



SYRAH ACHIEVES SIGNIFICANT GRAPHITE CONCENTRATE UPGRADE

Highlights

- Pilot plant test work demonstrates a significant improvement in total graphitic carbon (TGC) can be achieved across all size fractions by the addition of a liberation circuit as a final process step at the Balama Project
- A recent extensive piloting program has produced an average flake graphite concentrate grade of between 96.5% to 98.8% TGC across a range of flake sizes, with further work on-going to achieve optimised grades
- Optimisation work following commissioning of the mine will focus on producing consistent commercial quantities of high-grade concentrate

Pilot Plant Test Work

Syrah Resources Limited (ASX:SYR) is pleased to report the results of a comprehensive pilot plant test program undertaken in Brazil, using 100 tonnes of Balama graphite run of mine (ROM) material. The purpose of this test work was to:

- Produce concentrate material for the spherical test work facility in China
- Produce concentrate for potential flake graphite customers for product qualification purposes
- Further optimise the Balama Project flowsheet and process conditions in preparation for commissioning during Q2 2017
- Identify further enhancements to the Balama Project flowsheet that would lead to a >95% total graphitic carbon product (TGC) being consistently produced across all size fractions

The results of this test work demonstrates that by introducing a liberation circuit to the Balama graphite plant flowsheet, a significant improvement in TGC can be achieved across all size fractions (+50, +80, +100, -100 mesh). The liberation process is very simple and involves the removal of gangue minerals from the graphite particles. This cleans the surface of the particles and improves flotation efficiencies downstream, without a significant impact on particle size.

All of the Balama graphite concentrate production will be produced and sold as +50, +80, +100 or -100 mesh. The piloting program has produced an average flake graphite concentrate grade of between 96.5% to 98.8% TGC across a range of flake sizes. The Company also believes there is opportunity to further improve the liberation circuit performance with on-going test work. Optimisation work following commissioning of the mine will focus on producing consistent commercial quantities of high-grade concentrate.

The Feasibility Study (refer ASX announcement dated 29 May 2015) assumed that the Balama Graphite Project will produce an average concentrate grade of 95% TGC over life of mine.



An improvement in the average graphite concentrate grade produced will enhance the margins of the Balama Project by increasing the selling price of Balama graphite.

The estimated capital expenditure for this liberation circuit will have no material impact on the capital forecast for the project. Incremental operating costs for the liberation circuit are estimated to be less than US\$10 per tonne of concentrate produced. Installation of this equipment is expected to be easily integrated into the existing flow sheet and will provide better flexibility through commissioning and optimization of the plant.

Managing Director Tolga Kumova said: *"We are delighted with the outstanding results of this pilot plant test work. The addition of a simple, low cost liberation circuit will further enhance the already robust economics of the Balama Project and Proposed Spherical Graphite Facility, and represents another significant development towards achieving our goal to become the leading graphite supplier to both traditional and the lithium ion battery market."*

For further information contact:

Tolga Kumova

Managing Director

Syrah Resources Limited

Office Contact - +61 3 9670 7264

Mobile Contact - +61 421 707 155

Email – t.kumova@syrahresources.com.au

About Syrah Resources

Syrah Resources Limited (ASX code: SYR) is an Australian-based industrial minerals and technology company. Syrah is currently constructing the Balama graphite project (Balama) in Mozambique, with commercial production scheduled to commence in Q2 2017. Balama will be the largest global producer, by a substantial margin, of high purity graphite and hosts the world's largest graphite Ore Reserve (JORC Code 2012 compliant), sufficient for over 40 years of production. Balama will target traditional industrial graphite markets and emerging technology markets.

Syrah has completed extensive product certification test work with several major battery producers for the use of Balama spherical graphite in the anode of lithium ion batteries. To underpin this interest by global lithium ion battery manufacturers, Syrah is currently undertaking engineering and commercial studies regarding the construction of a spherical graphite plant in south-eastern USA. This plant would take graphite production from Balama and subject it to further purification and mechanical processing to produce world class spherical product for battery anodes.