KEY POINTS<sup>1</sup>

## OLAROSZ LITHIUM FACILITY (ORE 66.5%)<sup>2</sup>

- Production through the September quarter was 2,135 tonnes of lithium carbonate with consecutive increases month on month as brine concentration and evaporation rates increased
- Production has continued to increase in October, and is on track to achieve budget of 1,220 tonnes for the month. Production has averaged 44 tonnes per day (90% of design) over the past week as brine concentration continued to rise in line with modelling
- The Company reiterates guidance for the full year of 14,000 tonnes of lithium carbonate with production split approximately 45/55 between the first and second halves with record production expected in the December quarter at a production cost of <US\$4,000/tonne
- Sales revenue for the September quarter is US\$23.2 million on total sales of 2,072 tonnes of lithium carbonate
- Average FOB price received up 5% quarter on quarter (QoQ) to US\$11,190/tonne with higher priced contracts reflecting firmer market conditions. Prices are expected to continue to exceed US\$11,000 per tonne FOB in the December FY18 quarter with market conditions remaining tight
- Cash costs (on cost of goods sold basis) were US\$4,987/tonne as a result of lower production volumes in July and August and increased soda ash unit costs caused by the impact of bad weather in June
- Gross cash margins remained strong at US\$6,203/tonne and are expected to increase as costs reduce to previous levels with increased production rates, and normalised soda ash costs and consumption
- SDJ SA (SDJ) made a payment of US\$14 million (100% basis) to Mizuho Bank against the project finance facility. The Mizuho loan balance has now been reduced by US\$47 million over the last two years
- A review of the Olaroz pond system by a team of experts from the Chilean office of multinational engineering group GHD Pty Ltd found there were no design faults that would prevent overall plant production of 17,500 tonnes per year. The team comprised five professionals covering all aspects of pond design and operations with collectively over 75 years of pond design and operating experience. This review refutes misinformation and market commentary suggesting the need for substantial capital to rectify the Olaroz pond system
- Submissions have been made to the Japanese government for substantial subsidies and rebates relating to construction costs of the 10,000 tonne per annum battery grade lithium hydroxide plant, a response to this submission is expected in November

## BORAX ARGENTINA

- Overall sales volume in the September quarter was 8,543 tonnes (11,398t last quarter). This follows the strategic exit of a loss making, high volume mineral product line for the Agricultural market in Brazil
- Sales of refined higher product value borates (decahydrate, pentahydrate, anhydrous and DOT) were up 26% on volume compared to the previous corresponding period
- The average sales price increased by approximately 20% with the change in product mix
- The Tincalayu Expansion Project feasibility study (from 30,000 tonnes to 120,000 tonnes decahydrate equivalent and 40,000 tonnes of Boric Acid) is 90% complete with the various components undergoing internal review

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<sup>1</sup> All figures presented in this report are unaudited

<sup>2</sup> All figures 100% Olaroz Project basis

## ADVANTAGE LITHIUM AND CAUCHARI

- Advantage Lithium (ORE 35%) announced results from 48 hours of pump tests at drill hole CAU10 with an average lithium grade of 682 milligrams per litre (mg/l) and a Mg/Li ratio averaging 2.1:1. Sampling from the CAU09 rotary hole averaged 662 mg/l lithium with a Mg/Li ratio of 2.2:1. These concentrations are significantly above the resource grade

## CORPORATE

- As at 30 September 2017, Orocobre Group had US\$46.6 million of available cash after providing funding for a working capital build at Borax Argentina
- The Company executed agreements with Lithium X Energy Corp. for the sale of Diablillos tenements for cash and shares with a value of approximately US\$2m and a 1% net revenue based royalty on future production. The shares have been issued and the cash component will be received in this quarter



*Salar de Olaroz*

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# OLAROZ LITHIUM FACILITY

[For more information on Olaroz please click here](#)

The Olaroz Lithium Facility is located in the Jujuy province of Argentina. Together with partners, Toyota Tsusho Corporation (**TTC**) and Jujuy Energia y Minería Sociedad del Estado (**JEMSE**), Orocobre is now operating the first large scale lithium chemicals brine based facility to be commissioned in approximately 20 years.

Olaroz produces high quality lithium carbonate chemicals for both the battery and industrial markets. It is the only operation in the world with an integrated purification circuit that permits it to produce, if desired, 100% battery grade lithium carbonate (+99.5%) on site.

The Olaroz Lithium Facility joint venture is operated through Argentine subsidiary Sales de Jujuy S.A. The effective equity interests are: Orocobre 66.5%, TTC 25.0% and JEMSE 8.5%.

## PRODUCTION, SALES AND OPERATIONAL UPDATE

### PRODUCTION AND SALES

Production for the quarter was 2,135 tonnes. As in the previous quarter, operations continued to be impacted by slow evaporation rates related to winter weather conditions and the finalisation of the pond rebalancing process previously disclosed. Since early September, evaporation rates have increased significantly resulting in increased brine concentration, increased harvest pond inventory and increasing production rates as feed brine concentration has risen. This trend has continued into October as discussed later in the report.

Sales revenue for the quarter was US\$23.2 million on total sales of 2,072 tonnes with average sales prices up 5% to US\$11,190/tonne<sup>3</sup>. Operating costs (on a cost of goods sold basis) were US\$4,987/tonne, up 17% QoQ due to lower production levels and the impact of higher soda ash unit costs. As reported on 22 June 2017, bad weather in NW Argentina resulted in Olaroz procuring alternative sources of soda ash during June and July at significantly higher than normal cost. The soda ash costs resulted in higher inventory unit costs being carried forward into July which combined with lower production months of July and August resulted in higher costs for the September quarter. Lower unit costs from higher production rates in the month of September are carried forward with inventory into October.

Metric	September quarter 2017	June quarter 2017	Change QoQ (%)
Production (tonnes)	2,135	2,536	-16%
Sales (tonnes)	2,072	2,566	-19%
Average price received (US\$/tonne)	11,190	10,696	5%
Cost of sales (US\$/tonne) <sup>4</sup>	4,987	4,279	17%
Revenue (US\$M)	23.2	27.4	-15%
Gross cash margin (US\$/tonne)	6203	6417	-3%
Gross cash margin (%)	55%	60%	-8%

<sup>3</sup> Note: Orocobre reports price as "FOB" (Free On Board) which excludes additional insurance and freight charges included in "CIF" (Cost, Insurance and Freight or delivered to destination port) pricing. The key difference between an FOB and CIF agreement is the point at which responsibility and liability transfer from seller to buyer. With a FOB shipment, this typically occurs when the goods pass the ship's rail at the export port. With a CIF agreement, the seller pays costs and assumes liability until the goods reach the port of destination chosen by the buyer. The Company's pricing is also net of TTC commissions.

The intention in reporting FOB prices is to provide clarity on the sales revenue that flows back to SDJ, the joint venture company in Argentina.

<sup>4</sup> Excludes royalties and head office costs



Five days of plant planned maintenance was brought forward to this quarter to minimise the impact later in the year when daily production rates are expected to be higher. Costs are expected to decrease to <US\$4,000/tonne in the December quarter as brine concentration and production increases.

Gross cash margins for the quarter remained strong at US\$6,203/tonne with the increase in sales prices partially offsetting the increase in costs. Overall gross operating margins remain strong at 55%. SDJ remains strongly operating cashflow positive.

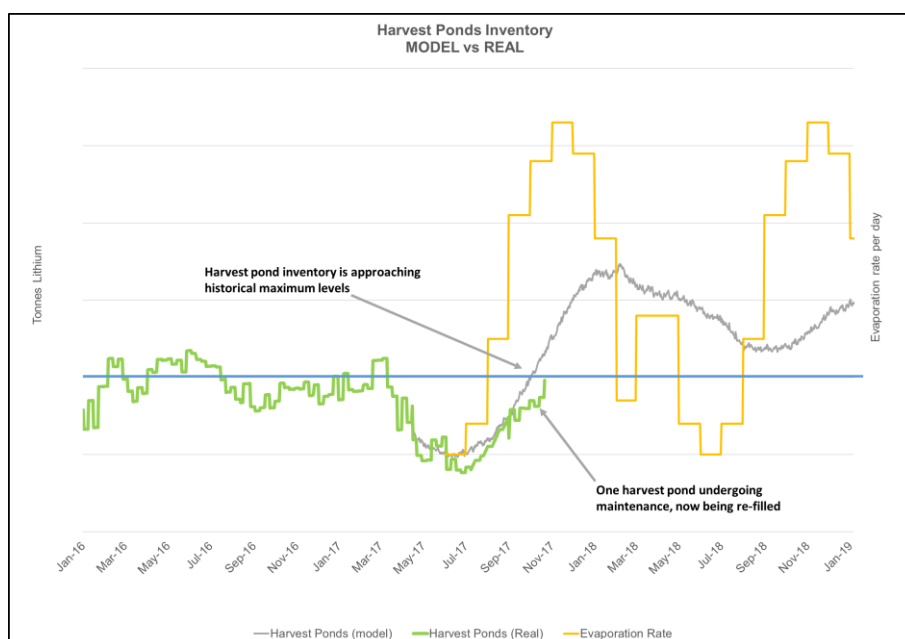
## OPERATIONAL UPDATE

During the quarter the Olaroz operations recorded the production of a cumulative 20,000 tonnes of lithium carbonate since operations commenced in 2015. This milestone is testament to the operational team at Olaroz who have relentlessly pursued operational excellence in developing the first new brine operation in 20 years. These development and operating skills provide an on-going competitive advantage for Orocobre in the multi-phase development of Olaroz.

Over the September quarter the focus has remained on pond management both from the perspective of inter-pond brine transfer and operational controls and monitoring. The design and upgrade for the improved transfer and pumping system required the installation of six new pumps, remote monitoring systems and additional water cleaning lines for a revised capital cost of US\$2.7m. This program is mostly complete and the final two pumps are expected to be installed in the first weeks of November in time for increased evaporation rates which will necessitate increased inter-pond brine transfers.

As noted in February, the process of re-establishing the correct inventory profile (volume and concentration) would take approximately six months, this is now complete and concentrations across the entire pond system are now approaching steady state conditions. With increasing brine concentration, the production rate and recovery have risen, and reagent consumption rate has decreased. Production during October is on track to deliver the budget of 1,220 tonnes for the month the same as produced in July and August combined. In the last seven days production has averaged 46 tonnes per day (96% of design) and record production is expected for the December quarter. The Company reiterates guidance for the full year of 14,000 tonnes with production split approximately 45/55 between the first and second halves of the financial year.

The chart below shows the seasonality of average evaporation rates and the historical and forecast harvest pond inventory profile. The harvest pond inventory continues to increase generally in line with expectations and is approaching maximum historical levels. The deviation through October was due to one harvest pond being taken out of circuit for maintenance works to recover brine storage capacity which had been reduced by the secondary liming process which occurs on the brine feed to that pond. Last week the pond was brought back into circuit and it is now being re-filled. The primary and intermediate ponds are showing very good correlation to modelling. The Company is encouraged that the measured data across the pond system is much as predicted from the pond evaporation and production model.



Bathymetric surveys are complete and data is being analysed. The Company does not expect any significant changes to inventory levels or production guidance from this work, as such brine inventory levels will be reported at half and full year results.

Prior to pond management issues and a constraint of feedstock, the purification circuit has achieved a maximum throughput rate of 43 tonnes per day (tpd) and run consistently at 35-40 tpd (73-83% of nameplate). Hydrocyclones have been installed and are operational, these are expected to allow the purification circuit to achieve nameplate capacity of approximately 48 tonnes per day over the coming months.

The primary circuit runs consistently above nameplate capacity with a maximum achieved throughput of 66 tpd, some 35% above design rate of 48 tpd.

### **Carbon dioxide recovery**

Carbon dioxide is used at the Olaroz lithium facility in the production of battery grade lithium carbonate. It is currently sourced from near Buenos Aires, Cordoba and Mendoza and transported up to 1,800 kilometres by truck. Consequently, it is a significant component of reagent costs and the Company is installing CO<sub>2</sub> recovery systems on various parts of the purification circuit to recover CO<sub>2</sub> from the production process.

Results from a engineering studies and a trial plant over the last year have demonstrated that recovery of up to 50% of total CO<sub>2</sub> is possible, and orders have now been placed for provision and installation of permanent equipment. Capital expenditure on this project is expected to be less than US\$2M. The CO<sub>2</sub> plant is supplied as a package by a specialist manufacturer in Europe.

Installation and operation of the permanent CO<sub>2</sub> recovery equipment is expected in the June Quarter 2018.

### **Third party review of pond design**

A review of the Olaroz pond system by a team of experts from the Chilean office of multinational engineering group GHD Pty Ltd who collectively have more than 75 years of pond design and management experience has been completed. The review concluded that there were no design faults that would prevent overall plant production of 17,500 tonnes per year. Since February the Company has spent US\$2.7 million on the addition of pumps and monitoring systems, and considers this work is now effectively complete and has achieved the aim of adding robustness to the pond system. Misinformation and market commentary suggesting the need for substantial capital to rectify the pond system is incorrect.



*Brine pond at Olaroz Lithium Facility*

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## MARKET AND SALES

Total volume of lithium carbonate sold in the September quarter was 2,072 tonnes. Lithium carbonate prices increased 5% to US\$11,190/tonne (FOB) for the quarter. The price achieved for the quarter is a result of higher pricing in short term contracts compared to last quarter.

Since operations commenced Olaroz has developed a strong customer base of >70 customers who have tested and accepted the high grade Purified and Prime products. The Purified product regularly tests at 99.9% lithium carbonate and is sold to battery and cathode end users. The Prime product regularly tests at 99% lithium carbonate and is sold to a variety of technical and industrial end users. Neither of these products require any additional processing for their respective markets and uses.

### LITHIUM MARKET

Analysis by Orocobre determined that demand for lithium continued to grow at a rate which supply struggled to meet. Leading into the quarter, existing brine producers including SQM, Albemarle, and FMC confirmed ambitious expansions amounting to approximately 100kt LCE additional supply by 2020. However, no significant new supply from the majors is thought to have entered the market during the quarter, resulting in sustained market tightness.

Australian hard rock projects continued to steadily ramp-up following what Chinese import data showed was a slow start to the year. Supply of spodumene concentrate from Mt Marion & Mt Cattlin was quickly absorbed by Chinese conversion plants which otherwise rely on scarce domestic production and/or imported lithium carbonate. Key downstream processors are slowly moving to meet growing market demand with expansions announced by Tianqi, Ganfeng, Albemarle, Yahua, Ruifu, General Lithium. However, while those expansions would double the current installed conversion capacity it will require over US\$2.5Bn<sup>5</sup> capital (Company Announcements, Asian Metals). Security of supply remains a concern with a number of capital guarantees and offtake agreements proposed to finance projects.

The shift toward partnerships between raw material suppliers and compounders/processors that occurred in 2016 appears to have stretched further downstream with battery and car manufacturers eager to secure future raw material supply needed to meet electric vehicle targets. It seems likely that this form of disintermediation will continue with Volvo, Volkswagen, Jaguar Land Rover and BMW all announcing plans to have completely electrified vehicle fleets in the future.

Car manufacturers have been encouraged to accelerate EV expansion plans with growing awareness of future raw material supply bottlenecks and the continued implementation of regulation requiring the switch to electric vehicles. China continues to develop new policy with the recent proposition of a point system in July similar to that employed in California which penalizes internal combustion drivers and subsidises EV manufacturers and owners (Industrial Minerals). The European Union has also announced plans to form a consortium that seeks to address the lack of battery cell manufacturing capacity which may impact the speed new EV's can come to market. Currently cell manufacturing is dominated by Japanese firms like Panasonic and NEC, Korea's LG and Samsung and China's BYD and CATL.

New and varied forms of collaboration between Government and industry provides greater certainty that short- and long-term demand for lithium can only grow and push EV penetration rates to over 5% p.a. by 2020. It is the Company's expectation that any new lithium supply to enter the market during this time will be quickly absorbed, keeping prices above US\$10,000 per tonne FOB in the short term.

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<sup>5</sup> Assumes capital intensity of Tianqi Kwinana plant US\$400M for 24ktpa LCE conversion plant.

# LITHIUM HYDROXIDE PLANT

## UPDATE ON PROGRESS

Olaroz industrial grade lithium carbonate and locally sourced Japanese lime have been used as feedstock for testing of process design to produce lithium hydroxide by two specialised engineering firms. The test work demonstrated that a very high-quality lithium hydroxide could be produced from Olaroz lithium carbonate using a customised process. The test work has also highlighted opportunities to reduce lithium losses during conversion from carbonate to hydroxide.

Contract negotiations are continuing with the two engineering firms to determine the preferred contractor. The selection criteria for choice of engineering contractor includes turn-key commissioning and personnel training with process, product quality and performance guarantees.

Capital and operating costs have been supplied by one of the engineering firms during the September quarter. Information from the second firm is expected in November.

Discussions with TTC are well advanced to determine the optimal joint venture structure for ownership and operation of the hydroxide facility.

Submissions have been made in September to Japanese National and Provincial governments for development permits and subsidies for capital costs and results from the submission are expected by the end of November. If successful, the subsidy support could amount to up to 50% of total capital costs for construction of a lithium hydroxide plant.

Subject to joint venture approvals and finalisation of financing and permitting, construction is likely to commence in June quarter 2018 with commissioning 12 months later. Orocobre does not anticipate the need to raise equity capital for this project.



*Olaroz Lithium Facility*

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## EXPANSION STUDY FOR OLAROZ

The Phase 2 expansion investment decision remains dependent on achieving Phase 1 design production rates and the expansion being funded without further equity capital (i.e. funded by project finance and Phase 1 operating cashflow). Sustainable production rates are expected to be achieved during the current summer period (southern hemisphere) and construction is therefore likely to commence in the first half of 2018.

### REVISED SCOPE OF PHASE 2 EXPANSION STUDIES

On 15 December 2016, Orocobre announced the results of scoping studies into the expansion of Olaroz and the proposed doubling of production at a cost of US\$190 million including US\$25 million contingency. Subsequently, these plans have been simplified to remove the purification circuit from the incremental production. The resultant product mix is 17,500 tonne per annum Battery Grade lithium carbonate (>99.5%) from the existing purification circuit and 17,500 tonne per annum Industrial Grade lithium carbonate (avg. 99.0%) which will provide feedstock for the planned lithium hydroxide plant in Japan.

This simplified strategy results in lower capital expenditure of approximately US\$160 million including a US\$25 million contingency and lower implementation risk as the project is based around a simple duplication of bores, ponds and primary circuit of Phase 1 at Olaroz. The full cost of the pond system contained within the total capital expenditure estimate for Phase 2 is US\$75 million.

Multinational engineering firm, GHD has been appointed to oversee engineering design studies for the Olaroz Phase 2 expansion.

Key permits have been received for water extraction, additional bores and new ponds from the Jujuy Provincial Government for the expansion.

Plant layout and pond design is being finalised and soil tests have been completed over the new pond area. Flowsheets, mass balance, an equipment list and design criteria have also been completed. Six layout options for the  $\text{Li}_2\text{CO}_3$  plant and three options for the liming plant are currently being considered and the preliminary design for the road, pump stations, piping and electricity lines to new extraction bore holes were completed.



*Salar de Olaroz*

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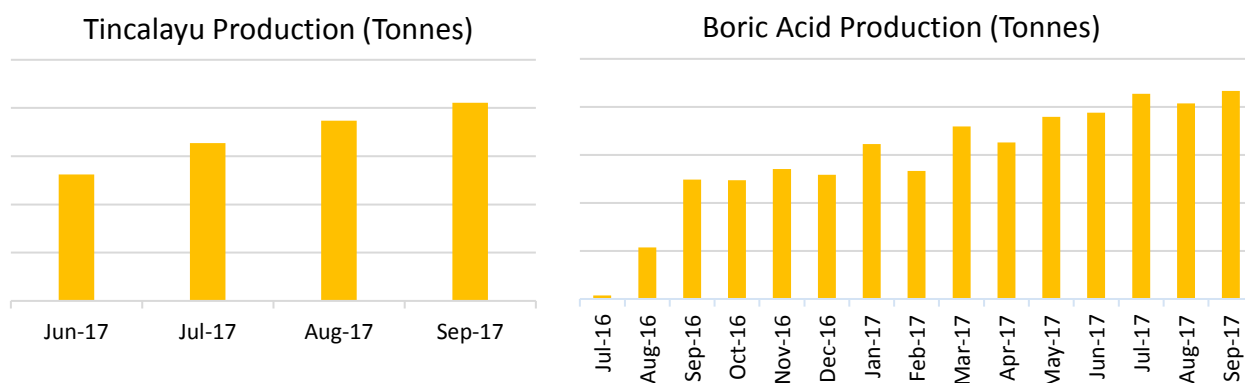
# BORAX ARGENTINA

The current focus for Borax Argentina has been to restructure its business to deliver sustainable operational and financial performance. This is resulting in a change in product mix as described below and an improvement in average pricing. During these changes it has been necessary for Orocobre to provide financial support of US\$2.4 million over the quarter for the build of working capital.

## OPERATIONS

Sales volumes in the September quarter 2017 were 8,543 tonnes of combined product, a reduction from the previous quarter following the strategic exit of a loss making, high volume mineral product line for the Agricultural market in Brazil. A decision was made to exit this business as it was no longer commercially attractive. Borax has been managing out of this supply arrangement during the quarter and a project is underway to develop a new product that delivers improved value to customers and the business.

During the quarter production rates of refined products continued to increase month on month (up 26% compared to the previous corresponding period) with record production achieved at Tincalayu and the Boric Acid plant at Campo Quijano. Costs are expected to decrease as these unit production benefits are realised.



Average sales price increased by approximately 20% relative to the previous corresponding quarter with the change in product mix.

## COMBINED PRODUCT SALES VOLUME BY QUARTER

Previous Year Quarters		Recent Quarters	
December 2015	10,078	December 2016	8,767
March 2016	8,006	March 2017	9,672
June 2016	9,274	June 2017	11,398
September 2016	11,940	September 2017	8,543

## **TINCALAYU EXPANSION STUDY**

A study commenced in Q2 CY16 to evaluate a potential expansion of the Tincalayu refined borates operation from its current production capacity of 30,000 to 100-120,000 tonnes per annum and an integrated 40,000 tonne boric acid plant.

It is anticipated that the potential expansion will significantly increase efficiencies in the production of refined borates at Tincalayu and contribute provide a step change improvement in unit costs. Approvals have been received for a new gas pipeline to supply the expanded plant and initial cost estimates are under review.

The study is 90% complete with the various components undergoing internal review.

## **MARKET CONDITIONS**

Market conditions remain challenging, however there are positive signs of economic recovery in South America, with a recent press article in “MercoPress” forecasting a 10% sales and output growth in the automotive sector in Brazil for 2018.

The continued focus on production efficiencies and product mix is required to cushion the effect of market pricing remaining at the bottom of the price cycle.

In addition to price pressure the operations are seeing Argentine inflation of costs which are exceeding devaluation of the Argentine Peso. Calendar year 2017 has seen inflation of 17.5% while the Peso has only devalued by 8.9%.

# SAFETY AND COMMUNITY

## SAFETY MILESTONES

The Olaroz site has recently achieved a significant milestone of 330 days of operation without a lost time injury (LTI).

At Borax, the Sijes mine site achieved two years without a LTI, Campo Quijano achieved one year without a LTI and Tincalayu achieved six months without a LTI.

## SHARED VALUE PROGRAM AND COMMUNITY

During the quarter Richard Seville (MD and CEO) was invited to join an Advisory Council with CEADS (Argentine Business Council for Sustainable Development), an organization of which Orocobre is a member. This role will further establish Orocobre's position as a leading and responsible lithium producer. <http://www.ods.ceads.org.ar/>

Sales de Jujuy and Borax Argentina received recognition for their commitment and contribution to academia in professional practices and internships. A ceremony was held at the School of Engineering of Universidad Nacional de Salta with representatives from both companies, the University and public officials.

Training and support has been provided in the fields of Chemical Engineering, Industrial Engineering, IT, Human resources, Laboratory and Electromechanical services.

Orocobre group companies also collaborate with Universidad Católica de Salta; Siglo XXI, Universidad Nacional de Córdoba, Universidad Nacional de San Juan and other international educational institutions.

SDJ General Manager Cristian Saavedra presented at the Seminar on Renewable Energy and Sustainable Mining in Jujuy, providing an update on characteristics of the lithium process, the current demand in world markets, the expansion of the Olaroz plant to meet such demand and the contribution to the development of communities. Other participants included Miguel Soler, Secretary of Mining, Sandra Giunta, UNJu representative at CIDMEJu and Franco Mignacco, President of EXAR.



*Cristian Saavedra (right) at the Seminar on Renewable Energy and Sustainable Mining*



# ADVANTAGE LITHIUM

As previously announced, Orocobre completed the sale of a suite of exploration assets to Advantage Lithium Corp (TSV:AAL) in the March 2017 quarter. AAL remains well funded having raised C\$20,000,000 capital in February 2017. Orocobre holds 46,325,000 (35%) of the issued shares of AAL and 2,550,000 warrants exercisable at C\$1.

Orocobre retains a 50% interest in the Cauchari Project of Jujuy province in NW Argentina and AAL has the right to increase its interest to a total of 75% by the expenditure of US\$5,000,000 or production of a Feasibility Study. AAL also took a 100% interest in five other lithium properties that were previously held by Orocobre totalling 85,543 hectares.

## Initial drilling results

During the quarter, Advantage Lithium advised of initial test results from drilling and testing at the Cauchari Salar.

Initial results from the first set of composite brine samples from hole CAU10 in the SE sector of Cauchari (see hole location in Figure below) have returned an average lithium grade of 678 milligrams per litre (mg/l) with sample results ranging from 585 to 724 mg/l lithium and Mg/Li ratios averaging 2.1:1. These concentrations are significantly higher than the resource grade.

Hole CAU10 is part of a two phase program totalling 17 holes which will lead to a scoping study. Three drill rigs are engaged on this program.

Sampling from the CAU09 rotary hole averaged 662 mg/l lithium with a Mg/Li ratio of 2.2:1 and geological logging of CAU07 indicated high quality sand and gravel units similar to the most productive units at Olaroz. Drilling is continuing.

## Senior Technical Appointments

Advantage Lithium also strengthened its technical capability with the addition of Andy Robb as Technical Advisor and Frits Reidel as a consulting Independent Qualified Person. Andy has held significant technical and management roles with companies such as BHP Billiton and AMC Consulting. Andy was VP South America and Project Director for Enirgi Group Corporation where he had responsibility for over 200 Operational and Project staff and was instrumental in the completion of the NI43-101 compliant Definitive Feasibility Study for the Rincon lithium brine project located in Salta.

Fritz and his team at FloSolutions have vast experience in brine resource evaluation, salt-lake exploration, hydrogeology, drilling methods, well construction, and testing gained from working on numerous projects such as Olaroz, Cauchari (Lithium Americas) and Maricunga.

## Drill Hole Location and Details

Exploration Hole Number	Total Depth (m)	Installed Depth (m)	Assay Interval (m)	Lithium (mg/l avg)	Potassium (mg/l avg)	Drilling method	Coordinates Gauss Kruger Argentine Zone3 Posgar Datum		Elevation mean sea level (m)	Azimuth	Dip
							Easting	Northing			
CAU10	429	340	50-340	678	6,516	Rotary	3,425,530	7,379,295	3,900	0	-90
CAU09	400	400	60-400	662	6,137	Rotary	3,423,775	7,377,806	3,900	0	-90
CAU07	275	Not installed	Awaiting results			Diamond	3,421,626	7,385,385	3,930	0	-90

\* Planned coordinates - not confirmed by surveying at date of release

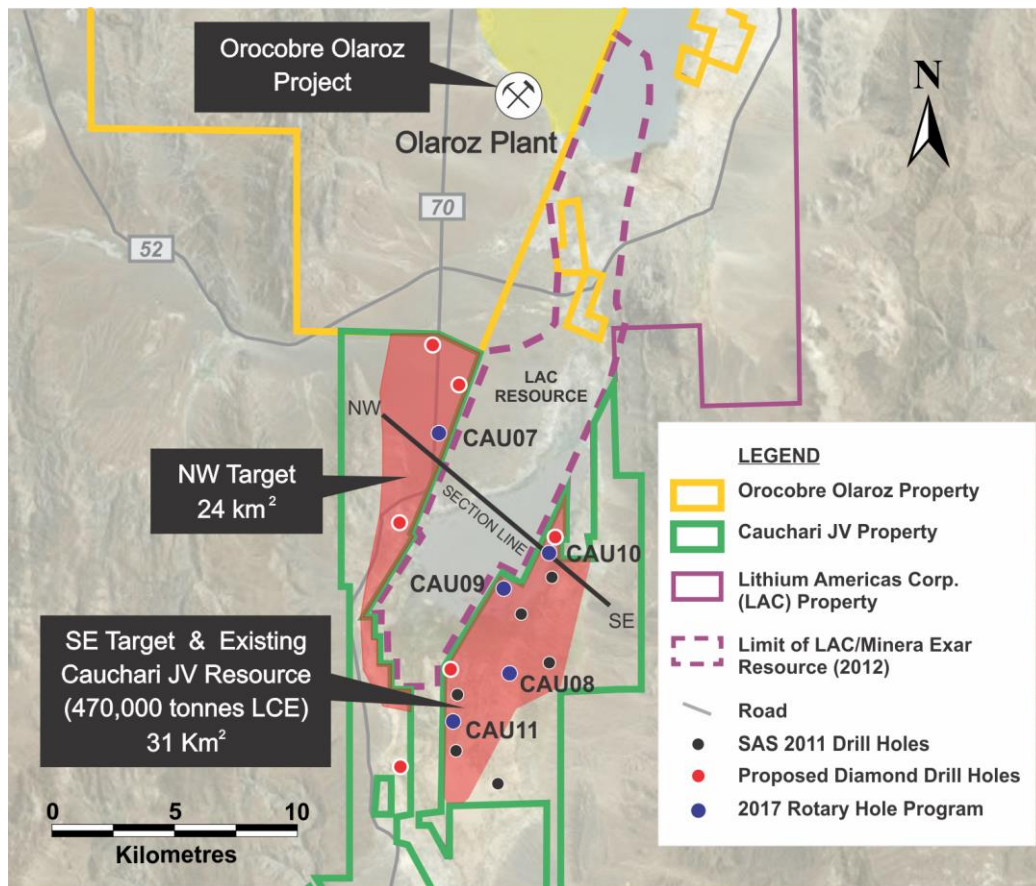


Figure: Location of the CAU7,9,10 drill holes relative to previous drilling

# CORPORATE AND ADMINISTRATION

## DIABLILLOS

Subsequent to the end of the quarter, Orocobre announced the execution of agreements with Lithium X Energy Corp. (**TSXV:LIX**) (**OTCQX: LIXXF**) ("Lithium X") in respect of tenure held by Orocobre subsidiaries, Borax Argentina S.A. ("Borax") and South American Salars S.A. ("SAS") at the Salar de Diablillos.

Lithium X through its wholly-owned subsidiary, Potasio Litio de Argentina S.A. (PLASA) will acquire 2,700 hectares of tenements from Borax over which Lithium-X currently holds usufruct rights for the extraction of lithium brines. Lithium-X will also acquire a further 700 hectares owned by SAS which had been excluded from the Advantage Lithium transaction (ASX release 28 March 2017). These tenements will be consolidated into the PLASA project, Sal de los Angeles (SDLA) in Salta Province, Argentina.

Under the agreement:

- PLASA acquires mineral title to the Borax and SAS tenements
- PLASA grants a usufruct right in favour of Borax over the Borax tenements in relation to the extraction of surface ulexite mineralisation
- PLASA agrees to pay to Borax US\$250,000 and to issue 650,000 common shares of Lithium X to Borax or its nominee
- PLASA acquires the SAS tenements for consideration of US\$750,000 payable to Orocobre upon certain conditions being met by SAS
- PLASA and Borax agree to cancel the existing 1.5% Mine Mouth Royalty<sup>6</sup> on the Borax held tenements, in consideration of a 1% Net Revenue Royalty over the entire SDLA project, and
- Orocobre and PLASA mutually release each other from any potential or existing claims due to past activities by either party.

## FINANCE

### VAT

VAT refunds continue to be received on a timely basis and during the quarter approximately US\$4.1M was received by SDJ.

Post the end of the quarter, July's VAT presentation of ~US\$1.5M was approved and such funds received whilst the August presentation has been submitted for approval.

### CASH BALANCE, DEBT POSITION AND STANDBY LETTERS OF CREDIT

As at 30 September 2017, Orocobre Group had available cash of US\$46.6 million and net debt of US\$68.4 million. During the quarter, approximately US\$2.4 million was provided to Borax Argentina to support a build of working capital. Corporate costs were US\$1.8 million and US\$0.8 million was paid as a deposit for a property acquisition. Further details of the acquisition will be provided upon completion of the transaction.

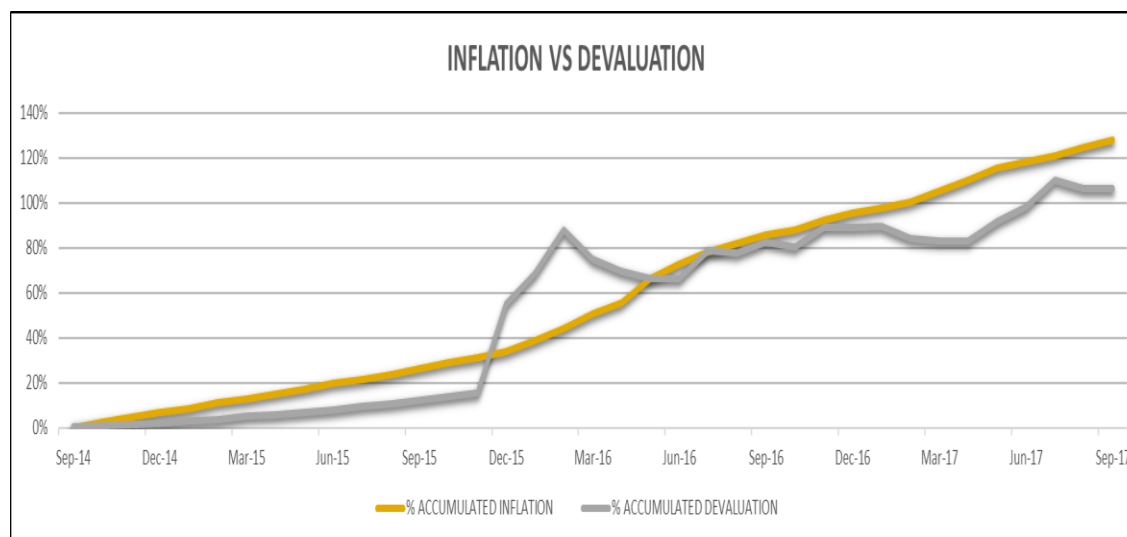
SDJ made a finance payment to Mizuho Bank in September 2017 of approximately US\$14 million including principal and interest thereby reducing the outstanding principal on this facility to US\$144.9M (Original facility US\$191.9M).

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<sup>6</sup> Mine Mouth Royalty is calculated as revenue less all costs incurred from the point of brine extraction.

## INFLATION VERSUS DEVALUATION

The AR\$/US\$ exchange rate weakened by 4% during the quarter from AR\$16.63/US\$ at 30 June 2017 to AR\$17.31/US\$ at 30 September 2017 whilst inflation for the same period was 5.7%. When looking at specific periods such as the calendar year to 30 September, devaluation of the AR\$ against the US\$ was 8.9% versus inflation of 17.5%. This resulted in 8.6% higher than expected US\$ costs for ARS peso denominated expenses for the period, resulting in higher costs at Borax Argentina and to a much lesser extent, SDJ. The effect of inflation and devaluation over time generally shows that they cancel each other out.



## ANNUAL GENERAL MEETING

The Company will hold its Annual General Meeting at 9am AEST on 24 November at L23, 480 Queen Street, Brisbane. A Notice of Meeting has been released through the ASX with explanatory notes, however the following is provided as further explanation of the increase in the Remuneration Pool for Directors fees.

Resolution 6 proposes to increase the Directors fee pool by A\$250,000 in order to provide scope for the addition of new Directors to the Board and an increase for existing Directors whose fees have not been increased since 2014. It is the view of the current Board, that as the Company executes the proposed growth strategy the Board may require additional Directors with an expanded variety of skills and experience. This resolution will provide suitable scope for remuneration of those new Directors.

## FOR FURTHER INFORMATION PLEASE CONTACT:

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# ABOUT OROCOBRE LIMITED

Orocobre Limited is listed on the Australian Securities Exchange and Toronto Stock Exchange (ASX:ORE) (TSX:ORL), and is building a substantial Argentinian-based industrial chemicals and minerals company through the construction and operation of its portfolio of lithium, potash and boron projects and facilities in the Puna region of northern Argentina. The Company has built, in partnership with Toyota Tsusho Corporation and JEMSE, the first large-scale, greenfield brine based lithium project in approximately 20 years at the Salar de Olaroz with planned production of 17,500 tonnes per annum of low-cost lithium carbonate.

The Olaroz Lithium Facility has a low environmental footprint because of the following aspects of the process:

- The process is designed to have a high processing recovery of lithium. With its low unit costs, the process will result in low cut-off grades, which will maximise resource recovery.
- The process route is designed with a zero liquid discharge design. All waste products are stored in permanent impoundments (the lined evaporation ponds). At the end of the project life the ponds will be capped and returned to a similar profile following soil placement and planting of original vegetation types.
- Brine is extracted from wells with minimum impact on freshwater resources outside the salar. Because the lithium is in sedimentary aquifers with relatively low permeability, drawdowns are limited to the salar itself. This is different from halite hosted deposits such as Salar de Atacama, Salar de Hombre Muerto and Salar de Rincon where the halite bodies have very high near surface permeability and the drawdown cones can impact on water resources around the Salar affecting the local environment.
- Energy used to concentrate the lithium in the brine is solar energy. The carbon footprint is lower than other processes.
- The technology developed has a very low maximum fresh water consumption of <20 l/s, which is low by industry standards. This fresh water is produced by reverse osmosis from non-potable brackish water.
- Sales de Jujuy S.A. is also committed to the ten principles of the sustainable development framework as developed by The International Council on Mining and Metals. The Company has an active and well-funded "Shared Value" program aimed at the long term development of the local people.

The Company continues to follow the community and shared value policy to successfully work with suppliers and the employment bureau to focus on the hiring of local people from the communities of Olaroz, Huancar, Puesto Sey, Pastos Chicos, Catua, Susques, Jama, El Toro, Coranzulí, San Juan and Abrapampa. The project implementation is through EPCM (Engineering, Procurement and Construction Management) with a high proportion of local involvement through construction and supply contracts and local employment. The community and shared value policy continues to be a key success factor, training local people under the supervision of high quality experienced professionals.

## TECHNICAL INFORMATION, COMPETENT PERSONS' AND QUALIFIED PERSONS STATEMENTS

The Company is not in possession of any new information or data relating to historical estimates that materially impacts on the reliability of the estimates or the Company's ability to verify the historical estimates as mineral resources, in accordance with the JORC Code. The supporting information provided in the initial market announcement on 21/08/12 continues to apply and has not materially changed. Additional information relating to the Company's Olaroz Lithium Facility is available on the Company's website in "Technical Report – Salar de Olaroz Lithium-Potash Project, Argentina" dated May 113, 2011 which was prepared by John Houston, Consulting Hydrogeologist, together with Mike Gunn, Consulting Processing Engineer, in accordance with NI 43-101.

## CAUTION REGARDING FORWARD-LOOKING INFORMATION

This news release contains “forward-looking information” within the meaning of applicable securities legislation. Forward-looking information contained in this release may include, but is not limited to, the completion of commissioning, the commencement of commercial production and ramp up of the Olaroz Lithium Facility and the timing thereof, the cost of construction relative to the estimated capital cost of the Olaroz Lithium Facility, the meeting of banking covenants contained in project finance documentation, the design production rate for lithium carbonate at the Olaroz Lithium Facility, the expected brine cost and grade at the Olaroz Lithium Facility, the expected operating costs at the Olaroz Lithium Facility and the comparison of such expected costs to expected global operating costs, the estimation and conversion of exploration targets to resources at the Olaroz Lithium Facility, the viability, recoverability and processing of such resources, the potential for an expansion at the Olaroz Lithium Facility and the outcome of studies currently being undertaken into the proposed expansion at Olaroz and elsewhere, the capital cost of an expansion at the Olaroz Lithium Facility; the future performance of the relocated borax plant and boric acid plant, including without limitation the plants estimated production rates, financial data, the estimates of mineral resources or mineralisation grade at Borax Argentina mines, the economic viability of such mineral resources or mineralisation, mine life and operating costs at Borax Argentina mines, the projected production rates associated with the borax plant and boric acid plant, the market price of borate products whether stated or implied, demand for borate products and other information and trends relating to the borate market, taxes including recoveries of IVA, royalty and duty rate and the ongoing working relationship between Orocobre and the Province of Jujuy, TTC and Mizuho Bank.

Such forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from those expressed or implied by such forward-looking information, including but not limited to the risk of further changes in government regulations, policies or legislation; the possibility that required concessions may not be obtained, or may be obtained only on terms and conditions that are materially worse than anticipated; that further funding may be required, but unavailable, for the ongoing development of the Company’s projects; changes in the scope and focus of studies currently being undertaken with respect to the expansion of the Company’s production facilities, fluctuations or decreases in commodity prices and market demand for product; uncertainty in the estimation, economic viability, recoverability and processing of mineral resources; risks associated with weather patterns and impact on production rate; risks associated with commissioning and ramp up of the Olaroz Lithium Facility to full capacity; unexpected capital or operating cost increases; uncertainty of meeting anticipated program milestones at the Olaroz Lithium Facility; general risks associated with the further development of the Olaroz Lithium Facility; general risks associated with the operation of the borax plant or boric acid plant; the potential for an expansion at the Tincalayu operations and the outcome of studies currently being undertaken into the proposed expansion at Tincalayu a decrease in the price for borates resulting from, among other things, decreased demand or an increased supply of borates or substitutes, as well as those factors disclosed in the Company’s Annual Report for the year ended June 30, 2017 filed at [www.sedar.com](http://www.sedar.com).

The Company believes that the assumptions and expectations reflected in such forward-looking information are reasonable. Assumptions have been made regarding, among other things: the timely receipt of required approvals and completion of agreements on reasonable terms and conditions; the ability of the Company to obtain financing as and when required and on reasonable terms and conditions; the prices of lithium, potash and borates; market demand for products and the ability of the Company to operate in a safe, efficient and effective manner. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. There can be no assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

## Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill cuttings were taken during rotary drilling. These are low quality drill samples, but provide sufficient information for lithological logging and for geological interpretation.</li> <li>• Drill core (CAU07) was recovered in triple tubes with a 1.5 m length core run and stored in core boxes after being wrapped in cling-film and duct tape to prevent moisture loss from the core.</li> <li>• Brine samples were collected during the preliminary pumping test, initially at 1 minute intervals, and then 5 minutes, 10 minutes, half hour and 1 hour during the first 6 hours of the pumping test reported in this release. Additional assays over the remaining period to 48 hours are awaited. Samples were taken from the end of the discharge hose connected to the submersible pump installed in the hole.</li> <li>• The holes are geophysically logged with resistivity and SP logs, to provide information on the lithology, in particular identifying units of halite (salt).</li> <li>• 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.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>• <i>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, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Rotary drilling was the method used for the installation of CAU10 and CAU09. Natural formation brine was used for lubrication during drilling, together with the use of biodegradable additives 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. Bentonite was used in the upper part of CAU09 to seal off part of the hole where collapse issues were encountered. This sandy section has been excluded from providing inflows to the well.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>During the rotary drilling the time to drill each metre is recorded, as well as any observations from the driller regarding hardness of the lithology being drilled.</li> <li>Rotary drilling allowed for recovery of drill cuttings and basic geological description. During rotary drilling, cuttings were collected directly from the outflow from well head to the fluid recirculation pits. Drill cuttings were collected every metre in plastic bags, that were marked with the drill hole number and depth interval. Sub-samples were collected from the bags by the site geologist to fill chip trays.</li> <li>Diamond drilling (CAU07)) produced cores with variable core recovery (to be reported in future releases, as the hole is currently underway). Recovery of more friable sediments such as sands is more difficult with diamond drilling, as this material can be washed from the core barrel.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Rotary drill cuttings were recovered from the hole from the recirculating drilling fluid, taking in account the return time for the samples, depending on the depth of the drill bit. Appropriate additives and drilling fluid viscosity were used to facilitate recovery of drill cuttings from the holes.</li> <li>Diamond drill core was recovered in 1.5m length intervals in the drilling triple split tubes. Appropriate additives were used for hole stability to attempt to maximize core recovery. The core recoveries were measured from the cores and compared to the length of each run to calculate the recovery.</li> <li>As the lithium brine (mineralisation) samples are taken in the hole from inflows of the brine to the hole 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.</li> </ul>
Logging	<ul style="list-style-type: none"> <li><i>Whether core and chip samples</i></li> </ul>	<ul style="list-style-type: none"> <li>Rotary drilling was carried out for the</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p><i>have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <ul style="list-style-type: none"> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>collection of drill cuttings for geologic logging and for brine sampling. Drill cuttings were logged by a geologist.</p> <ul style="list-style-type: none"> <li>Diamond holes are logged by a geologist who supervised taking of samples for laboratory porosity analysis.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>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.</i></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>Core samples will be systematically sub-sampled for laboratory analysis, cutting the lower 15 cm of core from the core sample and preserving the sample in cling wrap, tape and plastic tubing. This sub-sample will be sent to the porosity laboratory for testing. Sampling is to be systematic, to minimize any sampling bias.</li> <li>Brine samples collected from the preliminary pumping test on CUA10 are homogenized as brine is extracted from the hole by pumping. No sub-sampling is undertaken in the field.</li> <li>Fluorescein tracer dye was used to distinguish drilling fluid from natural formation brine used in the case of the diamond drilling (but not in the rotary drilling).</li> <li>The brine samples were collected in new unused one-litre sample bottles which were filled with brine from the pump discharge hose. 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.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory</i></li> </ul>	<ul style="list-style-type: none"> <li>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 commercial 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.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Duplicate and standard analyses are considered to be of acceptable quality</li> <li>• Down hole geophysical tools were provided by the drilling contractor and these are believed to be calibrated periodically to produce consistent results.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative Company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Accuracy, the closeness of measurements to the “true” or accepted value, was monitored by the insertion of laboratory certified standards.</li> <li>• Duplicate samples in the analysis chain were submitted as part of the laboratory batch and results are considered acceptable.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The holes will 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 are planned drill hole locations.</li> <li>• The location is in zone 3 of the Gauss Kruger coordinate system, with the Argentine POSGAR.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Lithological data was collected throughout the drilling.</li> <li>• The brine samples from CAU10 were taken from the pump outlet pipe and represent composite samples from 50 m (base of upper blank pipe section), to the base of the hole at 340 m, with different brine inflow contributions from different lithologies in the hole.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>should be assessed and reported if material.</i>	
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples were transported to the laboratory (primary, duplicate and QA/QC samples) for chemical analysis in sealed 250 ml rigid plastic bottles with sample numbers clearly identified.</li> <li>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.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have been conducted at this point in time.</li> </ul>

## Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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).</li> <li>The tenements/properties are believed to be in good standing, with payments made to relevant government departments.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration was previously carried out in the northern properties by Orocobre subsidiary SAS in 2011, with the drilling of 6 holes, 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.</li> <li>Immediately to the north of the project Orocobre Limited has developed the Olaroz lithium project, which is the first</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>new lithium brine project to produce lithium in 20 years.</p> <ul style="list-style-type: none"> <li>Significant exploration has been conducted immediately to the east and west of the JV properties by the company Lithium Americas Corporation, 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. The tenements/properties are believed to be in good standing, with payments made to relevant government departments.</li> </ul>
Geology	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>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</li> <li>Brines within the salar are formed by solar concentration, with brines hosted within the different sedimentary units</li> <li>Geology was recorded during drilling of all the holes.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Lithological data was collected from the holes as they were drilled as drill cuttings.</li> <li>Brine samples were collected from the preliminary pumping test on CAU10 and sent for analysis to the Norlab laboratory, together with quality control/quality assurance samples</li> <li>Drill hole collars,</li> <li>All drill holes are vertical, (dip -90, azimuth 0 degrees). CAU10 is 340 m installed (429 m drilled); CAU09 is 400 m installed and drilled. CAU07 is in progress. Both CAU10 and CAU09 intersected lithium-bearing brine from the water table (approximately 5 m deep) to the base of drilling. Holes are located at approximately 3900 m above sea level.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>Brine samples taken from CAU10 at intervals of 1, 5, 10, 30 and 60 m intervals during the preliminary pump test. The result reported is an average of the sample results from the first 6 hours of the 48 hour pump test, with the results from the remaining samples yet to be received.</li> <li>The samples represent the results of pumping CAU10, with contributions of brine flow from throughout the hole below the upper sealed section of the hole (which extends to 50 m deep) to the base of the hole.</li> <li>No sample results (excepting standards, duplicates and blanks) were excluded from the average value provided for the preliminary pumping test.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>The lithium-bearing brine deposits extend across the properties and over a thickness of &gt; 400 m (depending on the depth of drilling), limited by the depth of the drilling. Mineralisation in brine is interpreted to continue below the depth of the resource.</li> <li>The drill holes are vertical and essentially perpendicular to the horizontal sediment layers in the salar (providing true thicknesses of mineralisation)</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>This announcement presents representative preliminary data from drilling and sampling at 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.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results;</i></li> </ul>	<ul style="list-style-type: none"> <li>Refer to the information provided in Technical report on the Cauchari Lithium Project, Jujuy Province, Argentina, dated effective 5<sup>th</sup> December and amended 22<sup>nd</sup> December 2016 for previous</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	geophysical and geochemical data from drilling in 2011 by the Orocobre subsidiary SAS.
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Company is currently undertaking a drilling program, with CAU10 the first hole completed in this drilling program. Additional results will be provided as they come to hand.</li> </ul>