

**QUARTERLY REPORT OF OPERATIONS
FOR THE PERIOD ENDED 31 MARCH 2009
Highlights of the Quarter's Activities**

OLOROZ – LITHIUM/POTASH

- **Maiden Inferred Resource of 350 million kilolitres at 800 g/kL lithium and 6,600 g/kL potassium to 55m.**
- **Resource equivalent to 1.5million tonnes of lithium carbonate and 4.4 million tonnes of potash.**
- **Significant exploration potential for additional brines beneath the current resource.**
- **Excellent chemistry with attractive lithium and potassium grades, low magnesium: lithium ratios and attractive sulphate levels.**
- **Scoping study almost completed with results to be announced shortly.**

South American Salars S.A

- **The company signed an agreement with local Argentinean interests to set up a joint venture company, South American Salars S.A. targeting minerals from salt lakes. Orocobre has the right to earn 80% by funding US\$1.6m of expenditure.**
- **At the time of the announcement, South American Salars held highly prospective 50,000 hectare portfolio of potash, boron, lithium and sodium salt projects on 10 salars.**

CORPORATE

- **Company remained well funded at the end of the quarter with approximately \$2.9m in cash**
- **A presentation made at the conference, RUI Explorers Conference in Fremantle WA in February 2009.**

OLAROZ LITHIUM - POTASH ROJECT

MAIDEN INFERRED RESOURCE

Independent resource specialists Geos Mining of Sydney, Australia have reported an Inferred Mineral Resource of:

350 million kL of brine at 800g/kL lithium and 6,600 g/kL potassium.

This is equivalent to 1.5 million tonnes of lithium carbonate and 4.4 million tonnes of potash (KCl) 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.

The resource estimate extends to an average depth of 55m. Further details are given in the table below together with lower and higher estimates of brine volume.

	Brine Kilolitres (kL) (millions)	Lithium (g/kL)	Potassium (g/kL)	Lithium Carbonate equivalent (Million tonnes)	Potash (KCl) equivalent (Million tonnes)	Zone 1 Average Specific Yield	Zone 2 Average Specific Yield
Preferred Estimate	350	800	6,600	1.49	4.40	11.5%	8.3%
Higher Estimate	415	800	6,600	1.76	5.22	13.3%	9.9%
Lower Estimate	255	800	6,600	1.09	3.23	9.0%	6.0%

The resource estimate was based on 22 hole drilling programme the previous quarter and data collected during the quarter which included:

- Down hole geophysical logging on 7 cased boreholes.
- Additional brine sampling programmes at various depths on all boreholes
- Hydrogeological test work including constant flow rate drawdown tests at three locations where monitoring bores had been previously bored and drawdown/recovery tests on 6 other bore holes.
- A programme of extensive laboratory quality control.
- A hole by hole geological interpretation of the deposit

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. Consultants Geos Mining constructed a geological model dividing the deposit in three broad zones:

- Zone 1 - a near-surface layer, from surface to the base of a halite-rich unit, which occurs predominantly in the centre of the salar to a maximum depth of 19m and averaging 11m depth.
- Zone 2 - an interbedded sequence of sands, silts and clays to a maximum depth of 64m and an average depth of 55m.
- Zone 3 - an underlying clay layer with minor sand, silt and halite interbeds.

The drilling program at Olaroz experienced difficult coring conditions that resulted in low core recoveries at 50% and flowing fine sands blocked a number of holes, limiting downhole geophysical gamma logging to depths of 27m to 45m.

Although there is a reasonable understanding of the overall geological model, further drilling is required to improve the confidence in the interpretation of the detailed sedimentary sequence and, hence, improve the confidence in the estimates of brine volumes.

Exploration Potential

Typical halite-dominated salar sequences have highly predictable hydrogeological properties. Specific yield within the near-surface (0-15m) in recently deposited halite is in the range of 8-12%, but declines rapidly beneath this, due to overburden pressure and 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, the deepest of which is 200m, that have intersected 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.

SCOPING STUDY

During the quarter, the scoping study was advanced to near completion. Now that the resource estimate has been completed, the study will be finalised over the next few days and results released shortly.

SOUTH AMERICAN SALARS

During the quarter, the company announced a major new initiative by the signing of a joint venture arrangement focussing on the exploration and exploitation of minerals found in salars (salt lakes) in South America.

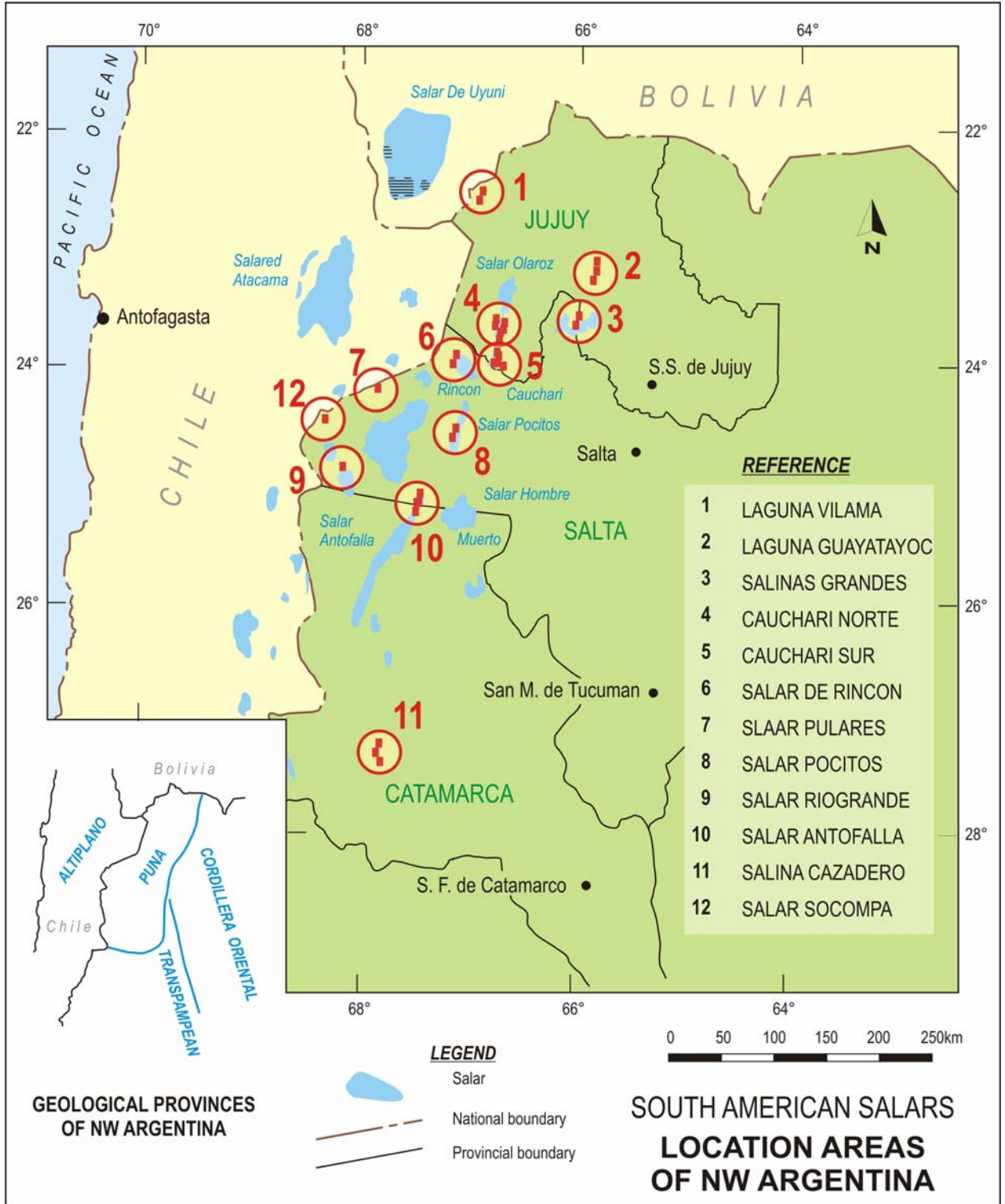
Under the terms of the joint venture, Orocobre has the right to earn 80% of the joint venture by spending US\$1.6m by 31 March 2012. It can also increase its percentage to 90% by sole funding an additional US\$2.0m. The joint venture is a corporate joint venture through South American Salars Pty Ltd, "SAS" and Orocobre will earn its interest by the progressive exercise of share options in SAS.

The projects contributed to the joint venture are located in 3 northern provinces in Argentina; namely Salta, Catamarca and Jujuy.(see figure). The tenements are located on 10 salars and covered approximately 50,000 hectares at the time of the agreement. Additional areas have since been applied for. A number of these salars have been exploited in the past for borates and sodium sulphate.

The projects include:

- The Salar de Cauchari which is prospective for potash, boron and lithium. The company's tenements cover approximately 12,000 has, approximately 30% of the salt crust of the Salar, and which it considers the most prospective areas for mineralised brine resources. The Salar had been exploited for borates for many decades by miners including by a local subsidiary of Rio Tinto Ltd. The salar is directly to the south of Orocobre's Olaroz lithium-potash project in Jujuy province which contains an Inferred Resource of 1.5mt of lithium carbonate and 4.1 million tonnes of potash equivalent and is advancing rapidly.
- The Salar de Antofalla project which is considered prospective for potash and covers approximately 10,000 hectares in Salta province. The area to the south is currently being explored by Brazil's Companhia Vale do Rio Doce (CVRD).
- The Salar de Casaderito project, which is prospective for potash, borates, sodium carbonate and sodium sulphate and covers approximately 10,000 hectares.

The projects expose the company to the growing world market for fertilisers together with a range of other industrial minerals such as potash, borates, lithium, sodium sulphate and sodium carbonate. The strategy will allow the company to build on its knowledge and expertise in salar geology being gained through its Olaroz Lithium - Potash Project and apply this knowledge to other salars.



SANTO DOMINGO PROJECT - COPPER/GOLD PORPHYRY, BRECCIA PIPE AND EPITHERMAL TARGETS

No reportable work was undertaken during the quarter.

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 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.

Information in this announcement relating to the Salar de Olaroz resources is based on information compiled by Sue Border, who is a Fellow of the Australasian Institute of Mining and Metallurgy and is Principal of Geos Mining. She 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. Sue Border consents to the inclusion in this announcement of this information in the form and context in which it appears.

Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

OROCOBRE LIMITED

ABN

31 112 589 910

Quarter ended ("current quarter")

31 MARCH 2009

Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$A'000	Year to date \$A'000
1.1 Receipts from product sales and related debtors		
1.2 Payments for (a) exploration and evaluation (b) development (c) production (d) administration	(668)	(2,106)
1.3 Dividends received		
1.4 Interest and other items of a similar nature received	51	201
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Other (provide details if material)		
Net Operating Cash Flows	(771)	(2,332)
Cash flows related to investing activities		
1.8 Payment for purchases of: (a)prospects (b)equity investments (c) other fixed assets		(57)
1.9 Proceeds from sale of: (a)prospects (b)equity investments (c)other fixed assets		
1.10 Loans to other entities		
1.11 Loans repaid by other entities		
1.12 Other (provide details if material)		
Net investing cash flows	-	(57)
1.13 Total operating and investing cash flows (carried forward)	(771)	(2,389)

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(771)	(2,389)
Cash flows related to financing activities			
1.14	Proceeds from issues of shares, options, etc.		22
1.15	Proceeds from sale of forfeited shares		
1.16	Proceeds from borrowings		
1.17	Repayment of borrowings		
1.18	Dividends paid		
1.19	Other		
	Net financing cash flows	-	22
Net increase (decrease) in cash held			
		(771)	(2,367)
1.20	Cash at beginning of quarter/year to date	3,651	5,242
1.21	Exchange rate adjustments to item 1.20	5	10
1.22	Cash at end of quarter	2,885	2,885

Payments to directors of the entity and associates of the directors

Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	46
1.24	Aggregate amount of loans to the parties included in item 1.10	Nil
1.25	Explanation necessary for an understanding of the transactions	
	Services provided by executive directors and company secretarial services. Director fees	

Non-cash financing and investing activities

- 2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

nil

- 2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

nil

+ See chapter 19 for defined terms.

Financing facilities available

Add notes as necessary for an understanding of the position.

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	Nil	Nil
3.2 Credit standby arrangements	Nil	Nil

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	500
4.2 Development	Nil
Total	500

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.

	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	331	301
5.2 Deposits at call	2,554	3,350
5.3 Bank overdraft		
5.4 Other (provide details)		
Total: cash at end of quarter (item 1.22)	2,885	3,651

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1		Interests in mining tenements relinquished, reduced or lapsed		
6.2		Interests in mining tenements acquired or increased		

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 Preference +securities <i>(description)</i>				
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3 +Ordinary securities	52,351,187	42,702,808		
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	165,000	165,000		
7.5 +Convertible debt securities <i>(description)</i>				
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7 Options <i>(description and conversion factor)</i> Unlisted Options	8,000,000 1,025,000	Nil Nil	<i>Exercise price</i> 25 cents 37.5 cents	<i>Expiry date</i> 31 December 2010 31 July 2011
7.8 Issued during quarter				
7.9 Exercised during quarter				
7.10 Expired during quarter				
7.11 Debentures <i>(totals only)</i>				
7.12 Unsecured notes <i>(totals only)</i>				

Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement gives a true and fair view of the matters disclosed.



Sign here: Date: 30 April 2009
 (Director/Company secretary)

Print name: Paul Crawford

+ See chapter 19 for defined terms.

Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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