

Arafura Development Report reinforces robust project economics, rare earth production scheduled for 2019

Arafura Resources ('Arafura', ASX: ARU) will start production in 2019 with a 20,000 tons/year target featuring excellent project economics according to the Company's 'Development Report for the Nolans Project in the Northern Territory – the



Nolans Development Report (NDR). The Report provides an updated picture for the project while serving as the preview to the Definitive Feasibility Study scheduled for completion in mid- to late-2015. The Project's Definitive Feasibility Study (DFS) will:

1. incorporate the results of the ongoing China-based optimization program
2. increase opportunities for the Company, including confirmation of provisional product sales agreements
3. Proceed with regulatory permitting for the Nolans Site, including the Project's water supply
4. Secure an offshore site within an established chemical precinct for the Separation Plant

The NDR reflects Arafura's strategy of de-risking the Nolans Project by focusing on the production of high demand heavy rare earth metals (HREE) such as neodymium and praseodymium (Nd, Pr) and a commitment to lowering costs wherever possible. Arafura has identified three main factors as responsible for the cost cutting measures in response to pressure from falling

commodity prices and Australian infrastructure costs, which have increased substantially in the past few years. One of the most notable examples of this approach was Arafura's decision to shift the proposed processing plant that was to be built in Wyhalla (at first chosen because the jurisdiction's welcoming attitude and recognition from the state government of South Australia) to an area closer to where the Nolans mine will be built.

The relocation of the processing plant alone has allowed Arafura to save some AUD\$ 400 million while also leaving sufficient capital to continue along the path to production. But the overall savings plan envisaged measures to achieve savings of over AUD\$ 1 billion, which has prompted the decision to locate the separation plant to an entirely different region within easy reach of hydrochloric acid supplies, which do away with the need to a chloralkali plant. The NDR assumes that the separation plant would be based at a location in the Gulf Coast region of the USA. Finally, the third major prong of Arafura's de-risking plan has been to work closely with experienced partners such as East China Mineral Exploration and Development Bureau (ECE). ECE holds a strategic equity holding of 24.86% in Arafura, enabling Arafura to avoid having to dilute the share price while continuing to work on its own innovative rare earth extraction process. The cost cutting measures have been of vital significance to the Nolans Project because, without them the Nolans Project was threatened. Arafura has survived and thrived thanks to a decision to become more efficient.

The Nolans Bore probable ore reserves total 24 million tons grading 2.8% REO (672,000 tons of contained REO), along with 2.97 million tons of phosphorus oxide and 4,900 tons of uranium oxide. Arafura's excellent economics stem from the composition of its resource, which features 25-26% magnet feed materials, clearly leaving Arafura the room and capacity to become a world class magnet producer. According to Arafura,

these reserves can be mined using open-pit methods that help improve on overall costs and have an estimated lifespan of 22 years, using a maximum beneficiation turnout of 1.1 million tons per annum. Further drilling will be required for confirmation but Arafura's 95% resource-to-reserve conversion rate marks a significant achievement, with Nolans Bore as one of the world's only rare earths projects that has established an ore reserve.

The Chinese have a market share of 90% for rare earths. State-controlled company Baotou Steel Rare-Earth intends to store up to 100,000 tons of metals in special warehouses. This practice should start to raise the price of rare earths. Just about all rare earths, with the likely exceptions of cerium and lanthanum, are being hoarded. China can afford to do this because it has no competition at all for the time being – unlike the cases of cerium and lanthanum. China wants to secure long-term supplies for its own industries and heavy rare earths are likely to be really rare in the next few years, which should force prices to rise – sharply. Chinese companies could then be supplied by the state with cheap supplies, while foreign companies would most likely have to pay horrendous prices. China is also consolidating suppliers and reducing excess capacity to match demand, allowing some measure of price controls.