BLACK ROCK MINING'S MAHENGE GRAPHITE SETS NEW STANDARDS FOR NATURAL GRAPHITE IN BATTERY PERFORMANCE

HIGHLIGHTS

- 200-cycle battery test results confirms Mahenge Graphite Project graphite has the potential to **enable battery manufacturers to produce more stable lithium-ion batteries (LIBs) at a lower cost with a longer cycle life**
- The evidence from Mahenge graphite's performance at 200-cycles indicates it **strongly outperforms commercially available products**, potentially establishing new performance benchmarks of natural graphite in the battery market. Establishing new industry performance benchmarks is an important step in the Company's commercialisation strategy
- Potential for performance and cost advantages over synthetic graphite in LIBs
- Interest from battery manufacturers growing continues to grow with strong results from test work
- The extended battery performance testing is consistent with the strategy of de-risking the Company's marketing of its product through demonstrating outperformance.

Tanzanian graphite developer Black Rock Mining Limited (ASX:BKT) ("Black Rock" or the "Company"), is pleased to announce long term battery test work has delivered further industry-leading results with Mahenge graphite outperforming commercial coated natural flake graphite in the Company's latest test work, in which it was tested through 200 charge/discharge cycles.

Black Rock Mining's CEO John de Vries commented:

"The proof is in the data. Mahenge Graphite has set new standards for performance for natural graphite in batteries. The 200-cycle results verifies the industry leading product attributes of Black Rock´s Mahenge Graphite Project. Our graphite clearly has potential to deliver battery manufacturers more stable lithium-ion batteries, at a lower cost , and with superior cycle life.

This highly positive test cell data will support our ongoing discussions with potential partners.

"Our next steps are to provide bulk quantities of Mahenge graphite concentrates for commercial scale spheronising tests together with detailed spherical test work results from our recently completed programme in Europe."

Black Rock Mining Limited
ACN 094 551 336
ASX: BKT

Issued Capital
364.7m ordinary shares
47.2m options
9.4m performance rights

Registered Office
Suite 1, Level 1
35 Havelock Street
WEST PERTH
WA 6005
T. +61 8 9320 7550

Tanzanian Office
202 Village Walk Building
Toure Drive
PO Box 80003
Dar es Salaam, Tanzania

Directors
Stephen Copulos
John de Vries
Gabriel Chiappini

Company Secretary
Gabriel Chiappini

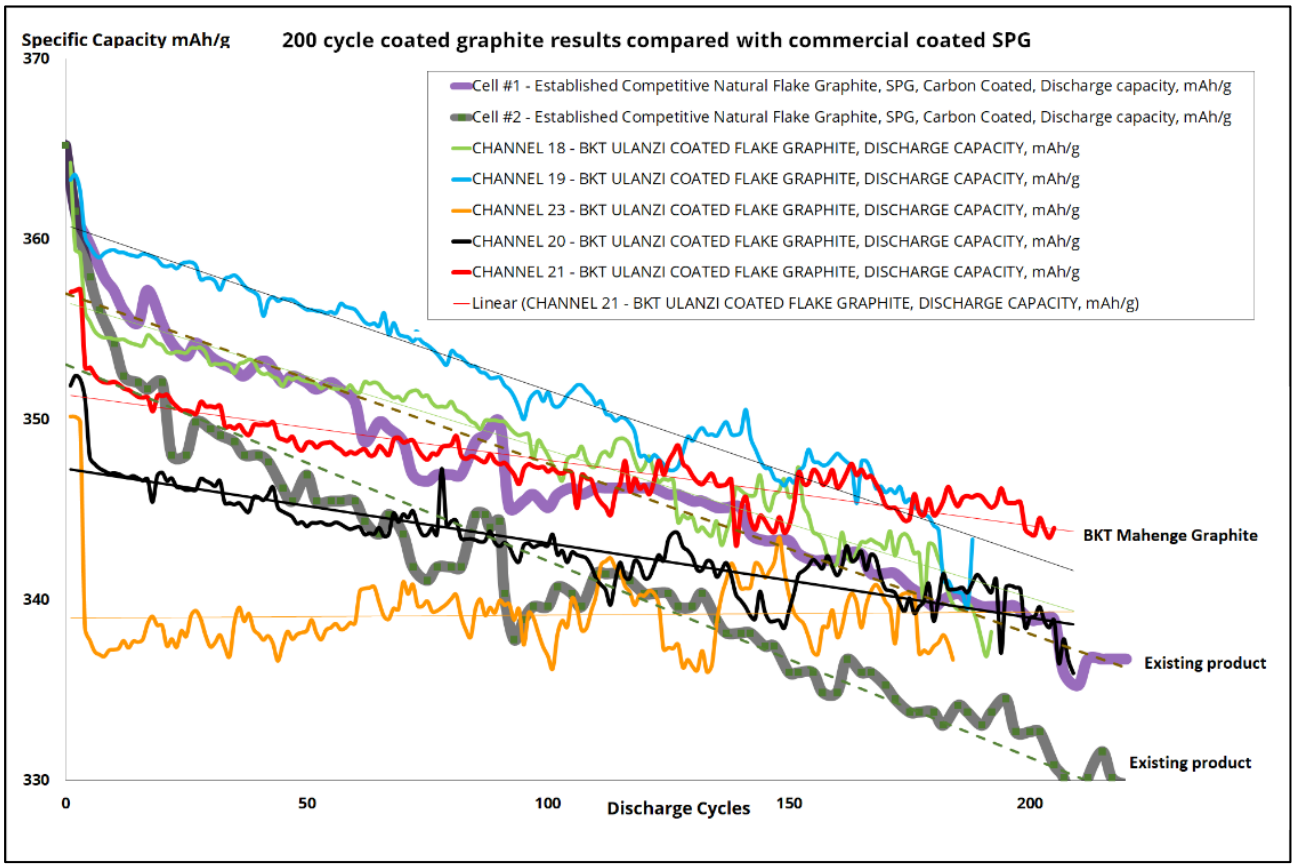

Figure 1. *Discharge curves of five Mahenge test cells showing higher capacities than a leading commercial coated natural flake graphite (Cell 1 and Cell 2). This data represents up to 209 charge and discharge cycles and shows Mahenge test cells demonstrate both flatter charge/discharge curves and higher specific capacities (in mAh/g) for the than the commercial comparison samples.*

Background

In 2016, Black Rock engaged a US *ISO accredited* test facility to undertake spherical graphite and purification test works on its Mahenge Graphite Project Ulanzi concentrate. This spherical graphite was then used to manufacture battery cells for performance evaluation – both initial and long-term performance.

Test Results

Initial cell test testing delivered excellent charge/discharge metrics with exceptionally high reversible capacity of 371.28 mAh and highly positive BET and irreversible capacity losses.

The ongoing long-term electrochemical tests have enhanced these initial results. Over approximately 200 charge/discharge cycles, Black Rock's test cells demonstrated consistently higher charge capacity and flatter performance curves than a leading coated spherical graphite used as a comparison. This is believed to occur due to the thicker Mahenge graphite flakes which are more stable in cell use than thin flakes.

The cell test trials used several variations in the composition of anode/binder/electrolyte and cell construction method, hence the different performance curves for the five test cells in Figure 1. The key result from the long-term testing is that Mahenge test cells have flatter sloping performance curves than a leading commercial SPG, indicating potential for longer cell life. Cell 23, for example, is yet to show cell performance degradation after 200 cycles. This cell has a slightly lower initial specific charge than the other test cells but is demonstrating remarkably stable performance. The other BKT cells show flatter performance curves than commercial SPG.

Relevance to Battery Manufacturers

The long-term cell testing builds upon the successful spherical graphite and purification test work showing that the Mahenge Graphite Project spherical graphite has unique positive physical features with potential to improve the stability, battery safety performance and enhance the cycle life of lithium-ion batteries.

Importantly, Black Rock believes it is leading the graphite industry in recognising the importance of the use of long-term cycling data to characterise the sustainability of battery performance with the Company's graphite. Long-term cycling is a pivotal performance characteristic within the battery industry, and the Company's electrochemical testing will provide guidance on anode binders, electrolyte composition and anode construction methods used in the test cells.

Next Steps

The Company is preparing to undertake the following detailed evaluation programmes:

1. Pilot scale test work to finalise flow sheet design and confirm the ability to process high purity graphite concentrates with a high proportion of coarse flake. This programme is expected to produce more than 10 tonnes of high purity graphite concentrates for evaluation by end users

2. Spheronising test programmes with our MOU partners to optimise yields and performance characteristics of Mahenge graphite. This programme is expected to demonstrate unique performance enhancements and potential cost savings for graphite spheronising businesses

3. Delivery of commercial-scale spherical graphite (SPG) to battery manufacturers for their evaluation.

Black Rock expects these evaluation initiatives will underpin ongoing discussions with potential partners.

Summary

- 200-cycle cell test results delivered excellent performance metrics that exceed commercially available coated SPG
- Independent testing indicates that Mahenge SPG has several unique performance characteristics with potential to manufacture lower cost and better performing lithium ion batteries
- These unique characteristics are attributed to the unusually thick, **high density** and naturally **high purity graphite flakes** from the Mahenge Graphite Project
- Additional independent development work is necessary to validate the highly encouraging potential for Mahenge graphite to:
    - Supply consistent high-grade graphite concentrates with superior electrochemical attributes compared to natural and synthetic graphites available
    - Potentially reduce manufacturing costs for construct lithium ion batteries with higher performance **and longer lifespan**
    - Displace a portion of synthetic graphite in LIBs.
- Mahenge graphite mineralisation is considered to be consistent in characteristics and distribution across each orebody. This is very significant to end users as the Mahenge Project has potential to deliver consistent quality graphite concentrates for decades. This in turn can allow SPG manufacturers to deliver consistent quality SPG product to battery manufacturers.

For more information:

John de Vries	Simon Hinsley	Charlie Bendon
Chief Executive Officer	**Investor Relations**	
Black Rock Mining	**NWR Communications**	**Tamesis Partners LLP (UK)**
+61 438 356 590	+61 401 809 653	+ 44 7968 167 030
jdv@blackrockmining.com.au	simon@nwrcommunications.com.au	cbendon@tamesispartners.com

About Black Rock Mining

Black Rock Mining Limited is an Australian-based company listed on the Australian Securities Exchange. The Company owns graphite tenure in the Mahenge region of Tanzania.

The Company announced a JORC compliant Mineral Resource Estimate of 211.9m tonnes at 7.8% TGC for 16.6m tonnes of contained Graphite, making this one of the largest JORC compliant flake graphite Mineral Resource Estimates globally. Over 50% of the Mineral Resource is in the Measured and Indicated categories. In April 2017, Black Rock announced results of a Preliminary Feasibility Study (PFS) and followed this up with an optimised PFS on 8 August 2017 for its Mahenge Graphite Project which confirmed its potential as a long-life, low capex, high margin operation.

The optimised PFS estimated a post-tax, unlevered, internal rate of return ("IRR") for the Project of 45.1%; and a net present value (NPV) using a discount rate of 10% (NPV_{10}) of US$905m. Black Rock confirms, the key assumptions used in the PFS have not materially changed and that the material assumptions continue to apply per the Optimised PFS announcement released to the ASX on 8 August 2017. Black Rock confirms that it's optimised PFS has allowed for the proposed Tanzanian legislative changes relating to 16% free carry position of the Tanzanian Government and the royalty fee increasing to 4.3%. Subject to clarification on Tanzanian legislative changes, Black Rock is moving towards commencing a Definitive Feasibility Study (DFS). With a successful DFS and associated financing, construction could commence in 2018 with first production in 2019.

For further information on the company's development pathway, please refer to the company's website at the following link: http://www.blackrockmining.com.au and the corporate video presentation at http://www.blackrockmining.com.au/#video.

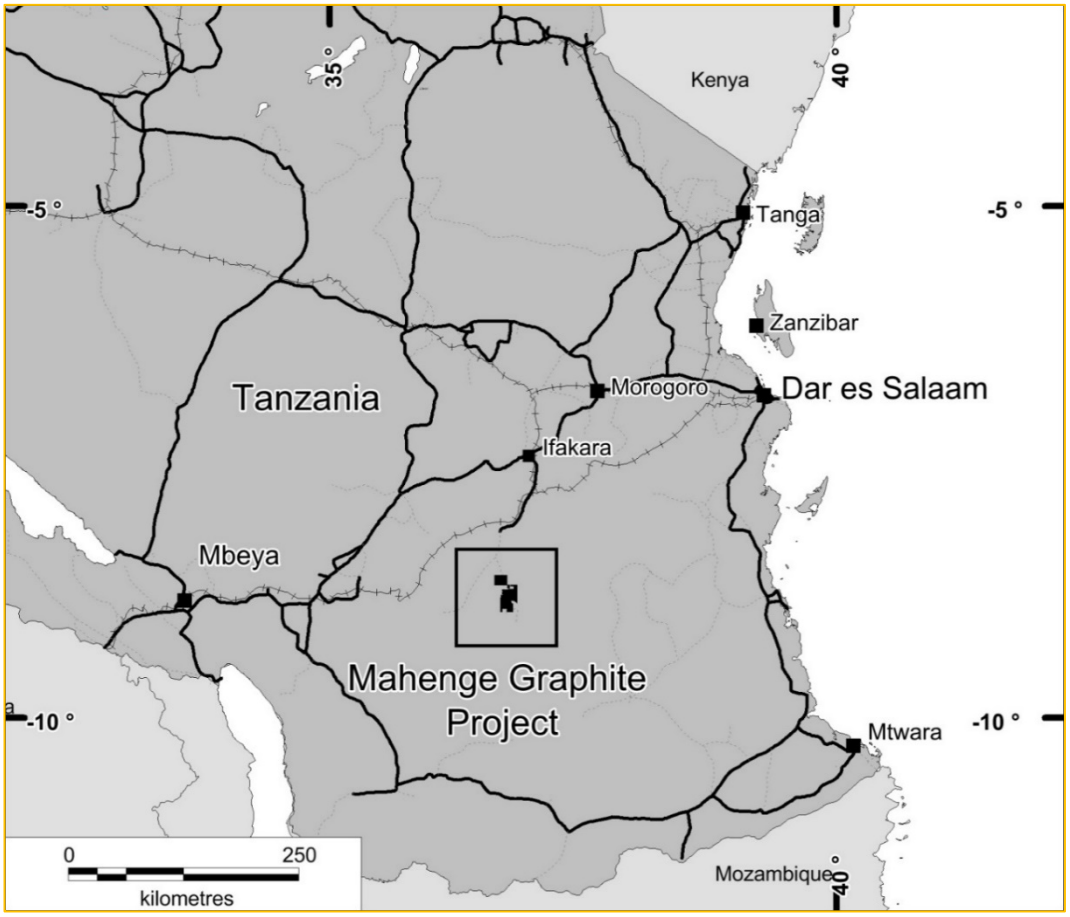

Figure 1: Location of Black Rock's Mahenge Graphite Project within Tanzania