

Quarterly Activities Report and Appendix 5B

For the period
ending
31 March 2011



**AN EMERGING
RARE EARTHS
PRODUCER
FOR USERS
WORLDWIDE**

Highlights

- Price for Nolans Rare Earth Oxide mix surpasses US\$160/kg;
- Massive drill program commences at Nolans Bore – expansion and definition targets;
- Key engineering contracts awarded to progress Nolans Bankable Feasibility Study;
- Global target customer visits conducted and discussions in progress – more planned in 2nd quarter;
- Hydrochloric Acid regeneration and Gypsum demonstration plant successfully commissioned.

CORPORATE

Expressions of interest for the corporate advisory role to assist Arafura progress the “bankable” aspects of the Nolans Bankable Feasibility Study have been sought. The assessment process is well advanced and selection is expected to occur in May. Key responsibilities of the role will be to assist Arafura in selecting the optimal financial capital structure for the Company, oversee Arafura’s in-house financial models to ensure they are adequately maintained to meet the needs of potential financiers, and work with Arafura and potential financiers in selection of credible, independent technical experts. The appointment had been intended to be made in the first quarter of 2011 following Arafura’s planned customer visits to Europe, UK, North America, Japan and Korea. The unfortunate natural events that struck Japan have delayed the visit to Japan and hence the advisor selection process until late in May.

These recent visits to target customers allowed Arafura to progress existing discussions and seek new interest from other customers as a near-term, alternate supplier to China. It has allowed Arafura to engage in discussions regarding specific customer requirements in terms of products and specifications, an integral part of the program towards establishing future supply contracts. It also ensures Arafura’s product suite unlocks the appropriate revenue returns.

The price of a kilogram of Nolans mix of Rare Earths rose significantly throughout the quarter from US\$70.52 in December 2010 to over US\$160 in April 2011. Comments from the Chinese Society of Rare Earths at the Critical Metals Investment Summit held in Vancouver, Canada, in January 2011 indicate China will move to become a net importer of Rare Earths in 2014. This dispels the “bubble” theory concerning recent price rises as it implies that China cannot simply turn on the supply tap – it is evident that it needs its own resources for its own requirements.

These comments, combined with the existing global shortages of Rare Earths which is exacerbated in countries outside China by Chinese export quotas and lack of alternate supply, means the market pricing mechanism for Rare Earths is following true demand/supply dynamics.

Demand > Supply for critical, strategic materials = ↑prices.

ARAFURA RESOURCES LIMITED

arafura@arafuraresources.com.au www.arafuraresources.com.au ABN 22 080 933 455

PERTH: Level 5/16 St Georges Tce, Perth WA 6000 | PO Box 3047, Adelaide Terrace, Perth WA 6832 T: +618 6210 7666 F: +618 9221 7966

DARWIN: 18 Menmuir St, Winnellie NT 0820 | PO Box 37220, Winnellie NT 0821 T: +618 8947 5588 F: +618 8947 5599

WHYALLA: Unit 18, 11 Darling Tce, Whyalla SA 5600 T: +618 8645 5509 F: +618 8645 1856

Detailed presentations on the Company's activities were given to:

- 34th Australian / Japanese High Level Group on Energy and Minerals; &
- The TREM 11 conference in Washington DC

Copies of these presentations can be found on our website at www.arafuraresources.com.au. These provide additional detail and can be read in conjunction with this report.

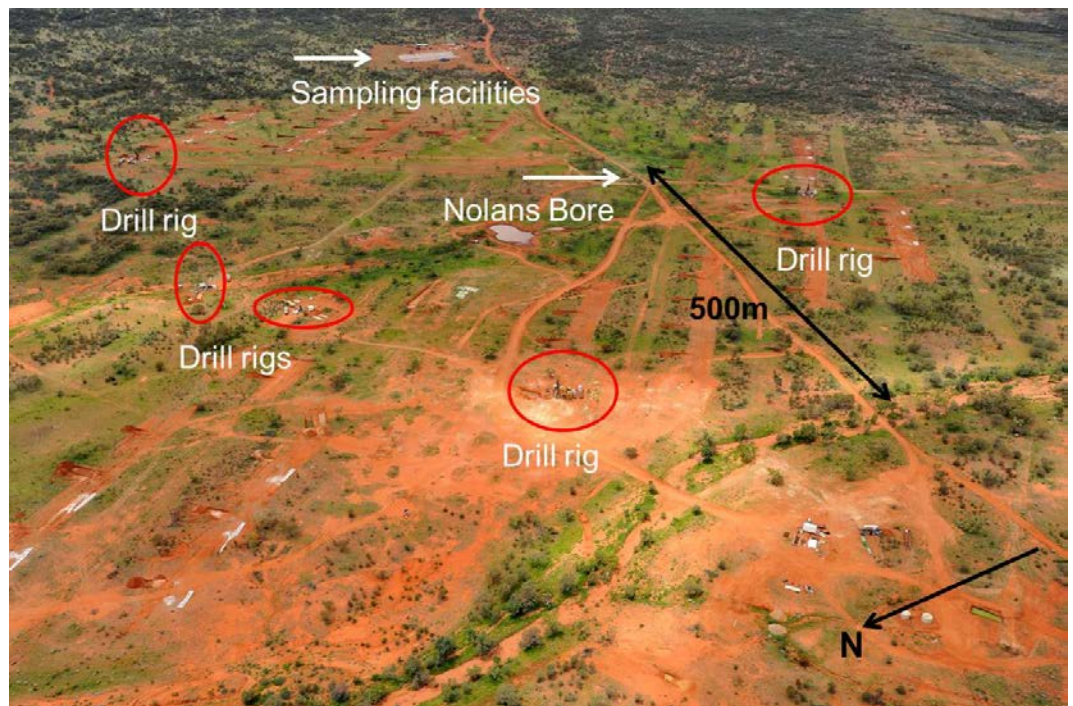
NOLANS PROJECT

Nolans Bore Mine and Resource

During the quarter the Company executed with Drillwest a contract to undertake the largest drilling program in Arafura's history at Nolans Bore. The program is aimed at improving resource confidence for direct feed into the Nolans Bankable Feasibility Study and to assess the potential for resource expansion. The program has been in planning for nearly twelve months pending finance. The program involves two reverse circulation (RC) rigs and two diamond core rigs to drill approximately 45,000 metres in a six month program. Historically Arafura has drilled a total of 43,000 metres at Nolans Bore.

The program was initially delayed by unseasonably wet weather in central Australia; however it is now in full swing.

In addition, the Company has engaged the use of sample preparation facilities at site in an effort to reduce assaying and laboratory gridlocks.



Aerial view of drill operations at Nolans Bore (March 2011) with drill sample preparation and wash-down facilities in distance. A fifth drill rig is undertaking hydrological assessment for the Nolans Bore Mine EIS.



Sample preparation and wash-down facilities at site. Sample bags from the earlier “Big Bertha” program are arranged in the centre.



“Big Bertha” samples awaiting transport for the sulphation demonstration program. Each bag weighs approximately 1 tonne, or 28 kg contained REO worth approximately US\$4,500 at today’s prices.



Night-shift diamond core drilling operations.



Resident Aileron Roadhouse identity and comedian, Greg Dick, entertains the workers with his daily “drop the stainless steel tray on the tile floor” routine!

Technology development

The Company successfully commissioned a scale demonstration plant to prove the process of treating a calcium chloride by-product with sulphuric acid to regenerate hydrochloric acid (a key component in the Nolans process pre-leach) and a by-product of calcium sulphate (Gypsum). The process operated on a continuous basis and successfully proved the recycling of hydrochloric acid. Customer analysis of the Gypsum product is being assessed for commerciality, and the final phases of the program are being reviewed and will be reported shortly. The plant is scheduled for decommissioning in early May.

Technology programs scheduled for the 2nd quarter includes large-scale beneficiation and preleaching; Rare Earth sulphation; and further Rare Earth Oxide separation for customer evaluation and engineering design.



Gypsum cake in production at the AMMTEC facility.

Bankable Feasibility Study (BFS)

A complete internal review across all technology aspects of the project has been underway for the past six months to refine and optimize the process flowsheets.

During the quarter, the Company was pleased to announce the appointment of AMEC Minproc as engineering contractor (study manager) for the Nolans Bankable Feasibility Study. AMEC Minproc will now review and advance design work through to completion of the BFS.

Environmental studies continue both at Nolans Bore and Whyalla, and meetings with the South Australian Government and regulators have taken place to progress the Whyalla development application. In addition, there have been a number of stakeholder engagement activities, both at Nolans Bore and at Whyalla.



Water level monitoring as part of the Nolans Bore Mine EIS program.



Groundwater monitoring bore being installed by Drilling Solutions, and soil sampling being conducted by AECOM, as part of the Whyalla site EIS program (March 2011).

Appendix 5B

Mining exploration entity quarterly report

Name of entity

ARAFURA RESOURCES LIMITED

ABN

22 080 933 455

Quarter ended ("current quarter")

31 March 2011

Consolidated statement of cash flows

		Current quarter \$A'000	Year to date (9 months) \$A'000
Cash flows related to operating activities			
1.1	Receipts from product sales and related debtors	-	-
1.2	Payments for (a) exploration & evaluation	(3,340)	(10,717)
	(b) development	(3,764)	(6,658)
	(c) production	-	-
	(d) administration	(1,989)	(4,793)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	1,072	1,565
1.5	Interest and other costs of finance paid	(1)	(4)
1.6	Income taxes paid	-	-
1.7	Other (provide details if material)	-	-
	Net Operating Cash Flows	(8,022)	(20,607)
Cash flows related to investing activities			
1.8	Payment for purchases of: (a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	(72)	(145)
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	(72)	(145)
1.13	Total operating and investing cash flows (carried forward)	(8,094)	(20,752)



1.13	Total operating and investing cash flows (brought forward)	(8,094)	(20,752)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	1,623	92,427
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 – Capital Raising Expenses	-	(4,968)
	Net financing cash flows	1,623	87,459
	Net increase (decrease) in cash held	(6,471)	66,707
1.20	Cash at beginning of quarter/year to date	96,667	23,543
1.21	Exchange rate adjustments to item 1.20	(102)	(156)
1.22	Cash at end of quarter	90,094	90,094

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	(541)
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

Directors fees, salaries & superannuation

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

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	9,671
4.2 Development	22,492
4.3 Production	-
4.4 Administration	2,209
Total	34,372

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	8,870	6,568
5.2 Deposits at call	81,224	90,099
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	90,094	96,667

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	-	-	-

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)	Amount paid up per security (see note 3)
7.1	Preference +securities (description)				
7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3	+Ordinary securities	367,930,342	367,930,342		
7.4	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	930,000 700,000	930,000 700,000	\$0.85 \$1.19	\$0.85 \$1.19
7.5	+Convertible debt securities (description)				
7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7	Options			Exercise price	Expiry date
	ARUAC	100,000	-	\$1.60	30-06-11
	ARUAI	3,495,000	-	\$0.85	31-12-13
	ARUAM	820,000	-	\$1.72	30-06-11
	ARUAO	7,930,000	-	\$1.19	31-12-12
	ARUAS	150,000	-	\$1.31	30-06-11
	ARUAZ	200,000	-	\$1.70	30-06-11
	ARUAK	1,200,000	-	\$0.75	20-07-13
	ARUAQ	750,000	-	\$0.98	31-08-13
	ARUAY	750,000	-	\$1.08	14-09-13
	ARUAD	1,100,000	-	\$1.54	26-11-13
7.8	Issued during quarter	-	-	-	-
7.9	Exercised during quarter	930,000 700,000	- -	\$0.85 \$1.19	\$0.85 \$1.19
7.10	Expired during quarter	-	-	-	-
7.11	Debentures (totals only)				
7.12	Unsecured notes (totals only)				



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 does give a true and fair view of the matters disclosed.

29/04/11

Sign here: Date:
(Director/Company secretary)

Gavin Lockyer

Print name:

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.

== == == == ==