

# ASX RELEASE

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## BUSINESS UPDATE

### Summary

- A number of key Nolans Project work stream activities are currently in progress.
- The rate of work has been reduced until additional funding has been secured. This will result in some delay to the overall schedule.
- The company is looking at various options to raise further funds to progress the Nolans Project Bankable Feasibility Study.
- At December 31<sup>st</sup> 2011, the Company had \$35.3M available to meet immediate commitments.
- This approach will enable careful management of funds whilst continuing to make positive progress in very challenging financial markets.
- Current work focus is to refine and complete elements of the flow sheet and design by building on the results of the previous work programs. Crucial data from this work will then feed into the subsequent work program which will be delayed until the data is available.
- A revised timetable will be announced when there is more certainty around timing of new funds and results from the current work activities are available.

Australian Rare Earths company **Arafura Resources Limited (ASX: ARU) (Arafura or the Company)** is pleased to provide a business update.

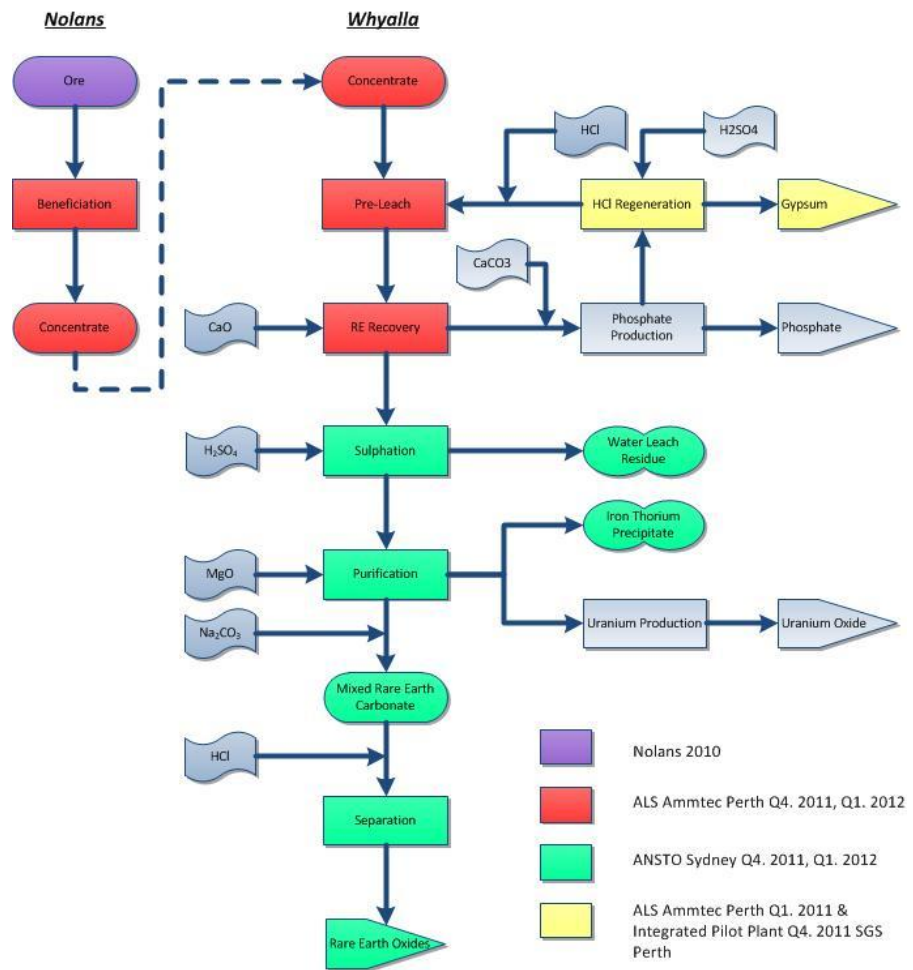
Good progress has been made on key work streams of the Nolans Project.

### 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

## Demonstration Program

### *Nolans Project Flow Diagram*



The Demonstration Program began in 2010. Approximately 1500t of mineralization ('ore') was extracted from the Nolans Bore resource using a wide diameter Bauer drill rig. The 'ore' was transported to Perth in 2011 and during Q4 2011 was beneficiated to produce a mineral concentrate. This work was undertaken at ALS Ammtec.



*Bauer drill rig – Nolans Bore*

Chemical processing of the mineral concentrate was also undertaken at ALS Ammtec. A pre-leach circuit (12t/day) in which mineral concentrate was reacted with hydrochloric acid (HCl) has operated successfully. This work has been completed. De-commissioning of the facilities is now in progress. The Rare Earth containing solids produced have been dried and transported to ANSTO in Sydney where subsequent processing will take place early in 2012



Pre-leach Circuit ALS Ammtec

Construction of demonstration facilities at ANSTO in Sydney for sulphation and downstream processing is complete. Pre-commissioning activities are almost finished. These facilities will be operated in production mode during the second half of February and in March 2012. Arrangements are being finalised for target customers, investors and other stakeholders to inspect the facilities during the period of operation.



*Sulphation Demonstration Plant at ANSTO Sydney*

## **Rare Earth Oxide Separation**

Rare Earth Oxide samples for customer evaluation have been produced from the Nolans Bore resource. These have been separated at ANSTO on a pilot scale basis. These are:

- A mixed 'Heavy' Rare Earth Oxide product (Tb+Dy+Ho+Er+Tm+Yb+Lu+Y): 'HRE oxide';
- A mixed 'Mids' Rare Earth Oxide product (Sm+Eu+Gd): 'SEG oxide';
- A mixed Neodymium/Praseodymium Oxide product (Nd+Pr) for the magnet market: 'Nd/Pr oxide'.

Work on finalizing Cerium and Lanthanum Oxide products for customer evaluation is underway and will be progressed in the coming weeks.



*Rare Earth Oxide samples for customer evaluation from 2011-2012 pilot-scale program*





### **Integrated Pilot Plant**

Gypsum samples produced from the HCl regeneration circuit, which is part of the final integrated pilot plant, are under customer evaluation. Initial feedback has been very positive. Further process refinement work is now in progress in the laboratories as a lead into the full integrated pilot plant trial scheduled for later in 2012.



*HCL Regeneration Circuit*

### **Resource Update**

RESOURCES	TONNES (million)	RARE EARTHS REO %	PHOSPHATE P <sub>2</sub> O <sub>5</sub> %	URANIUM U <sub>3</sub> O <sub>8</sub> lb/t
Measured	5.1	3.2	13.5	0.57
Indicated	12.3	2.8	13.4	0.43
Inferred	12.8	2.6	12.2	0.40
<b>TOTAL</b>	<b>30.3</b>	<b>2.8</b>	<b>12.9</b>	<b>0.44</b>

Arafura executed a major drilling campaign at Nolans Bore in 2011. This had the following objectives:

- To upgrade JORC resource confidence levels for future mine planning purposes required for the Nolans Bankable Feasibility Study (BFS) – essentially infill drilling within the existing resource;
- To identify the extent of additional resources beyond the 2008 resource estimate in order to gauge future expansion potential and assess further value creation opportunities; and
- To provide samples for metallurgical variability testing and beneficiation flow sheet design and optimization.

A number of notable new intercepts of mineralisation have been made at depth, along strike and in a new area which is close to the existing resource (ASX: ARU 28/07/2011, 22/08/2011, 10/10/2011, 13/10/2011, 21/11/2011).

A revised estimate of JORC resources for Nolans Bore is anticipated by the end of February 2012. This information is required for the next steps of mine development.

### **Preparation of Environmental Impact Statements**

The Company is working carefully and thoroughly through the Environmental Impact Statement guidelines determined for Nolans by the Northern Territory government and for Whyalla by the South Australian government. Comprehensive background studies (flora, fauna, air quality, hydrology, radiation etc.) at Nolans and Whyalla are well advanced. A significant amount of data has been collected and



*EIS survey in progress at Whyalla*

analysis and interpretation is now in progress.

The formal Community Consultation process has commenced at both locations. A number of meetings have been held with interested stakeholders as part of Arafura's overall Community liaison program. The Social Impact assessment is also underway.



*Community Liaison in Whyalla*

### **Future Program**

The Nolans project involves a number of work streams which are interdependent. These are aligned in a full integrated program. There are many activities currently in progress. The Company has decided to reduce the rate of work until additional funding has been secured. This will result in some delay to the overall schedule.

This approach will enable careful management of funds whilst continuing to make positive progress in very challenging financial markets.

Current work focus is to refine and complete elements of the flow sheet and design by building on the results of the previous work programs. Crucial data from this work will then feed into the subsequent work program which will be delayed until the data is available.

A full assessment of all potential value creating opportunities will be carried out including those arising from the new Nolans Resource statement which is due by end of February.

A revised timetable will be announced when there is more certainty around timing of new funds and results from the current work activities are available.

At December 31<sup>st</sup> 2011, the Company had \$35.3M available to meet immediate commitments.

Dr Steve Ward, Arafura's Managing Director and CEO commented, "We are taking a prudent approach in these challenging financial markets. We continue to move forward with a focus on critical activities to our overall program. We recognise that this will lead to a delay in the overall Nolans program. An update will be given when there is more certainty regarding funding and current work program results."

- ENDS -

#### **For further information contact:**

Dr Steve Ward  
Managing Director & CEO

Arafura Resources Ltd  
T: +61 8 6210 7666