

11 June 2013

ASX/TSX ANNOUNCEMENT

Orocobre Completes Long-Term Pump Testing at the Cangrejillos/Salinas Grandes Potash – Lithium Project

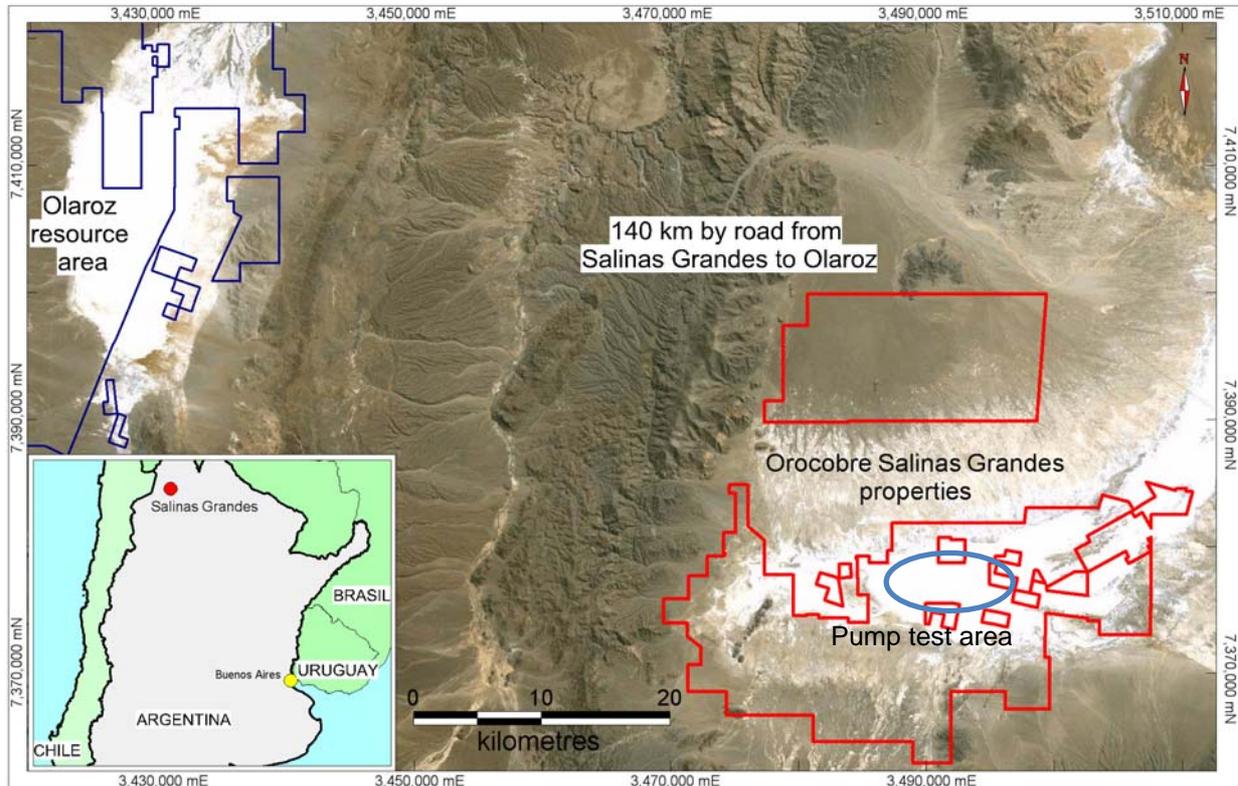
Highlights

- **Long-term pump testing completed on five test-production wells.**
- **Pump testing shows that brine volumes can be extracted from wells from the shallow potassium-lithium resource at a sufficient rate and concentration to support modest potash and lithium production.**
- **Brine grades stabilized during the pumping tests with some variation in average grade between holes.**
- **Test work since 2010 suggests the attractive brine chemistry; with a low Mg/Li ratio, high K/Li ratio and low sulphate and calcium levels; will result in high recoveries of potassium and lithium.**
- **Internal studies are underway to develop the strategy for further project advancement.**

Orocobre Limited (ASX: ORE; TSX: ORI) (the Company or Orocobre) reports completion of long-term pump tests at the 85% owned Salinas Grandes Potash-Lithium project (“Salinas Grandes”) in Salta Province, North West Argentina.

Salinas Grandes has an inferred resource, to a depth of 13.3m, estimated to contain **56.5 million cubic metres of brine at 795 mg/L lithium and 9,550 mg/L potassium, which is equivalent to 239,200 tonnes of lithium carbonate and 1.03 million tonnes of potash (potassium chloride)** based on 5.32 tonnes of lithium carbonate being equivalent to 1 tonne of lithium and 1.91 tonnes of potash being equivalent to one tonne of potassium.

Figure 1: The location of the Salinas Grandes and Olaroz projects in northern Argentina



Following completion of the resource estimate in 2012 the company has conducted long-term pump tests on five test production wells and two trenches within the central area of the salar. The purpose of the test work was:

- to ascertain whether a sufficiently high pumping rate could be achieved from the aquifer (being only to 13.3m depth)
- to investigate changes in permeability over the salar and to determine whether there are preferred areas for possible future extraction
- to ascertain whether the brine would maintain a stable grade during extraction and not be diluted by brackish water beneath the brine body

An extensive array of monitoring wells was established around test production wells and trenches. These provided information on the drawdown cones of wells and variations in brine chemistry with time.

Drilling and Geology

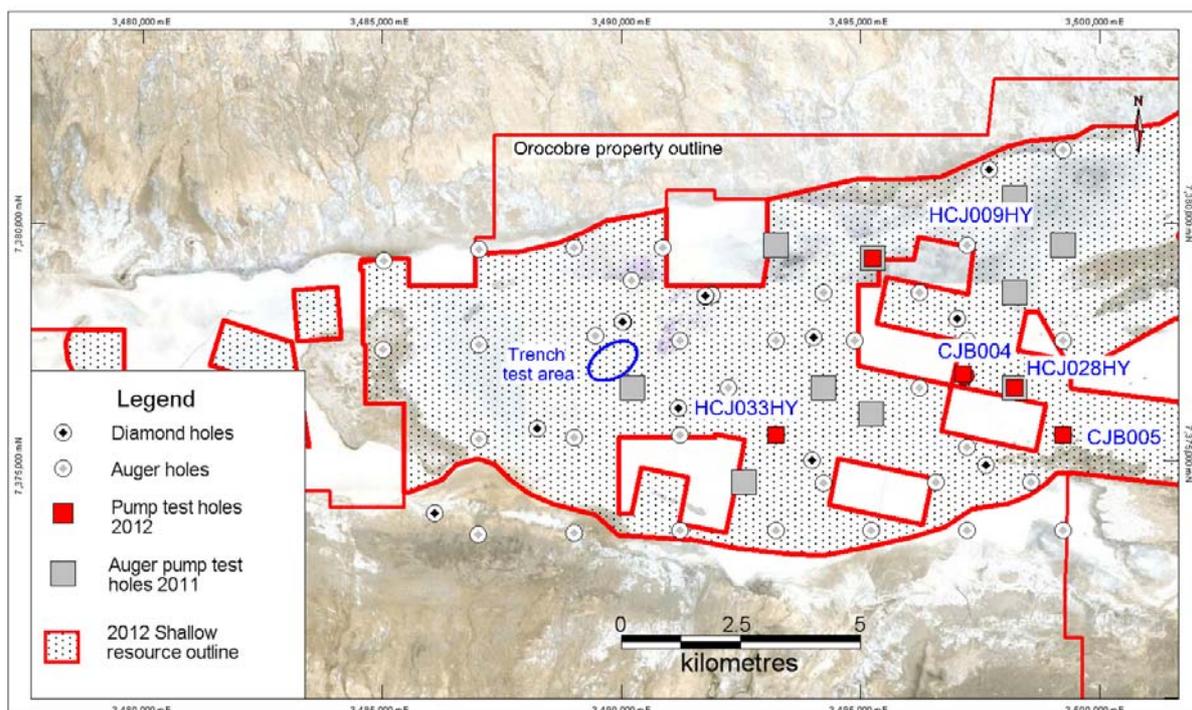
Orocobre previously drilled a total of 12 diamond drill holes in the Salinas Grandes salar to an average depth of 71.4 metres, with certain holes as deep as 180 metres and 47 shallow auger holes to a typical depth of 12m.

The shallow brine body is hosted in a sequence of silt and clay units, with minor intercalated sand - which generally increase in proportion towards the north of the salar. Halite extends to a maximum thickness of 0.5 metres below surface in the center-south of the salar. Drilling established there are higher permeability zones within the salar, associated with intervals of higher sand content and as channels within lower permeability silts and clays.

Pump Testing Methodology

To evaluate the potential for long term brine extraction from the Salinas Grandes salar pump testing was completed on five purpose-constructed test production wells. These wells were drilled to between 12.5 and 13.5 m below surface, using a rotary drilling rig, with the wells reamed to an outside diameter of 18 inches. Well casing with a diameter of 12 or 8 inches was installed in the wells, with the length of the casing perforated throughout. A clean well sorted 1-2 mm sand pack was installed as a filter around the casing in the holes. The location of the wells is shown in figure 2.

Figure 2: The location of the long term pump test holes (red), relative to the 2012 resource outline



A network of monitoring wells was established at distances of 5, 10 and 15 metres from each pump well. Additional monitoring wells were installed around the higher yielding hole HCJ009HY, 50 and 100 metres from this pump well. Monitoring was conducted using a Solinst down hole water level dipper and using data loggers in the pump well and surrounding wells.

Wells were pump tested by installing submersible pumps near the base of the five wells and monitoring changes in the standing water level in the pump well and the surrounding monitoring well network over a period of up to 91 days (in HCJ009HY).

Pump Test Results

Representative hydraulic conductivity (K) values calculated from the long term pump tests are in the range of 0.3 to 8.9 m/day. These pump test details are summarized in Table 1. These values are comparable to the range of values from 0.3 to 52 m/day from 12 short term tests undertaken in 2011 from the auger drilling programme.

Table 1: Pump test results from the five long-term pump tests carried out at Salinas Grandes

Test hole number	Predominant lithology	Screened depth m	Total Depth m	Pump rate l/s	Average K m/day	Pump time Days
CJB004	Clay with 0.2 m sand unit at 6 m	0-10	12.5	0.51	0.3	27
CJB005	Clay with fine sandy silt 9-11.5 m	0-10	12.5	2.71	8.9	88
HCJ009HY	Clay with sand and sandy silt 3.2-5.8; 11.5-12	0-11.5	12.5	1.55	1.1	91
HCJ028HY	Clay with 0.15-0.6 m fine silty sand	0-11.4	12.5	1.62	0.9	55
HCJ033HY	Clay with gypsiferous sand from 0.5-1.8 m	0-13	13.5	0.61	0.4	61

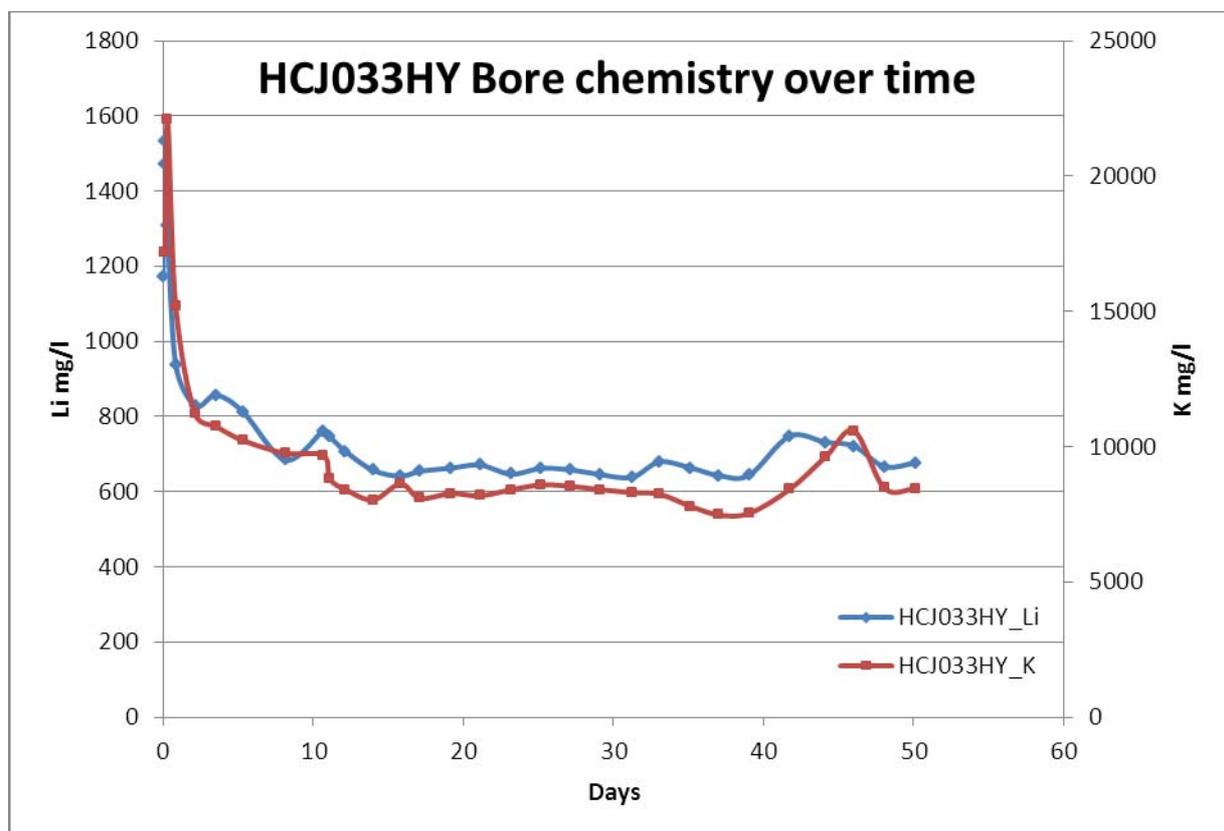
Although pump production declined to less than 1 l/s in two wells the remaining three wells sustained pump rates of between 1.55 and 2.71 l/s, with continuous pumping (interrupted for routine refueling of generators and maintenance) over a period of up to 91 days, before the test program was terminated. This suggested that wells are capable of supporting long-term brine production, although there is little available drawdown in most wells, with water levels close to the depth at which the pumps were installed. For production pumping this would probably require periods where wells are allowed to recover, with pumping switched to other wells during the recovery periods.

The highest yielding well (CJB005) is located in the central eastern part of the salar, with well HCJ028HY ~1.5 km to the NW. Well HCJ009HY is located near the northern boundary of the salar. Overall the pump tests show there is considerable variation in permeability within the salar.

Brine Chemistry

Lithium and potassium concentrations declined during the initial 15 day period of the 2012 pump tests prior to stabilizing or showing only minor declines in concentration (Figure 3 below). Overall results suggest that relatively constant brine concentrations can be produced from a well following this initial period of decline. The initial decline in concentrations is interpreted to reflect depletion of particularly concentrated brine from the surficial halite layer and underlying surficial sand intervals, relative to long-term contributions from silt, clay and minor sand units deeper within the well.

Figure 3: An example of changes in brine concentration over time during long term pump testing



Trenching Pump Test

Two trenches were constructed in the north west of the salar, in the area established by auger drilling to host Li values of > 800 mg/l. These were constructed with dimensions of 50 m by 3 m, and 1.5 m deep. The objective of this test program was to evaluate whether trenches could be used to extract brine from the shallow aquifer and to solar pre-concentrate the brine prior to extraction. Samples of brine taken following trench construction showed Li values exceeding 1700 mg/l. An evaluation of the economics of trench versus pump well construction will be evaluated as part of the scoping study.

Data Collection and QA/QC

Measurements of water levels and brine physical parameters (pH, density, Eh, TDS, temperature) were made systematically throughout the pump tests, with 272 primary samples collected for analysis. Brine samples were sent to the Orocobre Olaroz project laboratory for chemical analysis, including Li, K, B, Mg SO₄ and Cl.

Additional brine samples were sent for chemical analysis to the Alex Stuart Assayers Mendoza, Argentina laboratory, which has been used by the company since 2010. This laboratory has extensive experience analyzing brines from salar projects. They are ISO 9001:2000 accredited and operate their own internal standards consistent with ISO 17025.

Four different laboratory prepared standards were used as part of the Quality Assurance-Quality Control program, comprising 36 standard samples. In addition 42 blank samples were submitted with primary samples during the program. A total of 24 duplicate pairs were analysed as part of the pump testing program.

Analytical values generally fell within +/-10% of the standard values for samples. Overall duplicate samples showed a reasonable level of sample repeatability (precision).

During pump testing the brine extracted from wells was pumped through PVC pipes a distance >300 metres from the pump well. The brine was then released onto the salar surface and allowed to evaporate, to minimize the possibility of infiltration and recharge of the pump and monitoring wells.

Management Commentary

Orocobre's Managing Director, Richard Seville, stated: "The completion of the long-term pump tests is an important milestone for the Salinas Grandes project. The work completed at Salinas Grandes to date confirms the potential that brine can be extracted from the shallow resources at potentially commercial rates and with stable grades that could allow for modest annual production of potassium and lithium to augment our flagship Olaroz project, now under construction."

"The Salinas Grandes shallow brine body has attractive grades and excellent chemistry, with a low magnesium to lithium ratio, high potassium to lithium ratio and low sulphate levels, which should result in high recoveries and low operating costs. To better understand the potential for Salinas Grandes the company has initiated an internal study which will set determine the strategy for advancing the project further."

For more information please contact:

Australia and Asia

David Hall
Business Development Manager
Orocobre Limited
T: +61 7 3871 3985
M: +61 407 845 052
E: dhall@orocobre.com

North America

James Calaway
Chairman
Orocobre Limited
M: +1 (713) 818 1457
E: jcalaway@orocobre.com

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.

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 Salinas Grandes project is available in the existing technical report entitled "Technical Report – Salinas Grandes Project, Argentina" dated April 30, 2010, which was prepared by John Houston.

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 Salinas Grandes project, the viability, recoverability and processing of such resources, potential operating synergies between the Salinas Grandes project and the Olaroz project, and other matters related to the development of the Salinas Grandes 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 Salinas Grandes project; unexpected capital or operating cost increases; 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, 2012 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.