

Balama graphite project in the finishing straight



The flotation section of the Balama plant under construction (photo: Syrah Resources).

ASX-listed Syrah Resources, which is developing the Balama graphite project in northern Mozambique, reports that overall construction progress completion was 90 % as at 30 June 2017. Processing plant commissioning activities commenced in May and continue as planned, including energisation of the primary crusher substation, and completion of function testing for some material handling equipment.

The majority of supporting infrastructure for the plant site is complete, aside from the water pipeline which is well advanced. The main pipeline corridor has been cleared and trenched (13,5 km) and welding of the pipeline has begun.

Operational readiness for production ramp up is also progressing well, says Syrah, with most of the key operational management, supervision and personnel having been recruited and initial mine development complete with stockpiling of mineralised ore onto the ROM stockpile, ready for production. The laboratory has been fully fitted out with state-of-the-art equipment and is fully functional with Bureau Veritas technical personnel already mobilised to site. The laboratory is being used in advance of production to train personnel in processing and performing ore characterisation work.

The project remains on schedule for first production in August 2017 and the project capital cost is US\$193 million (plus a project contingency of US\$7 million).

Syrah says that the Mozambique Minister for Mineral Resources and Energy, Leticia Klemens, undertook a very detailed visit to the Balama operation on June 26. The visit focused on health and safety, environmental compliance, the

mine, processing plant and infrastructure, the training and development systems in place, and the high proportion of Mozambican national employees, particularly from the local communities.

The strong commitment Syrah has already shown towards social responsibility in advance of production was noted, and the Minister subsequently requested that the company share the established standards and processes with other resources projects in Cabo Delgado province and nationally.

The project has reserves of 114,5 Mt at 16,6 % Total Graphitic Content (TGC) (18,6 Mt contained graphite) and resources of 1 191 Mt at 11,0 % TGC (128,5 Mt of contained graphite), sufficient for a life of mine of almost 60 years.

Balama will be a simple open-pit operation with a low strip ratio. It will employ a processing route consisting of conventional processes including crushing, grinding, flotation, filtration, drying, screening and bagging. The plant will produce a 95 % to >98 % TGC concentrate across a range of flake sizes.

The processing rate is 2 Mt/a with the nameplate capacity of the plant being 380 000 t/a of graphite concentrate. It is envisaged that the operation will initially achieve a C1 production cash cost of less than US\$400 per tonne in the first 12 months, with this later reducing to less than US\$300 per tonne. ■



Looking south over the Balama site. This photo is from May this year (photo: Syrah Resources).