

Quarterly Activities Report and Appendix 5B

For the period
ending
31 March 2013

ASX: ARU



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

HIGHLIGHTS



New initiatives underway to boost economics of the Nolans Project



Targeted cuts of up to A\$1,000 million in Project capital costs:

- Significant efficiencies and savings from relocating intermediate chemical processing close to the Nolans Bore Mine site
- Other initiatives including, process improvements and further relocation of plant are under active consideration



Technical Review and Optimisation Program with Chinese rare earth experts well underway – additional material efficiencies and savings anticipated



Exploratory drilling identifies new aquifer system close to Nolans Bore with potential to supply required water for life of operation



Likely reduction in short-term funding requirements and long-term funding risk

SUMMARY

NEW INITIATIVES TO BOOST PROJECT ECONOMICS

As outlined in the recent Company announcement (ASX: ARU 22/04/13), Arafura is very focused on initiatives designed to improve and optimise the economics and viability of the Nolans Project. These include measures to:

- Improve and optimise the Project's configuration and logistics;
- Identify and apply process flow sheet improvements and design efficiencies; and
- Substantially reduce the Project's capital and operating costs

TARGETED CUTS OF UP TO A\$1 BILLION AND REDUCTIONS IN OPERATING COSTS

The Company is targeting total Project capital cost reductions of between A\$500 million and A\$1,000 million over the entire Project, as well as significant reductions in operating costs.

As part of the Trade-Off Study (completed during the quarter), a number of initiatives and processes improvements were identified which significantly improve the economics of the Project and its ability to be financed. The results of this study are presently being evaluated and considered.

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Preliminary findings from the Trade-Off Study indicate that significant savings in Project costs, and mitigation of key risks, can be achieved by simplifying the Project's transport and logistics component. The Company can realise indicative savings of approximately A\$160 million in capital costs and A\$1.60/kg of REO in operating costs by relocating intermediate chemical processing from Whyalla in South Australia close to the Nolans Bore Mine site in the Northern Territory.

Arafura has held discussions with both the South Australian and Northern Territory governments regarding this proposal and is confident that the proposed plant relocation and resultant cost savings is achievable.

In addition to prospective savings from relocating intermediate chemical processing close to the mine site, the Trade-Off Study has highlighted various process initiatives, and potentially further plant relocation benefits which the Company is actively assessing.

The Company is retaining its interest in the Project's Whyalla site pending its final decision on the extent of plant relocation.

TECHNICAL REVIEW AND OPTIMISATION PROGRAM WELL UNDERWAY – ADDITIONAL MATERIAL EFFICIENCIES AND SAVINGS ANTICIPATED

The ongoing Technical Review and Optimisation Program with Chinese rare earths experts complements the Trade-Off Study (outlined above).

The objective of the engagement is to review the work undertaken by Arafura to date and to identify where synergies and further optimisation of the Project can be achieved through access to Chinese rare earth expertise, technology, procurement, construction and potentially funding for the Project.

The Company's technical and commercial teams have in recent weeks visited Sichuan province to initiate a detailed exchange of data and information relating to the Nolans Project. Representative samples of relevant material are currently in China awaiting confirmatory test work. Progress on, and substantive outcomes from, the Optimisation Program will be reported over the coming months.

The Company anticipates further material reductions in capital and operating costs as key unit processes and circuits in the Base Case flow sheet are optimised, and synergies with established Chinese rare earth beneficiation, hydrometallurgical and separation technologies are identified and adopted.

EXPLORATORY DRILLING IDENTIFIES NEW AQUIFER SYSTEM CLOSE TO NOLANS BORE

Water exploration, including water bore drilling, completed by the Company in Central Australia in recent months has identified an extensive aquifer system that could potentially supply the Nolans Bore Mine and Concentrator, and the Rare Earth Intermediate Plant, with process and potable water for the life of operation. This is

expected to limit, and possibly eliminate, Arafura's draw on water resources from the Ti Tree Basin, currently used for horticultural and pastoral development in the district.

SUCCESSFUL SEPARATION OF FIFTH PRODUCT – LANTHANUM OXIDE

In January, Arafura announced the successful separation of its' fifth rare earth oxide product, Lanthanum Oxide (La_2O_3). This key milestone completes the Company's goal of developing five individual separated oxide products for initial commercialisation of the Nolans Project.

The ability to produce five separated oxide products is a major point of difference between Arafura and other rare earth projects currently being considered for development in Australia and elsewhere around the world.

SULPHATION DEMONSTRATION PLANT OPERATION

The commissioning activities for the Sulphation Demonstration Plant, located at the Australian Nuclear Science and Technology Organisation (ANSTO) in Sydney, were completed with the successful sulphation of pre-leach product material produced during the earlier phase of the demonstration program. The learning and information gained from this activity enhances the scale of process understanding and reduces the process equipment and materials of construction selection risks.

ENVIRONMENTAL, HEALTH, SAFETY AND COMMUNITY

Individual baseline environmental studies for the Whyalla site have been the subject of selected stakeholder examination and discussions prior to the planned wider engagement and consultation process. As previously indicated the relocation of the intermediate processing facility to the Northern Territory necessitates a realignment of the environmental studies scope but the Whyalla baseline data retains its relevance to the location.

The Company's March Board meeting was for the first time held in Alice Springs and this gave the opportunity for stakeholder engagement with the Northern Territory Government, NGOs and local businesses.

LIKELY REDUCTION IN SHORT-TERM FUNDING REQUIREMENTS AND LONG-TERM FUNDING RISK

The Company has previously announced that it requires additional funding in the order of A\$30 million to complete its Feasibility Study on the Nolans Project. Following recent discussions with the Company's major shareholder and strategic partner East China Mineral Exploration and Development Bureau ("ECE"), and with an expected reduction in the Company's costs stemming from the Optimisation Program being undertaken in China, Arafura believes that it can significantly reduce and potentially eliminate the necessity for this funding requirement.

As at the end of the March quarter, Arafura has cash reserves of \$36.3 million. With these funds in hand, with a much lower cost project and with continued support from

ECE, Arafura is confident that it can advance the development of the Nolans Project towards financing and commercialisation amidst these challenging financial markets.

EXPLORATION

MT PORTER – FRANCES CREEK (Au)

In March, Arafura executed a Mining, Farmin and Joint Venture agreement with Ark Mines Limited (“Ark”; ASX: AHK) on its’ Mt Porter-Frances Creek Gold Project in the Northern Territory. The terms of the agreement are as follows:

- a right to mine Mineral Resources at Mt Porter on ML 23839 for a 5% royalty;
- a right to earn a 40% interest in both the Mt Porter tenements (represented by ML 23839, ELR 116 and EL 23237) and the gold interests on the Frances Creek tenements (represented by MA 389, EL 10137 and a number of Territory Resources MLs) over a 30 month period subject to expenditure of \$400,000 (*First Earnin*);
- a right to either earn a further 30% interest (total 70%) over a 24 month period subject to expenditure of \$1,600,000 and the delineation of 100,000 ounces of gold (excluding Mineral Resources at Mt Porter and gold mined from Mt Porter) (*Second Earnin*), or to exercise an option to acquire 100% of the Mt Porter-Frances Creek Project for \$2,000,000;
- the creation of a joint venture between Ark and Arafura, in the event that Ark completes the *Second Earnin*, in which case each party shall thereafter be required to contribute to that joint venture in proportion to their interests.

YALYIRIMBI (Fe)

Ferrowest Limited (“Ferrowest”; ASX: FWL) advised in March that it had executed a Sale and Purchase Agreement with Ngalia Resources Pty Ltd (“Ngalia”) to acquire Ngalia’s right to earn up to a 60% interest in the iron ore rights on the Yalyirimbi Project (EL 24548). The iron rights at Yalyirimbi are currently held by Arafura Iron Pty Ltd, a wholly-owned subsidiary of Arafura Resources.

As part of its earn in obligations at Yalyirimbi, Ngalia has completed a scoping study on Inferred Resources of 14.1 million tonnes of haematite grading 27.1% Fe. Ferrowest estimates the Exploration Target at Yalyirimbi to be 50-70 million tonnes at 25%-29% Fe.

CORPORATE

NON-EXECUTIVE INDEPENDENT DIRECTOR APPOINTMENT

In January 2013, the Board appointed Mr Terence (Terry) Grose (B.Ec, MBA) as a non-executive director.

Mr Grose has a strong commercial background gained over thirty years as a senior business executive, consultant and director, in Australia and internationally. He has held various senior management positions in Wesfarmers and was the General Manager of International Business Development for a number of years. As well as establishing his own business, Mr Grose has held director positions with a number of companies.

STRATEGY, DEVELOPMENT & EXPLORATION

Arafura aims to be one of the leading rare earth producers in the world.

The Company's primary focus is to develop its' 100%-owned Nolans Rare Earths Project. The Nolans Bore deposit, located in the Northern Territory, Australia, hosts very substantial Mineral Resources (ASX: ARU 08/06/12) and mineralisation remains open at depth. Most of the Measured and Indicated Mineral Resources have been converted to Probable Ore Reserves (ASX: ARU 11/12/12). These Ore Reserves currently support a 22-year mine life.

Arafura has developed a processing flowsheet that optimises the extraction of rare earths, phosphate and uranium. The Company expects to improve on this flow sheet through its engagement with Chinese rare earths experts, prior to finalising its Feasibility Study.

Long-term sustainable development and the creation of shareholder wealth can also be realised through exploration success. Arafura has exploration projects in rare earths, gold, base metals and iron-vanadium, and will assess exploration opportunities that are consistent with growth beyond the Nolans Project.

OUTLOOK

Industry and global financial pressures have continued to impact businesses across Australia. The upward pressure on costs and the recent softening in rare earth prices has created an environment which, at present, compromises the viability of the Nolans Project in its current configuration.

The Company is focused on keeping Project costs to a minimum and initiatives are well underway to enhance the economic validity of the Project, with an aggressive yet achievable target to reduce capital costs by up to A\$1 billion.



Arafura remains well positioned to become one of the world's leading rare earths producers this decade. The Project's advanced position is a key point of difference over other rare earth development projects, both in Australia and elsewhere in the world. The Company has a clear plan that significantly de-risks the path to production, and is confident that it can advance the Nolans Project towards sustainable financing and commercialisation within an acceptable timeframe.



Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/01, 01/06/10.

Name of entity

ARAFURA RESOURCES LIMITED

ABN

22 080 933 455

Quarter ended ("current quarter")

31 March 2013

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	(2,320)	(6,808)
	(b) development	(1,059)	(3,065)
	(c) production	-	-
	(d) administration	(1,148)	(3,874)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	361	756
1.5	Interest and other costs of finance paid	-	(1)
1.6	Income taxes paid	-	-
1.7	Other (provide details if material)*	-	22,538
	Net Operating Cash Flows	(4,166)	9,546
Cash flows related to investing activities			
1.8	Payment for purchases of: (a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	(506)	(2,553)
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	(506)	(2,553)
1.13	Total operating and investing cash flows (carried forward)	(4,672)	6,993

+ See chapter 19 for defined terms.

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1.13	Total operating and investing cash flows (brought forward)	(4,672)	6,993
Cash flows related to financing activities			
1.14	Proceeds from issues of shares, options, etc.	-	9,958
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	(1)	(194)
	Net financing cash flows	(1)	9,764

	Net increase (decrease) in cash held	(4,673)	16,757
1.20	Cash at beginning of quarter/year to date	40,962	19,546
1.21	Exchange rate adjustments to item 1.20	(2)	(16)
1.22	Cash at end of quarter	36,287	36,287

*R&D Tax Incentive Rebate received

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	(183)
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

Salaries, fees, superannuation and consulting services at standard commercial rates.

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	2,609
4.2 Development	3,381
4.3 Production	-
4.4 Administration	1,473
Total	7,463

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	3,509	3,181
5.2 Deposits at call	32,778	37,781
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	36,287	40,962

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				
Interests in mining tenements acquired or increased				

+ See chapter 19 for defined terms.
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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	441,270,644	441,470,664		
7.4	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs				
7.5	+Convertible debt securities (description)				
7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7	Options			<i>Exercise price</i>	<i>Expiry date</i>
	ARUAI	2,700,000	-	\$0.85	31-12-13
	ARUAK	850,000	-	\$0.75	20-07-13
	ARUAQ	750,000	-	\$0.98	31-08-13
	ARUAY	750,000	-	\$1.08	14-09-13
	ARUAU	1,400,000	-	\$0.96	16-07-14
	ARUAM	700,000	-	\$0.81	31-12-14
	ARUAW	1,750,000	-	\$0.70	24-11-14
7.8	Issued during quarter	2,058,000	-	\$0.23	31-12-15
7.9	Exercised during quarter				

+ See chapter 19 for defined terms.

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7.10 Expired during quarter

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7.11 **Debentures**
(totals only)

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7.12 **Unsecured notes**
(totals only)

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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.

Sign here:

Date: 30 April 2013

Print name: Gavin Lockyer
(Company secretary)

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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