

# Mine on verge of becoming a reality

Aussie resources house Orocobre Ltd is looking to start construction at its Oloroz lithium-potash play in Argentina next year and expects first production by 2012.

With a US\$10 million bankable feasibility study (BFS) and environmental impact statement due to be finalised mid 2010, the company will then look to progress finance options.

Results from prefeasibility due diligence completed last May had already pointed to a hefty US\$80-US\$100 million capital cost range.

However, it also demonstrated Oloroz had the potential to be a long life, low cost operation, producing 15,000 tonnes per annum of lithium carbonate and 36,000 tpa of potash based on respective resources of 1.5 million tonnes and 4.4 Mt.

To maintain its focus on Oloroz, Orocobre is in the throes of spinning out its hard rock assets – which cover six projects in two countries – into new vehicle Elementos Ltd.

An IPO is due to close this month and the company is looking to raise up to \$8.25 million.

As for Orocobre, it undertook a \$5.4 million rights issue and private placement in May and is valued at around \$90 million.

Elementos managing director Corey Nolan, a last minute replacement for Orocobre chief executive Richard Seville at this year's Mining 2009 Resources Convention in Brisbane, said Oloroz was well placed to become the world's lowest cost and highest margin lithium operation.

"We (Orocobre) are looking at commissioning 15,000 tpa of carbonate capacity from 2012 over 25-30 years," he enthused.

"The price of lithium carbonate has been growing steadily in line with growing demand for lithium ion batteries and their use in electric vehicles and electronic products."

## Favourable logistics

Located in northern Argentina on the border with Chile, Oloroz spans 11,000 square hectares and is a brine source of lithium.

It has access to the provincial capital of San Salvador de Jujuy and Salta, 270 km and 400 km by road to the east respectively.

The project is also well positioned in terms of logistics, with a gas pipeline only 40 km away and compressor station just 25 km away. Meanwhile, water is readily available.

Oloroz itself comprises a sequence of inter bedded sands/silts and clays which encase the lithium brine solutions.

With inferred resources down to 55m in depth, Nolan said there was potential for this to be extended to 200m.

"Our chemistry is also simple and we have a low magnesium to lithium ratio and attractive sulphide levels, which means that our consumption of reagents will be low, which keeps our costs low," he explained.

"It also means our deposit is amenable to conventional processing



Corey Nolan

routes with relatively low technical risk."

The average lithium grade is 800 grams/kilolitre, the magnesium to lithium ratio is low at around 2.8 and the sulphate levels are such that soda ash may not be required for magnesium or calcium removal.

The process will involve solar evaporation, precipitation of waste products followed by potash recovery via differential flotation and production of lithium carbonate with soda ash.

## Interests expanded

Current work as part of the DFS, apart from additional drilling to bring the inferred numbers into the measured category, also includes further brine sampling for chemical analysis and core sampling for hydrogeological testing.

Also, being at an altitude of about 3,900m above sea level, the conditions at Oloroz are ideal for solar evaporation. On this note, it is also close to the Hombre Muerto mine, which uses the same process at very high concentration levels and has been operating since 1996.

During the year Orocobre signed a joint venture agreement on the Salars project in South America and can earn a 80% interest in the undertaking by spending \$1.7 million by March 2012.

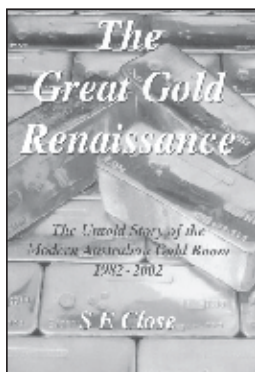
The tenements include 28,000 hectares, about 30% of the salt crust, at the Salar de Cauchari, which is prospective for potash, boron and lithium.

This area has been exploited for borates for many decades by miners including Rio Tinto Ltd and it lies directly south of Oloroz.

The project exposes the company to the growing world market for lithium and fertilisers together with a range of other industrial minerals.

By Tania Winter

## A REMARKABLE BOOK - ORDER YOUR COPY NOW



### THE GREAT GOLD RENAISSANCE

by S.E. Close

*The untold story of the modern Australian gold boom 1982-2002*

See [www.surbiton.com.au](http://www.surbiton.com.au) for details and order form

A\$60 (including GST + p&p)

Surbiton Associates Pty Ltd ABN 36 073 947 716  
71 Stevenson Street Kew Victoria 3101 Australia  
Phone +61 3 9853 6120 Fax +61 3 9853 9343  
Mobile 0409 966 120 Email [info@surbiton.com.au](mailto:info@surbiton.com.au)

Website [www.surbiton.com.au](http://www.surbiton.com.au)