

# BLACK ROCK MINING SUCCESSFULLY COMPLETES PILOT PLANT TESTWORKS IN CHINA

# HIGHLIGHTS

- This Pilot plant validates BKT's Mahenge mine's optimised design flow sheet and concentrate properties
- Pilot plant operations attended by Chinese, Korean and Japanese offtake and potential investment partners who observed performance and conducted due diligence
- Preliminary performance of recovery, grade and flake size is consistent with recent lab & DFS results
- Accelerates efforts to further de-risk the project

**Tanzanian graphite developer Black Rock Mining Limited** (BKT: ASX) ("Black Rock" or "the Company") is pleased to announce it has successfully completed pilot plant testworks processing 18.5 dry tonnes of ore in a dedicated pilot plant facility in China operated by Black Rock's EPC partner Yantai Jinyuan Mining Machinery. Ore milled is characterised as Ulanzi oxide ores from our 2018 bulk sampling program and pilot plant operations targeted production of the Premium (+97.5%) range of products only.

After the successful 90 tonne pilot plant run at SGS Lakefield in Canada, Black Rock and its EPC partner Yantai Jinyuan agreed on the 18.5 tonne pilot plant run in China for two main purposes:

- 1. To ensure Yantai was able to replicate and validate the unique Mahenge product attributes following the exceptional processing results achieved in Canada; and
- 2. To enable Yantai to optimise the DFS flow sheet based on the first pilot plant testwork program.

Black Rock and its EPC partner, Yantai Jinyuan Mining Machinery, hosted Chinese, Korean and Japanese offtake and potential investment partners during operation of the plant at a dedicated facility in Laiyang province China. Operations delivered recovery, grade and flake size performance consistent with lab results announced 1 March 2019. Attendees took the opportunity to observe and review the optimised plant circuit design as well as complete due diligence on plant performance and sampling of ore, intermediate and final concentrate attributes.



Black Rock Mining Ltd ACN 094 551 336 ASX:BKT Issued Capital 585.5m Shares 47m Options Australian Registered Office 45 Ventnor Avenue West Perth WA 6005 Ph: +61 8 9389 4415 E: info@blackrockmining.com.au Tanzanian Office Mahenge Resources Ltd 202 Village Walk Building Toure Drive, PO BOX 80003 Dar es Salaam Tanzania **Directors** Richard Crookes John de Vries Gabriel Chiappini



## Commenting on the Pilot Plant in China, Black Rock CEO, John de Vries, said

"Our second round of substantial pilot plant testworks is the best way to attract finance by further derisking the project. This pilot plant has also given us an opportunity to differentiate and demonstrate the uniqueness of Mahenge brand graphite in front of key offtakers and potential investors. The demonstration of our capacity to produce our premium branded product through a simple and repeatable process without the need for chemical intervention establishes Mahenge as one of the world's leading premium flake graphite concentrates.

The pilot plant will deliver improvements on our DFS flowsheet by incorporating the experience and IP of Yantai Jinyuan. Once all the plant data is fully processed, we will be able to proceed with contract establishment with Yantai Jinyuan for supply of plant and engineering services as well begin the process of documenting the pledge of US\$20m in vendor finance and a further US\$20m of supported finance through third parties."



Large flake (+100 mesh) concentrate will be made available to offtakers as part of our validation process. All sub 100 mesh flake will be processed for battery anode precursor in dedicated facilities to establish spheronising plant performance metrics and to provide increased volumes of material for independent battery performance testing. This data will be available in late May.

Based on customer and investor feedback Black Rock has commenced optimising the October 2018 Definitive Feasibility Study to increase ramp up rates and to consider the addition of a fourth milling module (Crawl, Walk, Run, Sprint). This second pilot plant in China has supported this process by generating a competitive environment for volume and price discovery.

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## **About Black Rock Mining**

Black Rock Mining Limited is an Australian based company listed on the Australian Securities Exchange (ASX:BKT). The Company has a 100% interest in the Mahenge Graphite Project (the "Project") located in Tanzania. The Project has a JORC compliant Mineral Resource Estimate of 212m tonnes at 7.8% TGC. It also has Reserves of 70m tonnes at 8.5% TGC. The Reserve supports a mine life of 250k tonnes of graphite per annum for 25 years. Since the release of the Resource Estimate, the Company confirms that it is not aware of any new information or data that materially affects the resources estimate.

In October 2018, the Company released a Definitive Feasibility Study for the Project demonstrating exceptional financial metrics including:

- Low Capex: Lowest peak capital expenditure of US\$115M for phase one;
- *High Margin*: AISC margin of 63.6%;
- Low Technical Risk: Substantial pilot plant run of 90 tonnes delivering eight tonnes of product; and
- Superior Economics: IRR of 42.8% with NPV<sub>10</sub> of US\$895m

Following release of the DFS, the Company confirms that it is not aware of any new data or information that materially affects the results of the DFS and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. In January 2019 the Company announced it had substantially sold out of production with up to 205k tonnes of graphite subjected to binding offtakes in year three of production. In February 2019 it also announced receipt of its mining licence for the DFS project.

The Company is currently progressing financing discussions and detailed engineering with a view to commencing construction of the mine in 2019.

JORC Compliant Mineral Resource Estimate and Reserve			
Reserves	Tonnes (Mt)	Grade (% TGC)	Contained Graphite (Mt)
- Proven	0	0.0	0.0
- Probable	70	8.5	6.0
Total Reserves	70	8.5	6.0
Resources			
- Measured	25.5	8.6	2.2
- Indicated	88.1	7.9	6.9
Total M&I	113.6	16.5	9.1
- Inferred	98.3	7.6	7.4
Total M, I&I	211.9	7.8	16.6



#### For further information on Black Rock Mining Ltd, please visit www.blackrockmining.com.au

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