

Quarterly Activities Report and Appendix 5B

For the period
ending
30 June 2012

ASX: ARU



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

HIGHLIGHTS

- **Separated Cerium Oxide produced**
- **Commitment of ongoing funding support from major shareholder**
- **Strategic MOU executed with Korean Multi-national**
- **Upgrade in Nolans Bore JORC Mineral Resources**
- **Advancement of Nolans Project technical and engineering works**
- **Gold and PGE assay results provide basis for continued exploration at Jervois**

SUMMARY

The quarter has been highlighted by the progression of key technical and engineering work streams for the Nolans Project, evaluation of Rare Earth Oxide (REO) products by potential customers, and corporate activities targeting short to medium term capital funding required to progress the Nolans Project.

The Company successfully produced a separated Cerium Oxide product for customer evaluation. This follows successful production of three other REO products from Nolans Bore in the previous quarter.

The four REO products developed at 99% Total Rare Earth Oxide levels are:

- A mixed 'Heavy' REO product (Tb+Dy+Ho+Er+Tm+Yb+Lu+Y): HRE Oxide;
- A mixed 'Mids' REO product (Sm+Eu+Gd): SEG Oxide;
- A mixed 'Didymium' REO product (Nd+Pr): Didymium Oxide; and
- A Cerium (Ce) Oxide.

All of the above products have been produced at pilot scale at ANSTO (Australian Nuclear Science and Technology Organisation) in Sydney. The Company is now advancing production of Lanthanum (La) Oxide, the last of its five separated REO products intended for initial commercialisation from the Nolans Project.

All the REO products are currently under evaluation by a number of key end users in Japan, Korea and Europe, and the Didymium product in particular has attracted considerable interest from magnet producers. SEG Oxide and HRE Oxide were tested by key partners and discussions continue to realise the value of the rare earth phosphor elements in the SEG and dysprosium in the HRE Oxide for the permanent magnet application.

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The Cerium Oxide product was recently offered to polishing powder producers in Japan, the UK and Europe along with those in the catalyst industry. The Company is in continuing discussions for supply agreements with key customers and partners.

In June, the Company received an amended estimate of JORC Mineral Resources for its 100-percent owned Nolans Bore rare earths deposit. This update, provided by AMC Consultants, replaces the resources estimate reported to the ASX on 12 March 2012. The high-value Neodymium Oxide (Nd₂O₃) content of 20.58% of the total REO composition is the highest of any rare earths resource currently being advanced for development anywhere in the world (refer to *Nolans Bore Resource* under the Nolans Project section for details).

Nolans Project technical, engineering and the feasibility study work continued focusing on essential work streams required to advance the project feasibility study. In addition there has been a concentration on areas of the project where there are significant potential technological and engineering efficiencies to be considered. The current major work streams are:

- Resource optimisation and mine planning;
- Separation of Lanthanum Oxide product;
- Customer analysis of REO products;
- Process flow sheet refinement; and
- Environmental studies at Nolans Bore and Whyalla.

The Company went out to tender for the provision of professional services to undertake an independent technical review of the Nolans Project in order to assist with external due diligence and with certain aspects of the work program. The awarding of this tender took place in July with works expected to commence shortly.

Corporate activities for the quarter included the execution of a non-binding Memorandum of Understanding (MOU) with a major Korean multinational organisation (the Group) to cooperate on long-term business arrangements in Rare Earths in Australia and Korea. The MOU aims to formalise:

- a sale and purchase agreement for Rare Earth products from the Nolans Project;
- co-development of Rare Earth separation facilities in Australia and Korea;
- cooperative efforts to share technology and organisational capacity; and
- funding arrangements to bring the Nolans Project to production.

The signing of the MOU followed a visit by the Group's executives and representatives of its subsidiaries to Arafura's Rare Earths Demonstration Plant at ANSTO near Sydney and the Nolans Bore site in the Northern Territory.

In June, representatives from Arafura met with East China Mineral Exploration and Development Bureau in Nanjing, China to discuss the Company's financial requirements and the Nolans Project status. Following on from the meetings Arafura executed a Letter of Intent (LOI) with ECE Nolans Investment Company Proprietary Limited (ECE), a wholly owned subsidiary of East China Mineral Exploration and Development Bureau for ECE to subscribe for 45,266,565 fully paid ordinary shares in Arafura at an issue price A\$0.22 per share. This will provide a capital injection of approximately \$9.9 million to Arafura and is subject to both regulatory and shareholder approval. The price of A\$0.22 per share represents a 10% premium over the share trading price at the time the transaction was agreed.

The Notice of Meeting for shareholders to consider the ECE share issue will be posted in coming weeks following the completion of the independent expert's report, which will comment on the

“fairness and reasonableness” of the transaction. ECE has also commenced drafting its application for consideration by the Australian Government’s Foreign Investment Review Board.

During the visit to China, the Company executed a number of confidentiality agreements with Chinese rare earths experts with whom it had discussions about reviewing the Nolans Project test work, engineering design and flowsheet for possible process improvements.

In addition to the continued financial support from Arafura’s single largest shareholder, further identification, sourcing and negotiations for the Company’s short and medium term capital requirements took place during the quarter. Despite the current volatile global economic conditions the Arafura Board is confident that it will secure, under acceptable arrangements in the future, the capital required to progress the Nolans Project, through to a formal investment decision by the Arafura Board.

The Company completed work for the 2012 Research and Development (R&D) Incentive Registration, which was lodged with AusIndustry in July. With the new tax legislation taking effect under the Australian Government’s R&D Tax Incentive, the Company is targeting lodgement of its tax return by mid next quarter to claim the eligible R&D refundable tax offset.

On the exploration front, additional and new assaying was conducted on previous drill samples of vanadium-bearing magnetite mineralisation at the Company’s Jervois Vanadium Project. The results contained anomalous gold and platinum group elements (PGE) demonstrating that ultramafic rocks in the project area have potential to host substantial deposits of economic mineralisation. This provides additional encouragement for continued exploration at Jervois.

A more detailed Nolans Project Update, which will provide current investors and potential future investors with a more comprehensive update on the Nolans Project was commenced during the quarter, and will be released to the market in the second week of August.

NOLANS PROJECT

Nolans Bore Resource

An updated Mineral Resource estimate for Nolans Bore was provided by AMC Consultants Pty Ltd, replacing the previous estimate reported on 12 March 2012. Classification of total resources at Nolans Bore into Measured, Indicated and Inferred Resource categories, using a 1.0% REO cut-off grade, is shown below. Contained (in-situ) resources of Rare Earths, Phosphate and Uranium are also shown.

RESOURCES	TONNES (million)	RARE EARTHS REO %	TONNES REO	PHOSPHATE P ₂ O ₅ %	TONNES P ₂ O ₅	URANIUM U ₃ O ₈ lb/t	TONNES U ₃ O ₈
Measured	4.3	3.3	144,000	13	572,000	0.57	1,120
Indicated	21	2.6	563,000	12	2,610,000	0.42	4,090
Inferred	22	2.4	511,000	10	2,220,000	0.37	3,610
TOTAL	47	2.6	1,217,000	11	5,410,000	0.41	8,830

Numbers may not compute exactly due to rounding. REO grade excludes Yttrium (Y).

The average contained REO composition for Nolans Bore is as per the table below.

Rare Earth Oxide REO	Average contained composition
Lanthanum as La_2O_3	19.13%
Cerium as CeO_2	48.72%
Praseodymium as Pr_6O_{11}	5.93%
Neodymium as Nd_2O_3	20.58%
Samarium as Sm_2O_3	2.30%
Europium as Eu_2O_3	0.39%
Gadolinium as Gd_2O_3	0.99%
Terbium as Tb_4O_7	0.08%
Dysprosium as Dy_2O_3	0.32%
Holmium as Ho_2O_3	0.04%
Erbium as Er_2O_3	0.09%
Thulium as Tm_2O_3	0.01%
Ytterbium as Yb_2O_3	0.06%
Lutetium as Lu_2O_3	0.01%
Yttrium as Y_2O_3	1.35%
TOTAL	100.00%

Nolans Project Feasibility Study

Major engineering activities have progressed at a reduced rate under the current funding constraints.. Critical activities dealing with mine planning, flowsheet development and process optimisation continued in the quarter as follows.

Engineering

Work remained focussed on optimisation studies this quarter, with the main activities being:

- Progressing and closing out bench-scale test programs and report writing;
- Desktop review of water availability in the north eastern extent of the Ti Tree Basin, which can be used for process water;
- The Base Case mass balance, which is being used to update engineering and estimates, was completed;
- Engineering and estimating updates for the Base Case are progressing and will be used to factor other options in the optimisation studies for comparison; and
- Desktop reviews are continuing to either eliminate options from the study or to progress the options for further review.

The preferred options resulting from the optimisation studies will be costed and assessed for incorporation into an updated development plan and financial model.

Mine Planning

An interim mine plan was developed during the quarter to generate a mining inventory, which is expected to be converted into a reserve at a later date. Pit optimisation studies have generated strategic production schedules which show:

- REO production in excess of 20 years based on Measured and Indicated Resources; and

- Indicative mine life of greater than 30 years based on Measured, Indicated and Inferred Resources.

Technology

Following the successful production during the previous quarter of three final REO products for customer assessment, a fourth product – separated Cerium Oxide – was added this quarter. The quality of all REO product samples is consistent with the original design specification, which itself was based on significant input from Arafura's target customer base. Consequently, Arafura is confident that the process developed will yield products that satisfy the market.

The above four REO products have been sent to potential customers for testing and feedback from these customers is very encouraging.

Work on the separation of the final REO product, Lanthanum (La) Oxide, commenced during the quarter.

The Rare Earth Sulphation and Purification Demonstration Plant constructed at ANSTO has remained under care and maintenance until funds to operate it become available.

Environment and Community

Progress on baseline environmental surveys was approximately 80% complete by the end of the quarter. Studies to date have not identified any significant issues and report finalisation of some of the study areas is presently underway.

Arafura continues to be active in the community with general stakeholder engagement and more specifically active sponsorship of the Whyalla SciWorld Sunday, and the Male Out men's health event. Engagement activities supporting regional development in Central Australia continue with the Central Desert Shire.

EXPLORATION

Jervois (Fe-V-Ti)

The second and final batch of Fe-V-Ti assay and recovery results, and initial assaying of selected drill samples for gold and PGEs, from the 2008 drill program at Jervois were reported during the Quarter.

The results demonstrated:

- An excellent average grade in DTR concentrates of 1.45% V_2O_5 , 65.9% Fe and 3.78% TiO_2 for all drill samples, consistent with results reported in 2007 and 2010; and
- Anomalous Au-PGE results from five drill holes, the best being 47 metres at 0.6 g/t Au+Pt+Pd (including 4 metres at 1.4 g/t) in hole UNRC032.

These anomalous gold and PGE results demonstrate that the Jervois Project area has potential to host substantial deposits of economic mineralisation. Importantly, they provide additional encouragement for continued exploration at Jervois.

CORPORATE

STRATEGY

Arafura aims to be a recognised leading producer of Rare Earths for users worldwide and has an exploration and development program to grow its position in Rare Earth projects beyond the Nolans Project. The Company will specialise in Rare Earths products and their markets.

GROWTH – DEVELOPMENT

Arafura's primary focus is to develop its 100% owned Nolans Rare Earths Project. The deposit has a resource to sustain a mine life of over 30 years and Arafura has developed a processing flowsheet that optimises the extraction of rare earths, phosphate and uranium.

GROWTH – EXPLORATION

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 other exploration opportunities that are consistent with additional growth beyond the Nolans Project.

Competent Person's Statement

The information in this report relating to Exploration Results and geological interpretation was compiled by Mr Kelvin Hussey who is a Member of the Australian Institute of Geoscientists. Mr Hussey is a full time employee of Arafura Resources Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 (the JORC Code). Mr Hussey consents to the inclusion of this information in the form and context in which it appears.

The information in this report relating to Mineral Resources was compiled by Mr John Tyrrell who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Tyrrell is a full time employee of AMC Consultants Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 (the JORC Code). Mr Tyrrell consents to the inclusion 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, 01/06/10.

Name of entity

ARAFURA RESOURCES LIMITED

ABN

22 080 933 455

Quarter ended ("current quarter")

30 June 2012

Consolidated statement of cash flows

		Current Quarter \$A'000	Year to date (12 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	(2,899)	(28,517)
	(b) development	(4,623)	(27,095)
	(c) production	-	-
	(d) administration	(1,279)	(7,363)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	221	3,131
1.5	Interest and other costs of finance paid	(1)	(3)
1.6	Income taxes paid	-	-
1.7	Other (provide details if material)	154	154
		(8,427)	(59,693)
Net Operating Cash Flows			
Cash flows related to investing activities			
1.8	Payment for purchases of: (a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	(4)	(71)
1.9	Proceeds from sale of: (a) prospects	-	-
	(b) equity investments	-	850
	(c) other fixed assets	-	-
1.10	Loans to other entities	-	-
1.11	Loans repaid by other entities	-	-
1.12	Other (provide details if material)	-	-
		(4)	779
Net investing cash flows			
1.13	Total operating and investing cash flows (carried forward)	(8,431)	(58,914)

+ See chapter 19 for defined terms.
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1.13	Total operating and investing cash flows (brought forward)	(8,431)	(58,914)
Cash flows related to financing activities			
1.14	Proceeds from issues of shares, options, etc.	-	8,239
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	-	(39)
Net financing cash flows		-	8,200
Net increase (decrease) in cash held		(8,431)	(50,714)
1.20	Cash at beginning of quarter/year to date	27,962	70,224
1.21	Exchange rate adjustments to item 1.20	15	36
1.22	Cash at end of quarter	19,546	19,546

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	(187)
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

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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	3,571
4.2 Development	3,522
4.3 Production	-
4.4 Administration	1,505
Total	8,598

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	6,546	9,962
5.2 Deposits at call	13,000	18,000
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	19,546	27,962

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	EL 26318	Lease	12 blocks	Nil
Interests in mining tenements acquired or increased	ELA 29503 ELA 29509	Lease Lease	Nil Nil	16 blocks 122 blocks

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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				
<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	396,004,144	396,004,144		
7.4 Changes during quarter				
(a) Increases through issues				
(b) Decreases through returns of capital, buy-backs				
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>Exercise price</i>	<i>Expiry date</i>
ARUAI	2,700,000	-	\$0.85	31-12-13
ARUAO	1,100,000	-	\$1.19	31-12-12
ARUAK	850,000	-	\$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
ARUAU	1,400,000	-	\$0.96	16-07-14
ARUAM	700,000	-	\$0.81	31-12-14
ARUAW	2,150,000	-	\$0.70	24-11-14
7.8 Issued during quarter				
7.9 Exercised during quarter				

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

Sign here: _____ Date: 31 July 2012

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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+ See chapter 19 for defined terms.
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