OROCOBRE LIMITED
ABN 31 112 589 910

5 May 2009

ASX ANNOUNCEMENT

OLAROZ LITHIUM – POTASH PROJECT
SCOPING STUDY

- **Potential to develop a long life operation with production of 15,000 tpa lithium carbonate and 36,000 tpa potash.**
- **Resource base sufficient to support future expansions.**
- **Exploration potential beneath the current resource.**
- **Excellent chemistry with attractive lithium and potassium grades, low magnesium: lithium ratios and attractive sulphate levels.**
- **Conventional processing routes applicable with low technical risk.**
- **Capital costs estimated to be in the range of US$80m-US$100m.**
- **Low cash operating costs and strong operating margins indicated. An operation would be competitive with current low cost brine producers.**
- **Company to undertake a Bankable Feasibility Study which is expected to cost approximately US$2m and be completed in mid-2010.**

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SCOPING STUDY

Introduction

With completion of the maiden resource estimate which was announced on 29 April 2009, it has been possible to complete a Scoping Study on the project. The study has considered all technical aspects of the Olaroz Project including:

- geology, hydrogeology and resources
- exploration potential
- brine chemistry
- climatic conditions
- solar evaporation test work and two stages of batch test work
- consideration of various processing routes
- infrastructure requirements
- transport routes
- labour requirements
- capital and operating costs.

During the process, particular emphasis has been put on scoping the requirements of further work to be undertaken during a Bankable Feasibility Study.

Geology and Resources.

The geological sequence is a recent sedimentary sequence composed of poorly consolidated fluvial and lacustrine clastic sediments. These inter-bedded sands, silts, clays, and minor halite units occur beneath the current halite crust.

Within the top 55m from surface, an inferred resource of **1.5 million tonnes of lithium carbonate equivalent and 4.1 million tonnes of potash** has been estimated by independent consultants Geos Mining.

Exploration Potential

Typical halite-dominated salar sequences have highly predictable hydrogeological properties. Specific yield (the amount of free draining brine) within the near-surface (0-15m) environment in recently deposited halite is in the range of 8-12%. However, specific yields decline rapidly beneath this level, due to overburden pressure and salt crystallisation, to values of around 3%-5% at 40-50m depth. This results in halite-rich salar deposits having an overall specific yield of around 6-8% in the top 40-50m.

Olaroz is different as it is not dominated by halite. The specific yield of sand and sandstones do not decline nearly as rapidly with depth and thus the zone beneath the clay layer (used as a lower boundary in the current resource estimate) is an exciting exploration target. This zone has already been intersected by three drill holes that have identified a number of potential sandy aquifer horizons. Drilling has also shown the salt lake to be at least 200m deep, the depth of the deepest drill hole.

Potential Production Rate

Subject to the current resource being upgraded to measured and indicated resources of a similar size and grade, the current resource will support a development of an long life operation producing, in the first stage, 15,000 tonnes per annum of lithium carbonate and 36,000 tonnes of potash (potassium chloride). A boric acid by product has also been considered. The resource is also of sufficient size to allow for potential significant expansion and the exploration potential provides further upside over the long term.

Brine Chemistry

The brine chemistry is very attractive.

- The average lithium grade at 800g/kl is similar to the Hombre Muerto Operation and approximately double the grade of the Silver Peak Operation and the Rincon Salar .
- The Mg:Li ratio is also low (which is desirable for processing) at around 2.8 compared to Atacama , Rincon and Uyuni at 6.4, 8.6 and 19 respectively. Only Silver Peak and Hombre Muerto are lower at 1.4.
- The sulphate levels are such that soda ash may not be required for magnesium or calcium removal which is of considerable cost benefit.

The grade distribution throughout the deposit indicates the potential for the first 5 to 10 years of an operation to benefit from grades significantly higher than the average grade.

Climate

The project is at approximately 3,900m. The average temperature is approximately 8 degrees centigrade. Precipitation is less than 100mm/annum. Average wind velocity is approximately 25km/hr. These conditions and low cloud cover make it suitable for solar evaporation processes. The project is very close to the Hombre Muerto Operation which uses solar evaporation up to very high concentration levels and has been in production since 1996.

Processing Route

Batch test work was undertaken to investigate on a number of processing routes. Assisted by detailed phase chemistry, it is concluded that the brines can be processed by a number of conventional processing routes. All of the potential routes involve using solar evaporation and precipitation of waste products with or without other reagents followed by potash recovery via differential flotation and production of lithium carbonate with soda ash.

The indicated processing routes do not require the use of high risk novel technology such as nano-filtration or new processes and as such has a lower level of technical processing risk.

Infrastructure

The project is located on the main road from northern Argentina to the major port of Antofagasta, approximately 550 kms by road to the west. This will provide the export route for production. 40kms to the north of the salar is a major gas pipeline. The operation is supported by the provincial capital of San Salvador de Jujuy and Salta, 270kms and 400kms by road to the east.

Capital Costs

Capital costs for an operation producing 15,000 tpa lithium carbonate are estimated in the range of US$80m-US$100m including contingency.

Operating Costs and Operating Margin

The study indicates an operation would have low operating costs and strong operating margins and be competitive with established brine producers.

Bankable Feasibility Study

The scoping study indicates that the Olaroz Project has the potential to be a highly attractive project with strong investment returns and low technical risks. With such positive conclusions, the Company has committed to undertaking a Bankable Feasibility Study into the development of an operation at Olaroz. The study is expected to cost approximately US$2m and be completed in mid 2010.

Managing Director, Richard Seville, commented: “We are delighted with the results of our scoping study. The Olaroz project has the potential to be a low cost producer, highly competitive with the established producers. The lithium market has grown strongly over the past 10 years driven by rechargeable battery demand in portable electronics. This demand growth is forecast to accelerate with the application of lithium ion batteries in hybrid and plug-in electrical vehicles.

We look forward to progressing the project through to Bankable Feasibility Study to be completed in mid 2010 and being part of the supply side in this growing market”

For and on behalf of the Board

Paul Crawford
Company Secretary

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COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Messrs Richard Seville and Neil Stuart who are members of the Australasian Institute of Mining and Metallurgy. Messrs Seville and Stuart are Directors of Orocobre Ltd and have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Messrs Seville and Stuart consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.