Highlights

- Six drill holes completed at Orocobre’s Cauchari Lithium – Potash Project to depths up to 249 m.

- Drilling intersected extensive halite units with variable porosity, interbedded with units of sand, silt and clay.

- Results received from four holes including 244 m in CAU001D @ 548 mg/l Li (from 5-249 m) and 177 m @ 403 mg/l Li (9-186 m) in CAU002D.

- Lithium geochemistry is similar to the Olaroz project, with average Mg/Li ratios of 2.6 to 4.9 in the three holes for which these results have been received to date. The SO4/Li ratio is higher than Olaroz, with values from 44 to 177 for these three drill holes.

- Cauchari provides an additional source of lithium brine for Orocobre to expand production at its planned Olaroz facility given similarities in brine and the close proximity.

- A resource estimate will commence when remaining geochemical and porosity data is received, with expected delivery in 2Q 2012.
Orocobre Limited (ASX:ORE; TSX:ORL) (the Company or Orocobre) announces the completion of a diamond drilling program on its Salar de Cauchari properties (“Cauchari Project”) immediately south of the company’s Salar de Olaroz project in Jujuy Province, Argentina.

Orocobre’s Managing Director, Richard Seville, commented, “The drilling at Cauchari has tested the company’s properties immediately south-east of the highest grade part of the brine body identified by Lithium Americas Corp. on its Cauchari project. Our drilling confirms that the brine body extends into the Orocobre properties, with high lithium grades present in the extensive halite units encountered in drilling.”

“Results are encouraging with drill intersections of 244 m @ 548 mg/l Li in CAU001D (from 5-249 m) and 177 m @ 403 mg/l Li (9-186 m) in CAU002D. The brine Mg/Li ratio is low, averaging between 2.6 and 4.9 for the first 3 holes, while the SO4/Li ratio averages between 44 and 177, increasing towards the south and east of the salar.”

Richard Seville added, “The completion of the drilling program represents another milestone for the company. The assay results confirm the company’s previous expectations that Lithium Americas’ brine body extends into our Cauchari properties and that a resource can be developed at the project to support additional production at the planned Olaroz facilities twenty kilometres north. We look forward to completing the resource estimate, developing a plan to produce brines from our Cauchari asset and thereby increasing shareholder value.”

**Drilling Program Details**

The Salar de Cauchari project is located immediately due south of the Company’s flagship Olaroz project where the Company has been producing pilot scale battery grade lithium carbonate for almost a year. The location is shown in the figure below. [http://www.orocobre.com/Maps/Cauchari_Fig1_24Jan12.jpg](http://www.orocobre.com/Maps/Cauchari_Fig1_24Jan12.jpg)

A total of 6 holes, comprising 5 diamond and one rotary hole, were drilled vertically to depths between 46.5 and 249 m in the Cauchari properties. CAU002D to CAU005D terminated in units of halite (salt) and interbedded clastic sediments, suggesting this sequence continues at depth (as observed in CAU001). Holes CAU002D to CAU005D did not reach the target depths of 200 m due to problems with drilling equipment.

Diamond coring was predominantly completed with HQ triple tube coring, with limited NQ core collected where drilling conditions prevented HQ coring. Drill core was collected in transparent core liners, which were capped immediately following recovery from the core barrel. Drill core samples for porosity analysis by the British Geological Survey laboratories were collected at intervals between 1.5 and 6 m by cutting 20 cm lengths from the base of the core. Samples were capped and transported to England for analysis of total porosity and specific yield.
During drilling brine samples were collected using a single valve bailer. A volume equivalent to the external diameter of the drill hole was extracted from the hole by bailing, with an additional volume extracted to minimize the possibility of sample contamination by drilling fluid. A biodegradable tracer dye (Fluorescein) was added to the drilling fluid to allow a visual determination of when the drilling fluid had been completely removed from the hole. Down hole geophysical logging was conducted on the holes following completion.

**Results and Discussion**

Table 1 below summarizes data from the first four drill holes (with results for samples in CAU003D and CAU005D still pending) from the respective locations shown in Figure 2 below [http://www.orocobre.com/Maps/Cauchari_Fig2_24Jan12.jpg](http://www.orocobre.com/Maps/Cauchari_Fig2_24Jan12.jpg)
Drilling of the six holes by Orocobre confirms that, as expected, the elevated values identified in the lithium resource defined by Lithium Americas Corp. (see Figure 2) extend into the Orocobre properties along the east of the Cauchari salar. Assay results received to date from CAU001D and CAU002D show elevated lithium values in areas previously predicted from the Lithium Americas data. Information from drill holes to the south (CAU003 through CAU006) is pending, and will assist defining the southern extent of elevated lithium and the SO4/Li ratios in the south of the Orocobre properties.

Drilling intersected a sequence of predominantly silt and clay units to depths up to 60 m, overlying a halite dominated lower sequence. The halite sequence consists of compact to highly porous halite, with intervals of interbedded silt, clay and sand. Correlation of geological and down hole geophysical logs suggests these units correspond to the stratigraphic units in the Olaroz salar to the north. The down hole geophysical signature of the lower unit (Unit G in Olaroz) is particularly distinctive. While this unit is dominated by halite in Cauchari there is a transition to more clastically dominated sedimentation in Olaroz to the north, with lesser halite overall.

Correlation of stratigraphic units within the Cauchari salar, based on publicly available Lithium Americas Corp. drilling and the recent drilling by Orocobre, suggests the halite sequence thickens towards the east, although the halite becomes increasingly interbedded with clastic sediments in the eastern holes CAU005D and CAU006. An interpreted section through Cauchari is shown in Figure 3. [http://www.orocobre.com/Maps/Cauchari_Fig3_24Jan12.jpg](http://www.orocobre.com/Maps/Cauchari_Fig3_24Jan12.jpg)

**Brine Body Geometry and Brine Chemistry**

Evaluation of the depth to the top of the brine body, with densities of 1.2 g/cc, suggests the brine body is elongate north-south, extending south of the current salar halite crust towards CAU003D and CAU004D. Lower density brine in clays and silts overlies the higher density (1.2 g/cc) brine body east and south of the current salar halite crust surface. This contrasts with the situation at Olaroz where there are high densities continuously from surface and may reflect the narrower geometry of the Cauchari salar, compared to Olaroz, with a greater influence of low density water entering the salar sequence at Cauchari.

### Table 1 – Summary of Drilling Data – Averages per Hole

<table>
<thead>
<tr>
<th></th>
<th>Interval</th>
<th>Li</th>
<th>K</th>
<th>B</th>
<th>Mg/Li</th>
<th>K/Li</th>
<th>SO4/Li</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAU001D</td>
<td>Average over 244 m from 5 to 249 m</td>
<td>548</td>
<td>5,111</td>
<td>822</td>
<td>2.6</td>
<td>9</td>
<td>44</td>
</tr>
<tr>
<td>CAU002D</td>
<td>Average over 177 m from 9 to 186 m</td>
<td>403</td>
<td>4,057</td>
<td>622</td>
<td>2.1</td>
<td>10</td>
<td>77</td>
</tr>
<tr>
<td>CAU005D</td>
<td>Average over 72 m from 18 to 90 m</td>
<td>63</td>
<td>576</td>
<td>204</td>
<td>4.9</td>
<td>9</td>
<td>176</td>
</tr>
<tr>
<td>CAU003D</td>
<td>Average over 31.5 m from 22-53.5 m (results pending to 72 m - hole abandoned)</td>
<td>411</td>
<td>3,467</td>
<td>Preliminary results</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAU004D</td>
<td>Hole abandoned at 46.5 m</td>
<td>Results pending</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAU006</td>
<td>Hole drilled to 150 m</td>
<td>Results pending</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Figure 2 Drill hole locations over an image of lithium gram-metre/litre (averaged g/l lithium values multiplied by the thickness in metres over which they occur) values compiled from publicly released Lithium Americas Corp. data.
The sulphate levels are higher at the company’s Cauchari properties than Olaroz, with an average of about 2.5% as opposed to 1.5%. In addition, there is an apparent increase in sulphate levels towards the south of Cauchari, although sulphate levels are influenced by whether samples are within the higher density brine or lower density overlying brine. Changes in sulphate levels may reflect differences in the chemistry of inflows from the Tocomar River and drainages in the south of the salar at the time of brine formation.

The spacing between the six holes averages 2.9 km. Results suggest the lithium brine body extends over an area of approximately 26 square kilometres within Orocobre’s Cauchari properties. It is expected that the brine body could extend well beneath the current drilling depth, as Lithium Americas Corp.’s deepest reported hole (PE10/DDH07) had not intersected basement at 450 m.

Resource Estimation and Porosity/Permeability Measurements

Porosity data is being collected from the diamond drill cores by the British Geological Survey sedimentological laboratories that previously undertook this work for the company on the Olaroz project. Specific yield porosity determinations have not yet been received for cores samples analysed.

An estimate of the project resource will be undertaken when the remaining chemical analyses and specific yield porosity determinations are received from the British Geological Survey laboratories.

Quality Assurance/ Quality Control

Two litres of brine were collected from the bailed samples. Brine samples were field filtered prior to submission of a 250 ml sample to Alex Stewart laboratories. Laboratory prepared sample standards accompanied sample batches, with a frequency of one standard every five primary samples and one duplicate every 10 primary samples. Blank samples were also included with sample batches.
Alex Stewart Argentina (ASA) assayers in Mendoza, Argentina, has extensive experience analyzing lithium bearing brines. They are ISO 9001 accredited, and operate according to Alex Stewart Group standards consistent with ISO 17025 methods at other laboratories. Inter-laboratory check samples were sent by Orocobre to the University of Antofagasta, in Chile. This laboratory also has extensive experience analyzing brines.

Overall the analyses are considered to be of adequate quality, based on the results of the QA/QC samples. The results received to date have been verified by Murray Brooker, Geological and Hydrogeological Consultant, who is a Qualified Person as defined in NI 43-101.

**Development Synergies**

If sufficient resource is delineated in the Caucharí Project, the Caucharí brines could be developed and processed at the planned Olaroz Project facilities for relatively small incremental capital cost. This development strategy would require a capacity expansion of the Olaroz processing facilities beyond the currently planned rate of 16,400 tonnes per year of battery grade lithium carbonate. Similarities in brine type are expected to allow Caucharí brine to be integrated into the planned operation with minor modifications to the processing route.

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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 the leading lithium-potash developer in the lithium and potassium rich Puna region of Argentina. For further information, please visit [www.orocobre.com](http://www.orocobre.com).

**Competent Person’s and Qualified Person’s Statement**

The technical information in this announcement has been prepared by Murray Brooker. Murray Brooker is a geologist and hydrogeologist and is a Member of the Australian Institute of Geoscientists. Murray has sufficient relevant experience to qualify as a competent person as defined in the 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. He is also a “Qualified Person” as defined by Canadian Securities Administrators’ National Instrument 43-101. Murray Brooker consents to the inclusion in this announcement of this information in the form and context in which it appears.

Additional information relating to the Company’s Caucharí project is available in the existing technical report entitled “Technical Report – Caucharí Project, Argentina” dated April 30, 2010, which was prepared by John Houston, and in the Company’s press release.

Information in this news release relating to the testing results of Lithium Americas Corp. has not been verified by Mr. Brooker or by Orocobre, and such information is not necessarily indicative of results that will be obtained by Orocobre at the Caucharí Project.
Caution Regarding Forward-Looking Information

This report contains “forward-looking information” within the meaning of applicable securities legislation. Forward-looking information contained in this report may include, but is not limited to, the estimation and realization of resources at the Cauchari project, the viability, recoverability and processing of such resources, potential operating synergies between the Cauchari project and the Olaroz project, and other matters related to the development of the Cauchari project.

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 that further funding may be required, but unavailable, for the ongoing development of the Company’s projects; changes in government regulations, policies or legislation; fluctuations or decreases in commodity prices; the possibility that required permits may not be obtained; uncertainty in the estimation or economic viability of mineral resources; general risks associated with the feasibility and development of the Cauchari project; unexpected capital or operating cost increases; the risk that a definitive joint venture agreement with Toyota Tsusho Corporation in respect of the Company’s Olaroz project may not be completed; uncertainty of meeting anticipated program milestones; as well as those factors disclosed in the Company’s Annual Information Form for the year ended June 30, 2011 filed at 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 Company’s ability to carry on its exploration and development activities, the timely receipt of required approvals, the prices of lithium and potash, the ability of the Company to operate in a safe, efficient and effective manner and the ability of the Company to obtain financing as and when required and on reasonable terms. 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.