ASX Release  
29th September 2014  

Listings Officer  
Company Announcements  
ASX Limited, Melbourne  

AMMAROO PHOSPHATE PRE-FEASIBILITY STUDY  

Completion of the Ammaroo phosphate pre-feasibility study supports the economic potential of the project to be developed as a phosphate rock export operation or for downstream phosphate fertiliser production using proven technologies.  

The Ammaroo phosphate project is a global-scale, long-life resource, strategically positioned in proximity to existing transport infrastructure and in a stable OECD country. Currently, the majority of the world’s seaborne traded phosphate originates in the Middle East and northern Africa.  

Furthermore the project is positioned to leverage growth in demand for higher value food, increasing agri-business investment, the need for higher crop yields per unit of arable land and therefore growth in demand for fertilisers in the Asia-Pacific region, including Australia.  

SUMMARY  

Rum Jungle Resources Ltd is pleased to announce the completion of the Ammaroo Phosphate Project Pre-feasibility study (PFS). The knowledge and understanding of the chemical and physical properties of the phosphate ore, technical mining, processing and transport logistics, regional phosphate markets and pricing, gained through the considerable amount of work conducted during the study, now provides a credible basis on which to conduct a formal process to secure joint venture partners and associated off-take agreements. It is likely that partners and potential off-take agreements will be required to finance the progress of one of the development options to a potential future bankable feasibility study  

Four development cases have been studied to a PFS level (+/- 25% of capital and operating costs1). These are:  

**Case A** - A low capital, start-up phosphate rock export operation, 400,000 tpa (30% P2O5), leveraging high grade pockets of the resource, mechanical beneficiation and the use of existing road infrastructure and latent intermodal freight train capacity to move small volumes of product. This is potentially an option to start generating cash for the company while developing a larger scale project.  

**Case B** - A global scale phosphate rock export operation, 2,000,000 tpa (32.5%-33% P2O5), producing high quality beneficiated rock through flotation and the movement of product north to Darwin for export.  

**Case C** - A global scale phosphoric acid export operation, 500,000tpa (100% P2O5) utilising higher grade run of mine material, a minimal and low cost rock beneficiation process with a combination of dry screening and partial flotation, an integrated sulphuric acid plant and dedicated transport infrastructure to export liquid phosphoric acid out of Darwin and bring elemental sulphur south on backload.  

**Case D** - A global scale di-ammonium phosphate (DAP) and mono-ammonium phosphate (MAP) fertiliser production facility, 1,020,000tpa, utilising the phosphoric acid produced in Case C above with the addition of ammonia and granulation capacity for distribution north to export markets and south to Australian markets.  

---  
1 The Ammonia Plant and Granulation Plant associated with Case D have been assessed at a conceptual level of study which is notionally +/- 35%
HIGHLIGHTS

- Significant expertise brought to bear through WorleyParson’s study management and discipline expertise. This included advice from key experts based in the United States with regards to phosphate geology and phosphate processing.

- Mine plans were developed by Coffey Mining. All mine plans were developed based on selective mining from only part of the Measured and Indicated resource at a 10% cut off grade within the total JORC resource that was released to the ASX on 24 March 2014 and has not changed since. Details of the mine plans developed by Coffey Mining are as per the table below.

<table>
<thead>
<tr>
<th>Case</th>
<th>Inventory Tonnes</th>
<th>Target Average Mined Grade</th>
<th>Target Mined Cut-off Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (10 year mine plan)</td>
<td>6.1Mt</td>
<td>24.0% P₂O₅</td>
<td>20% P₂O₅</td>
</tr>
<tr>
<td>B (27 year mine plan)</td>
<td>134.3Mt</td>
<td>15.0% P₂O₅</td>
<td>10% P₂O₅</td>
</tr>
<tr>
<td>C &amp; D (20 year mine plan)</td>
<td>67.7Mt</td>
<td>18.0% P₂O₅</td>
<td>15% P₂O₅</td>
</tr>
</tbody>
</table>

The inventory tonnes identified above represent only a portion of the total resource. Therefore, there is a reasonable probability that production could be extended many years beyond the current assumed mine life creating significant option value in the future. Metallurgical test work and bulk sample production conducted by Bureau Veritas in Adelaide and rock concentrate analysis, phosphoric acid and DAP and MAP pilot testing conducted by Prayon in Belgium, the world’s leading supplier of phosphoric acid plants. Key outcomes of this work included the apparent suitability of Ammaroo rock concentrate for wet phosphoric acid production with low sulphuric acid consumption, high P₂O₅ yields, acceptable minor element ratios and the apparent reversion of the lead that exists in some parts of the resource, to the gypsum waste stream.

- A comprehensive phosphate market study was conducted by CRU. The study included demand, supply and proprietary price forecasts across the phosphate value chain. The study incorporated a strategic analysis of potential customers and a customer survey to make potential buyers aware of the Ammaroo project, analysis of potential shipping cost advantages to certain markets from Darwin, the value in use of Ammaroo’s beneficiated rock, particularly associated with its grade and low sulphuric acid consumption.

- An ‘Expression of Interest’ process was conducted for rail and other transport solutions that garnered responses from a number of above rail operators and integrated logistics providers.

- The base case economic outcomes generated from the PFS capital and operating cost estimates for the four cases and cash flow analysis conducted by Origin Capital are presented in the table below:

<table>
<thead>
<tr>
<th></th>
<th>Case A</th>
<th>Case B</th>
<th>Case C</th>
<th>Case D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphate Rock Sold</td>
<td>0.4</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Phosphoric Acid Sold</td>
<td>-</td>
<td>-</td>
<td>0.5</td>
<td>-</td>
</tr>
<tr>
<td>MAP/DAP Sold</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.02</td>
</tr>
<tr>
<td>Mine Life</td>
<td>Years</td>
<td>10</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Assumed First Production</td>
<td>Q4 2016</td>
<td>Q1 2018</td>
<td>Q2 2019</td>
<td>Q4 2019</td>
</tr>
<tr>
<td>Assumed Price at first production</td>
<td>US$/t</td>
<td>113</td>
<td>149</td>
<td>684</td>
</tr>
<tr>
<td>Sales Revenues</td>
<td>ASM</td>
<td>550</td>
<td>9,100</td>
<td>10,520</td>
</tr>
<tr>
<td>Operating Costs/Transport/Royalties</td>
<td>ASM</td>
<td>420</td>
<td>5,090</td>
<td>5,320</td>
</tr>
<tr>
<td>Total Capital Cost</td>
<td>ASM</td>
<td>64</td>
<td>780</td>
<td>1,400</td>
</tr>
<tr>
<td>Contingency included in Total Capital Cost</td>
<td>ASM</td>
<td>6</td>
<td>85</td>
<td>110</td>
</tr>
<tr>
<td>Bankable feasibility study cost included in Total Capital Cost</td>
<td>ASM</td>
<td>3</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Indicative Ungereared NPV @ 10%</td>
<td>ASM</td>
<td>13</td>
<td>330</td>
<td>55</td>
</tr>
<tr>
<td>Ungeared IRR</td>
<td>%</td>
<td>16</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>Indicative 50% Geared NPV @ 8%</td>
<td>ASM</td>
<td>20</td>
<td>570</td>
<td>390</td>
</tr>
<tr>
<td>Geared IRR</td>
<td>%</td>
<td>23</td>
<td>25</td>
<td>14</td>
</tr>
<tr>
<td>Payback</td>
<td>Years</td>
<td>4.5</td>
<td>5</td>
<td>7.5</td>
</tr>
</tbody>
</table>

US$ to A$ exchange rate assumed to decline from current levels to be $0.80 from 2018
Market prices of products based on CRU’s market study and proprietary pricing forecasts
Indicative NPVs are after tax project NPVs and do not include corporate overhead or marketing costs
Mtpa: Million tonnes per annum
ASM: Millions of nominal Australian dollars
It should be noted that the total capital number for Cases B, C and D includes capital for the construction of a rail spur, dedicated train rolling stock, mining fleet and capitalised pre-stripping activities. Much of this could be funded through alternate sources of capital, if on acceptable terms, with a resultant decrease in project capital and increase in operating costs.

**COMPETITIVENESS AND SUSTAINABILITY**

The production of DAP/MAP at or near to the mine site, has the potential to be low cost and in the bottom half of the global cost curve. This is underpinned by a low cost source of phosphate rock, the largest input by volume. In the case of DAP/MAP, the cost of gas is a key driver in the cost of the ammonia input. RUM has identified the potential for gas to be supplied in the Northern Territory at costs that are likely to be well below forecast gas prices on the east coast of Australia and competitive globally. Sulphur is also required and is assumed to be available at prices at least equivalent to current long term contracts but there is potential that growing supplies of sulphur in the region associated with new and significant petrochemical developments could lower costs of sulphur inputs.

Production of these products in Central Australia, in proximity to the railway line should enable efficient distribution north to Darwin for export and also south to the agricultural areas of South Australia, Victoria and NSW. Moreover, price forecasts for DAP and MAP indicate robust demand and price growth, particularly during the next decade and beyond. These factors should help the project be sustainable through cyclical demand and be less sensitive to price and exchange rate shifts.

The phosphate rock export options, Cases A and B, would be positioned toward the higher end of the global FOB phosphate rock cost curve due to the need to dry the product prior to transportation and the impact of high transport costs. This is particularly pertinent for the concentrate product envisaged in Case A as it will be of a lower quality than the beneficiation concentrate of Case B and will likely have a lower market price. It will also have higher transport costs due to scale inefficiencies and multiple handling of the product.

In order to mitigate the risks of market price reductions, the conduct of the incumbent dominant suppliers and/or the negative effect of exchange rate shifts, having the production of phosphate rock concentrate linked to downstream phosphate fertiliser production in third party countries through joint venturing and resultant off take agreements would be needed to ensure sustainability and help underpin a future decision to invest.

**RISKS AND OPPORTUNITIES**

In addition to the normal pricing, foreign exchange, financing, contracting, commercial, operational and product specification risks; environmental approvals and native title agreements are not yet in place, but the approvals process is being progressed. Furthermore, there is limited transparency and clarity on the future cost of access to the Central Australian Railway line. Government approvals to use the existing remote road networks for haulage, as in Case A, is not guaranteed. If project capital were required to upgrade the existing remote road network, Case A would not be possible in its current form.

However, there are a number of key opportunities that could create value upside:

- Continued geopolitical instability in the Middle East and Northern Africa creating impetus for phosphate price increases or investment, particularly from North American, Indian and Chinese fertiliser companies, in less risky jurisdictions, such as Australia
- Demand and price increases above current forecasts due to increased global growth and consumerism in Asia
- Legislative outcomes associated with the ‘Developing Northern Australia’ political initiative that may include measures to help create competitive advantage
- Potential for cost reductions and productivity improvements in Australia as mining and oil and gas construction declines over the next few years
- Declaration of the NT as a special migration zone for the purpose of accessing skilled labour
- Leveraging Australia’s leading position in mining and processing automation and remote operations control as a significant lever in increasing productivity and lowering operating costs. This has not been considered in the PFS
- Opportunities that might exist to procure second hand capital equipment including ammonia plants, phosphoric acid plants, mining fleet and train rolling stock

Capital and operating cost estimations have been derived through a combination of market testing for budget pricing, analysis of current enterprise bargaining agreements and benchmarking on recent projects. None of it has been derived from competitive commercial negotiations. It is reasonable to assume that the current view of capital and operating costs incorporates some level of industry inertia to retain costs associated with the recent construction boom in mining and oil and gas. As these current projects are completed, there could be opportunity for unique projects such as this, to take advantage of the cycle downturn.
MOVING FORWARD

In order to take one of the development options forward to a bankable feasibility study, it will be necessary to secure funding through the establishment of a joint venture and associated off-take agreements. Rum Jungle Resources is currently in discussions with a number of investment banks and corporate advisory firms, with global reach and relationships in the fertiliser sector, to assist in the execution of a formal process to secure the funding necessary to progress.

It is important to note that potential development partners will have differing strategies regarding investment in the phosphate fertiliser space. For example, there may be Indian or Indonesian phosphate fertiliser producers looking to secure their supply of rock to underpin their existing or new investments in downstream production capacity in their home markets. Alternatively, a large North American fertiliser producer may be looking to integrate upstream to fertiliser production in the Australasian region to underpin their previous investments in retail distribution infrastructure or Chinese producers looking to establish offshore production to better access export markets. There are also a number of other entities with strategies to invest in agri-business such as Japanese and Korean Trading Houses and Middle Eastern Sovereign funds that may be interested in this project.

It is intended to commence this formal process of securing joint ventures and off-take agreements in the next few weeks with the first step being the engagement of an investment bank or corporate advisory to assist in facilitating the development of an Information Memorandum and facilitating the engagement process. Rum Jungle Resources’ aim is to conduct this formal process over the next few months with a view of concluding it during the first quarter of 2015, thus enabling the progression of one of the development cases.

Shareholders are reminded that the completion of a pre-feasibility study does not mean that the project is financeable and that no financing decision has been made to develop the project. The next step in the process is a more detailed bankable feasibility study on one of the four development options outlined above, which would incorporate a trial mine and larger scale pilot testing of product to ensure market specifications can be sustainably met.
The PFS has been prepared on behalf of, and for the exclusive use of, Rum Jungle Resources and is subject to and issued in accordance with the agreement between Rum Jungle Resources and WorleyParsons. WorleyParsons accepts no liability or responsibility whatsoever for it in respect of any use of, or reliance upon, this report by any third party.

The information in this report that relates to the Mineral Resource estimates is based on information compiled by Jonathon Abbott, a Competent Person who is a Member of the Australian Institute of Geoscientists. Jonathon Abbott is a full time employee of MPR Geological Consultants Pty Ltd and is an independent consultant to Rum Jungle Resources.

Mr Abbott has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Mineral Resources and Ore Reserves”.

Mr Abbott consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Jonathon Abbott
Consulting Geologist
MPR Geological Consulting Pty Ltd

This announcement contains forward looking statements. Forward looking statements are not based on historical facts, but are based on current expectations of future results or events. These forward looking statements are subject to risks, uncertainties and assumptions which could cause actual results or events to differ materially from the expectations described in such forward looking statements. Although Rum Jungle Resources believes that the expectations reflected in the forward looking statements in this presentation are reasonable, no assurance can be given (and Rum Jungle Resources does not give any assurance) that such expectations will prove to be correct. Undue reliance should not be placed on any forward looking statements in this announcement, particularly given that Rum Jungle Resources has not yet made a decision to proceed to develop the Ammaroo Project or any other project, and Rum Jungle Resources does not yet know whether it will be able to finance this project.

Chris Tziolis
Managing Director