



ABN 22 080 933 455

ARAFURA RESOURCES LIMITED (ASX: ARU)

12 March 2009

SUCCESSFUL RARE EARTHS CARBONATE PRODUCTION

NOLANS RARE EARTHS-PHOSPHATE-URANIUM PROJECT

Arafura Resources Limited (“Arafura”) has now demonstrated the successful production of Rare Earth Carbonate (REC) from its pilot plant at the Australian Nuclear Science and Technology Organisation (ANSTO).

Initial analysis indicates that a carbonate product can be produced from Nolans which meets the specifications of a saleable product.

Arafura is the only rare earth project that has been able to demonstrate, at a pre-production scale, the production of rare earth product. The pilot plant’s successes include:

- Development of a beneficiation plant flow sheet incorporating heavy media separation and flotation capable of producing a mineral concentrate of at least 6% REO;
- Separation of the predominant (phosphate and rare earth) minerals by a patented hydrometallurgical process;
- Production of premium quality, fertilizer grade phosphoric acid by world standards;
- Rejection of radionuclides to meet International shipping and marketplace requirements for the commercial sale or further refining of products;
- Effective extraction of uranium; and
- Production of rare earth carbonate.

Arafura is now looking to expand market relationships in the rare earths industry based on Arafura REC product.

Commenting on this significant project milestone, Arafura’s Managing Director Alistair Stephens said, “The metallurgical processing risks have now been defined and can be managed. Customers are now engaging Arafura in requesting specifications of our product. The pilot plant results will enable the completion of our Definitive Feasibility Study to bankable criteria. In addition, our REC product meets all the statutory requirements to enable it to be transported and processed anywhere in the world.”



Pilot plant filtration of REC



REC samples for further analysis



Pilot scale REC from single filtration cycle

About Arafura Resources

Arafura is a Perth-based specialty metals explorer and emerging producer which has operated in the Northern Territory for the past 20 years. It listed on the Australian Securities Exchange in 2003 and has diversified its asset portfolio by targeting projects that will deliver long-term and sustainable value and growth. The Company's intention is to explore, develop and bring to operation for profit, resources in various mineral commodities.

Arafura's corporate office is located in Perth, Western Australia, with a regional office in Darwin, Northern Territory. Arafura's assets include the Nolans apatite-hosted rare earths-phosphate-uranium- thorium deposit. Other tenements that Arafura controls contain gold, copper and vanadium mineralisation.

Arafura's primary focus is the development of the Nolans rare earths-phosphate-uranium project. The deposit has a current resource of 30.3 million tonnes, containing 848,000 tonnes of rare earth oxides, 3.9 million tonnes of phosphate, and 13.3 million pounds of uranium (ASX: ARU 11/11/08). The Nolans deposit is capable of sustaining a mine life well in excess of 20 years. The Company has developed a processing flow sheet, and is currently demonstrating the recovery of rare earths, phosphoric acid and uranium at a pilot plant located at ANSTO (Australian Nuclear Science and Technology Organisation) in Sydney.

Arafura has an exploration and development program to grow its position in rare earth projects with additional growth beyond the Nolans Project. The Company will focus on the identification and development of rare earth projects and specialise in rare earth products and their markets.

For more information:

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

The information in this release that relates to Arafura Resources Limited's exploration results and geological interpretation has been compiled by Mr Richard Brescianini BSc (Hons) and the information in this release that relates to Arafura Resources Limited's metallurgical results and interpretation has been compiled by Mr Steven Mackowski BAppSc, both full-time employees of Arafura Resources Limited.

Mr Brescianini is a Member of the Australian Institute of Geoscientists and he has sufficient experience with the style of mineralisation being reported 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)" for reporting these exploration results. Mr Brescianini consents to the inclusion in this report of the contained technical information in the form and context in which it appears.

Mr Mackowski is a Fellow of the Australian Institute of Mining and Metallurgy and he has sufficient experience with the style of mineralisation being reported 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)" for reporting these metallurgical results. Mr Mackowski consents to the inclusion in this report of the contained technical information in the form and context in which it appears.