



ASX Announcement
Arafura Resources Limited (ASX : ARU)
Nolans Rare Earths – Phosphate Project (100%)
Phosphoric acid recoveries exceed 80%
13 May 2008

Highlights

- Phosphoric acid (PA) recovery process is operating and stabilised
- Initial results indicate a phosphoric acid recovery in excess of 80%
- Product quality is premium fertiliser grade
- Lower cost operating conditions
- Phosphoric acid prices at US\$1,800* per tonne (as P₂O₅)
- Revenue from all Nolans Project products at current prices is US\$575 million pa
 - Rare earths US\$300m
 - Phosphoric acid US\$210m
 - Calcium Chloride US\$40 million
 - Uranium oxide US\$25 million

Arafura Resources Limited (Arafura) has commenced and stabilised the phosphoric acid recovery process using Bateman Litwin technology at the demonstration plant located at the Australian Nuclear Science and Technology Organization (ANSTO) in Sydney.

In 2007 Arafura contracted Bateman Litwin to test a process to recover phosphoric acid from the Company's Nolans project. Bateman is a global leader in developing, constructing and operating phosphoric acid plants.

Preliminary results from the demonstration plant have now confirmed both the quality and recovery of phosphoric acid. The demonstration work will continue to focus on optimising the grade and recovery.

Phosphoric acid recovery in excess of 80%

A premium fertiliser grade phosphoric acid

The initial results are demonstrating a **recovery in excess of 80%**, an outcome that is better than the 2007 pre-feasibility study (PFS) assumptions. Further, the phosphoric acid has a specification that qualifies it as a **premium quality** fertiliser grade product. Recent market trades for this type of product exceed US\$1,800* per tonne (as P₂O₅).

Arafura's Managing Director, Mr. Alistair Stephens said, "These results are extremely good news. We are systematically demonstrating that the Nolans process will produce high quality products as we planned. Based on the recovery assumptions in the PFS, the project will generate revenues of US\$575million per year using current commodity prices".

Demonstration plant works are continuing, and optimised phosphoric acid recovery results will be available in the July-September quarter of 2008.

Lower operating costs are identified

Current operating conditions in the demonstration plant indicate cost savings may be obtained compared to the PFS assumptions. This is due to lower heating conditions in both the extraction and washing columns that will result in a reduction in process heating costs.

In addition, the "phosphoric acid quality" eliminates some processing functions that were assumed in the PFS. This will further reduce operating costs by reducing steam demand.

The phosphoric acid process is highly selective to phosphate and results in no rare earths loss. This ensures maximum rare earths extraction to saleable products. The demonstration plant is proving that there is negligible recovery of other metals that simplifies downstream extraction of uranium, and cleaning of liquors prior to calcium chloride recovery.

Excellent outcomes using standard technology

These results are a clear demonstration that Arafura's process for the recovery of rare earths and phosphoric acid is delivering excellent results using standard technology.

Arafura will commence the rare earths recovery process in July 2008 with the initial stage targeting a rare earths carbonate before further demonstration work is undertaken to produce separated rare earth products later in the year.

This will enable the Company to provide significant sample volumes of rare earths, phosphoric acid and calcium chloride products to potential customers allowing them to assess the products as feed for their respective operations.

The preliminary results of the demonstration plant suggest that the project is likely to exceed the product recoveries used in the PFS.

Phosphoric acid production of at least 150,000 tonne per year

Phosphoric acid prices are trading at US\$1,800* per tonne

Revenue of US\$210 million per year from phosphoric acid

The interest in Arafura's phosphoric acid has grown due to strong demand from the agricultural sector.

"Nolan's phosphoric acid could halve Australia's need to import PA, and a local source will provide benefits Australia's farmers. In addition demand for phosphoric acid from the biofuel sector is very strong. This coupled with a retraction in exports of Chinese fertiliser which also attracts an export tariff of 135% positions Arafura to capitalise on emerging market opportunities," Mr Stephens added.

Total revenue per year of US\$575 million

At the current market price of US\$1,800* per tonne (as P₂O₅), the revenue from phosphoric acid would amount to US\$210 million per year. Total revenue from all products of rare earths (US\$300m) calcium chloride (US\$40m) and uranium (US\$25m) is US\$575 million per year.

The Nolans project is enriched in valuable rare earths compared to any other primary source. These specialty metals are vital to the technology used in hybrid vehicles, efficient wind farms, energy efficient light bulbs, plasma panels, oil refining and auto catalysts.

Nolans Project: designed production output and current commodity pricing.

	Output tpa	price US\$	revenue pa
Rare earths	20,000	15.00 / kg	US\$300m
Phosphoric Acid	150,000	1,800* / t	US\$210m
Calcium Chloride	400,000	100 / t	US\$40m
Uranium Oxide	150	75 / lb	US\$25m
Exchange rate	US/AUD	0.90	AUD640m

*This price is based on contained P₂O₅. A conversion factor of 0.7853 is used to convert P₂O₅ to phosphoric acid as H₃P₂O₄. The calculation has been rounded down to US\$1,400 per tonne of contained phosphoric acid.

For more information

Fact sheets on Arafura and the Nolans project can be found on the Arafura Resources website at www.arafuraresources.com.au

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