



ABN 22 080 933 455

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

**FLOTATION DEMONSTRATION RESULTS**

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

- Nolans mineralisation is amenable to flotation treatment
- The process has a 46% mass rejection
- REO recoveries of better than 86%
- Final product grade of greater than 6% REO are clearly possible
- Initial results indicate process plant feed grades significantly higher than the PFS
- Final optimised results are due end of May 2008

Arafura Resources Limited is pleased to announce it has successfully demonstrated that test work on a sample from the company's Nolans rare earths deposit is treatable by flotation. This process is complementary to the heavy media separation process.

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

Previous results from heavy media work have produced a concentrated product from the demonstration trials that has a rare earth grade of 5.8%. This product included a low grade screened portion of the plant feed that does not get processed through heavy media separation.

The Company has successfully tested a flotation technique to the low-grade screened material.

Froth flotation is a commonly used throughput the minerals processing industry. These results have a significant positive impact as the technique can be applied to the fines fraction of the mineralisation that is not suitable to heavy media separation.

The test work was undertaken on a sample of material less than 0.3mm which constitutes less than 25% of the plant feed. A series of tests were conducted using "oleic acid" as a "collector". The recovery of rare earths to concentrate exceeds 86% with a waste rejection of 46% by weight.

The work demonstrates waste rejection that will result in a significantly higher grade final product by using both flotation of fine materials and heavy media separation of coarse materials.

In the pre-feasibility study, Arafura assumed an upgrade by heavy media separation from an average resource grade of 3.1% REO to 4.2% REO. At greater than 6% REO these latest results are strikingly better and will have a significant positive impact to the projects commercial outcome.

Arafura's Managing Director Alistair Stephens said, "These results further demonstrate that we can successfully and easily upgrade the Nolans mineralisation. We can now plan on producing a concentrated product that will have a grade of at least 6% rare earths or even higher. These higher grades will allow us to lower downstream costs by lowering transport operating costs and potentially capital costs of the processing plant."

A full and final report that carefully assesses the optimum outcomes of heavy media separation and flotation should be available in late May 2008.

"We are now well into the process of digesting our mineralisation through the acid leach process at ANSTO. This process is progressing very successfully and the project is delivering reliable and robust results", Mr Stephens said.

## **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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