

# ASX RELEASE

08 June 2012



AN EMERGING  
RARE EARTHS  
PRODUCER  
FOR USERS  
WORLDWIDE

## UPGRADE IN NOLANS BORE JORC MINERAL RESOURCES

Australian Rare Earths company **Arafura Resources Limited (ASX: ARU)** (**Arafura or the Company**) advises it has received an amended estimate of JORC Mineral Resources for its 100-percent owned Nolans Bore Rare Earths deposit.

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 <sub>2</sub> O <sub>5</sub> %	TONNES P <sub>2</sub> O <sub>5</sub>	URANIUM U <sub>3</sub> O <sub>8</sub> lb/t	TONNES U <sub>3</sub> O <sub>8</sub>
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
<b>TOTAL</b>	<b>47</b>	<b>2.6</b>	<b>1,217,000</b>	<b>11</b>	<b>5,410,000</b>	<b>0.41</b>	<b>8,830</b>

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

This update, provided by AMC Consultants Pty Ltd, replaces the resource estimate reported in early-March (ASX: ARU 12/03/12). The changes are primarily due to:

- Adoption of 1.2 (up from 1.17) as the factor to convert Rare Earth Elements (REE) to Rare Earth Oxides (REO), strengthening the link between contained REO composition and market pricing;
- Addition of the rare earth Ytterbium (Yb) to the total REE value. Yb had inadvertently been omitted from calculations underpinning the previous estimate; and
- Variation in a number of geostatistical parameters which impacted, in the main, resource estimation outcomes for the North Zone of the deposit.

Arafura is also pleased to update the average contained REO composition for Nolans Bore (see table on following page). **The high-value Neodymium Oxide (Nd<sub>2</sub>O<sub>3</sub>) 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.**

- ENDS -

### For further information contact:

Chris Tonkin  
Chief Executive Officer  
T: +61 8 6210 7666

### 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 5773, St Georges Terrace, Perth WA 6831 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 | PO Box 511, Whyalla SA 5600 T: +618 8645 5509 F: +618 8645 1856



Rare Earth Oxide REO	Average contained composition
Lanthanum as $\text{La}_2\text{O}_3$	19.13%
Cerium as $\text{CeO}_2$	48.72%
Praseodymium as $\text{Pr}_6\text{O}_{11}$	5.93%
Neodymium as $\text{Nd}_2\text{O}_3$	20.58%
Samarium as $\text{Sm}_2\text{O}_3$	2.30%
Europium as $\text{Eu}_2\text{O}_3$	0.39%
Gadolinium as $\text{Gd}_2\text{O}_3$	0.99%
Terbium as $\text{Tb}_4\text{O}_7$	0.08%
Dysprosium as $\text{Dy}_2\text{O}_3$	0.32%
Holmium as $\text{Ho}_2\text{O}_3$	0.04%
Erbium as $\text{Er}_2\text{O}_3$	0.09%
Thulium as $\text{Tm}_2\text{O}_3$	0.01%
Ytterbium as $\text{Yb}_2\text{O}_3$	0.06%
Lutetium as $\text{Lu}_2\text{O}_3$	0.01%
Yttrium as $\text{Y}_2\text{O}_3$	1.35%
TOTAL	100.00%

#### Competent Persons' 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.