

# Arafura Resources – Not Forgotten & Definitely Not Gone

As Mark Antony notes in Shakespeare's Julius Caesar:

*You all did love him once, not without cause:*

*What cause withholds you then, to mourn for him?*

*O judgment! thou art fled to brutish beasts,*

While the Rare Earth space can look like carnage from a certain angle, anyway you look at the stock price of Arafura there has been a severe fall from grace when it was amongst those stock with the most substantial market caps in the sub-sector. The chart below shows the dire long term evolution of the stock price:



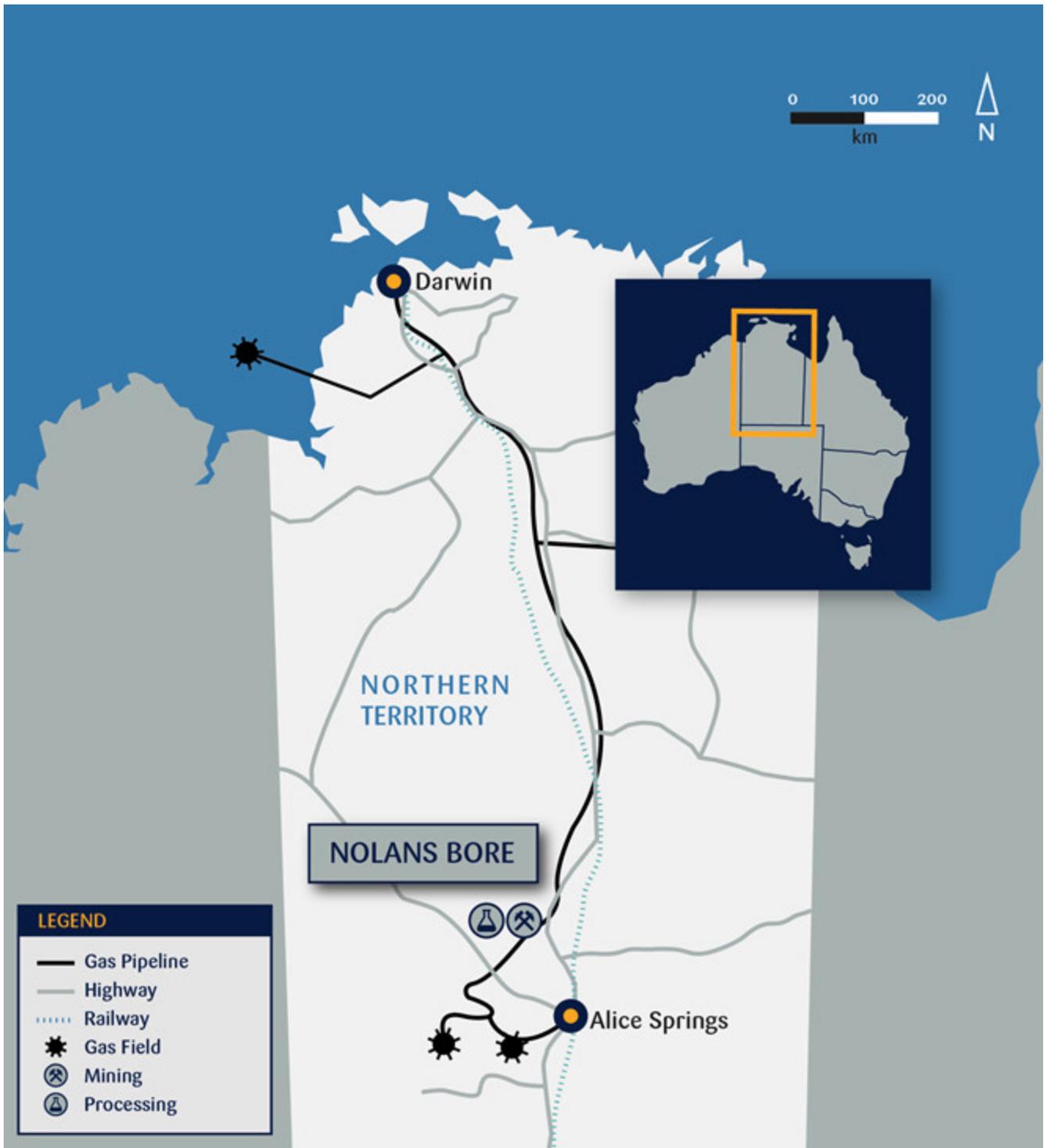
However, in recent times the stock price has not been as flatlining as the long term chart might suggest, as can be seen below:



However in both cases there is nothing to cheer about. In this piece we shall revisit the company's project and see where it is and whether the stock is prospective for a rerating.

### **Nolan's Bore**

The Nolans Bore rare earths-phosphate-uranium deposit was originally discovered in 1995 with the original goal being uranium. The property is located deep in the Northern Territory (in Australia) about 135 kilometres north-north-west of Alice Springs and ten kilometres over the Sturt Highway.



At Nolans Bore the most abundant rare earth-bearing minerals at site are fluorapatite and allanite. The deposit has a highly desirable rare earths mix, and contains 47 million tonnes of Mineral Resources at an average grade of 2.6% rare earth oxides (REO) with a rather surprising 20.58% of rare earths mix being Neodymium. This is unique amongst deposits we have looked at. Over 50% of these Mineral Resources have been converted to Ore Reserves. According to the company these Ore

Reserves are sufficient to support mining and processing operations for 22 years.

Recent times have seen the publication of the Nolan's Development Report, which appears to be a PFS, when you are not having a PFS! This may have left the market in some confusion because of the unfamiliar terminology and the veering off the path of true virtue as dictated by the gods of mining paperwork. The next step is the Definitive Feasibility Study which is scheduled for completion in mid- to late-2015. The DFS will incorporate the results of the ongoing China-based optimisation program. This program recently confirmed the efficacy of the project's beneficiation flowsheet, and the hydrometallurgical phase of the program is expected to commence shortly.

The Development Report envisaged an open-pit mine and came in with an NPV of AU\$2 billion on an after tax basis at a 10% discount rate and an IRR of 21.4% on an after tax basis. The production target is 20,000 tonnes of REO equivalent per annum over a 22 year mine life. This could potentially be providing 10% of global REE needs.

### **Capex – The Feet of Clay**

There seems to be an inverse relationship these days in the Rare Earth space between capex and market cap. Unfortunately for Arafura as one of the first companies into the space it originally marched to the beat of conventional wisdom that bigger was better, rather than heed the cry in the wilderness of Jack Lifton that "rightsizing" was the way to go. Time has moved on and some of those with truly gargantuan projects have paid the price in terms of shriveled market cap. One of the hardest things, for managements that spend several years talking up a project of a certain scale, is to turn around and then not only downsize it, but in some cases grasp the nettle, and cast the whole original concept to the winds.

The dilemma was made even more delectable for Arafura in that it has offtakers (to be discussed anon) so shrinking the project to something like a pilot plant on a cheap and cheerful basis is not the “try before you buy” approach that big offtakers want to hear.

Therefore the company has engaged in an exercise of cutting its coat to suit its cloth. The original August 2012 base case capex was AU\$1,912 million which by March 2014 had been whittled back to AU\$1,408 million (a reduction of AU\$504 million) to match the new realities of the financing market. Meanwhile Opex in the original base case had been AU\$20.55 per kg REO and was reduced to AU\$15.67 per kg REO (a saving of AU\$4.88 per kg REO. In both cases nearly 25% had been shaved off the original numbers.

These savings were achieved through material improvements in, and simplification of, the process configuration, and simplification of the supply chain. And, in a major *volte face* from previous perceived wisdom (see the Lynas and Galaxy debacles), the company decided to relocate the RE Intermediate Plant within Australia, and shift the RE Separation Plant from Australia to a chemical precinct on the US Gulf Coast. The company sees potential further savings from improvements arising from the ongoing Chinese optimisation program.

Management have clearly tossed away the butter-knife and taken a machete to the budget. Despite this the budget is still in the upper decile of the REE project Capex numbers that are in circulation.

## **The Offtakers**

In its early days, Arafura was helped by being seen to have been an early inclusion in the Chinese REE orbit. Meanwhile the Japanese went off and entered into JVs and signed LOI's with junior REE players that proved to be so much waste of the rainforest (mainly due to non-performance by the explorers

rather than the offtakers).

The reason that Arafura remains with a large-scale project is due to it having secured quite a respectable roster of offtakers that it doesn't want to let off the hook. These are:

- East China Mineral Exploration and Development Bureau (Arafura's major shareholder with 24.86%). It has been the strategic partner for Arafura since 2009
- Shenghe Resources Holding Co. (Shanghai Stock Exchange-listed) with which it has an MOU executed. This arrangement brings with it scheduled technical reviews, access to Rare Earth experts, supply chain exposure and co-funding opportunities (Shenghe are currently allocated 4.5% of the Chinese Rare Earths export quota)

Of a more amorphous nature are the LOIs that have been signed with ThyssenKrupp and a South Korean multinational as potential off-takers. These companies are also assisting in commercialization of the end-product through German and Korean government debt schemes.

## **Conclusion**

If Arafura had to go away and do penance for any sins it would be for having been too successful early on in its Rare Earth trajectory. The early success led to planning along conventional lines that all other "first-movers" indulged in with over-large projects with extensive financing commitments. It has now carved back the project to a size which still suits its offtakers. Time will only tell if the offtakers also see the light and acquiesce to the company shifting to a more modular approach to the eventual build, particularly with regard to the processing component. Watch this space...