



ABN 22 080 933 455

25 March 2008

**ARAFURA RESOURCES LIMITED (ASX: ARU)**

**HEAVY MEDIA SEPARATION DEMONSTRATION TESTS**

**OUTSTANDING RESULTS**

**NOLANS RARE EARTHS DEPOSIT, NORTHERN TERRITORY  
(ARU 100%)**

- Concentrated grades of 5.8% REO.
- 35% rejection of waste material
- Overall recoveries of 85% REO

Arafura Resources Limited is pleased to announce it has successfully demonstrated that test work on a bulk sample from the company's Nolans rare earths deposit is treatable by heavy media separation (HMS) technique. Heavy media separation is a simple process widely used in the minerals processing industry.

The Nolans project located 135km from Alice Springs in the Northern Territory hosts 18.6 million tonnes of rare earth resources with a proposed mine life of at least 20 years.

The heavy media separated product (concentrated ore) from the demonstration plant has a rare earth grade of 5.8% and is typical of the feed grade to the processing plant in the future. This compares to a feed grade of 4.2% and waste rejection rates of 30% used in Arafura's pre-feasibility study.

Arafura's Managing Director Alistair Stephens said, "These demonstration results are significant for two reasons. Firstly they have successfully demonstrated that mineralisation can be simply and effectively upgraded by rejecting waste with a low cost process. Secondly the higher concentrated grades will allow us to lower downstream costs by lowering transport operating costs and potentially capital costs of the processing plant."

A bulk sample was excavated from the Nolans rare earths – phosphate deposit in late 2007. The sample was selected from an area that is representative of mineralisation for the first five years mining and processing. The sample was prepared on site before transport to a beneficiation laboratory for test work.

In the first quarter of 2008 this bulk sample was assessed for crushing and screening before HMS trials. Half the sample was tested to generate material for the demonstration plant at the Australian Nuclear and Science Technology Organisation (ANSTO). The remaining half is currently undergoing optimisation for crushing and heavy media separation to provide detailed design criteria for the project's definitive feasibility study.

The process design currently involves crushing before screening. "Crushed material is fed into a slurry that separates the waste products from the valuable rare earths and phosphate products", Managing Director, Alistair Stephens said.

The results from the heavy media separation trials will be used in a broader, more extensive diagnostic test program on all drill samples from mineralisation across the Nolans mineralised zones.

Further test work is underway to assess other conditions that could improve the concentrated grade, and improve project returns. These demonstration trials are planned for April 2008.

"Based on the indicative trials we have undertaken, we could see further improvements in the rejection of waste material and therefore better rare earths grade product in heavy media separated material", Mr Stephens said.

The material from the first trial is currently at ANSTO awaiting final modifications to the demonstration plant which is due to commence the wet chemical process in April 2008.

### **Arafura Resources**

Arafura Resources is a Perth-based specialty metals explorer and developing producer which has operated in the Northern Territory for the past 20 years. It listed on the Australian Stock Exchange in 2003 and has diversified its asset portfolio by targeting projects that will deliver long-term and sustainable value and growth. These include:

- Gold           Mt Porter deposit near Pine Creek ARU 100%
- Gold           Kurinelli gold project ARU 100%
- Nickel         A farm-in by Mithril Resources at Hammer Hill
- Vanadium     Jervois magnetite-vanadium project ARU 100%

### **For more information:**

Fact sheets on Arafura can be found on the Arafura Resources website at [www.arafuraresources.com.au](http://www.arafuraresources.com.au)

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