

# AMMAROO PHOSPHATE PROJECT – BANKABLE FEASIBILITY STUDY AND ENVIRONMENTAL APPROVALS UPDATE

Studies and the approvals process progressing and on track for completion in late 2017

#### **HIGHLIGHTS**

- Bankable Feasibility Study (BFS) and the Environmental Approvals Process are progressing on schedule at the company's 100% owned Ammaroo Phosphate Project in the Northern Territory
- Product characterisation and specification pilot scale test work has commenced for Ammaroo with a 40 tonne bulk sample mined and dispatched from site
- Ground water quality and long term ground water availability confirmed by pump and draw down testing at Ammaroo
- Key milestones in the environmental approvals process achieved with ecological and archaeological surveys completed for the mine site, bore field and majority of the proposed transport corridor

#### **Bulk Sample for Pilot Scale Flotation Trials**

A 40 tonne bulk sample has been mined and dispatched from site to Corem, in Quebec, one of the world's leading mineral processing research and development organisations with specific expertise in phosphate beneficiation.

A series of metallurgical and beneficiation trials will be conducted over the next few months, culminating in a pilot scale continuous flotation beneficiation trial. The successful completion of these trials will then enable the progression of process plant design and engineering.

These trials will provide sample products for phosphoric acid test work and phosphate rock concentrate samples to potential customers.

#### **Production Water Bore Trials**

A seven day production bore pump and drawdown test was successfully completed confirming the availability of sufficient ground water for the project. 15 million litres of water was pumped over seven days resulting in one metre of draw down in the bore. The bore recharged a metre over 16 hours once pumping concluded, confirming aquifer transmissivity and demonstrating that the aquifer is very high yielding and extensive.

Water quality is also high with total dissolved solids (TDS) of approximately 1,000 mg/l which is within the potable water range. This could potentially reduce capital and operating expenditure for water treatment associated with the beneficiation plant.

#### Resource Evaluation, Geotechnical and Metallurgical Sampling

A total of 201 reverse circulation (RC) holes were drilled (4,885m) in order to increase the JORC Indicated Mineral Resource category of the northern part of the phosphate resource that extends east of the original Barrow Creek project area. This infill drilling is required to enable a mine planning at a BFS level of accuracy to be undertaken in the shallow, lower cost, part of the resource which also contains low iron-content phosphate.

In addition, 29 diamond core holes were drilled for geochemical, bulk density and metallurgical sampling of the phosphate mining area. This will inform the pending update of the Ammaroo phosphate resource.

The resource model is in the process of being updated with results of this evaluation drilling and a revised JORC 2012 Mineral Resource will be estimated in early 2017.

Further to this, 37 geotechnical holes were drilled and 39 small sample pits excavated in the mine, processing plant and tailings storage areas to provide geotechnical data on ground conditions and physical characteristics of potential construction materials. This will confirm the availability of construction materials for mine site roads and foundations, as well as the engineering design work associated with mine site infrastructure and tailings storage facilities.

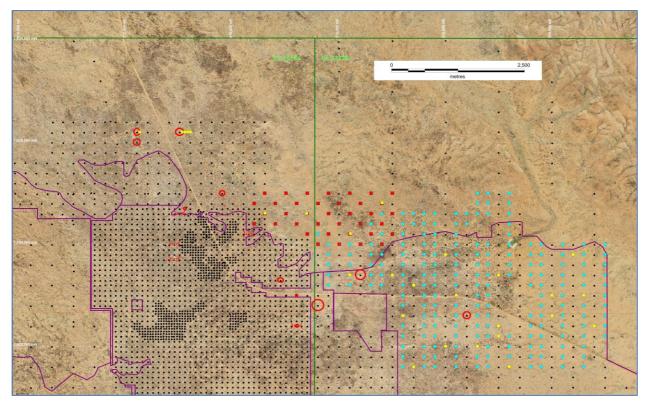
#### **Ecological and Archaeological Surveys**

Detailed ecological, endangered species and archaeological surveys have been completed over the proposed Minerals Lease areas, the majority of the proposed transport corridor and bore field, as required under the terms of reference for the pending Environmental Impact Statement (EIS).

At this point, there has been no evidence of the endangered species previously highlighted under the Ammaroo project's EIS terms of reference.

Verdant Minerals' Managing Director, Mr Chris Tziolis, stated, "We are pleased that the early work associated with the bankable feasibility study and the environmental approvals processes are progressing in accordance with our plan. The primary focus for the first quarter of 2017 will be on mine planning, the continuation of the environmental approvals process, native title agreement negotiations, and the metallurgical test work and flotation trials that will be a precursor to the commencement of engineering design work. There will also be a considerable ramp-up in engagement with the Northern Territory Government as we seek approvals and a licence to operate. As we continue to gain more information, obtain a detailed understanding of the project and remove perceived barriers to the project's development, we are increasingly confident of a successful outcome for the BFS in 2017."

### Bankable Feasibility Study - December 2016



Map with 2016 work shown in colour. Existing drill holes are black dots. Various categories of existing JORC Resource outlined in purple. Infill RC drilling in blue (not all holes were drilled); yellow dots are diamond cored holes for metallurgical testing, density samples and/or geotechnical studies; red squares are shallow test pits; red circles are proposed larger excavations for bulk samples and engineering test work; existing costeans some of which have been re-examined and re-sampled are shown with a trench symbol.



Excavation of 2016 Sample 2 at the site of drill hole ARC647. The pale, beige material is shallow phosphate.

## **Bankable Feasibility Study - December 2016**



Bulk sample ready for dispatch from site.



Production water bore pump testing.

Chris Tziolis Managing Director