

# Test work again achieves 99% purities - whilst increasing flake size



16 August 2016

## Highlights

- Ulanzi bulk sample optimisation delivers significant incremental improvements to flake size whilst achieving 99% graphite purity across all size fractions
- 99.1% purity achieved for entire >75 $\mu$  size fraction, which represents 88.5% of concentrate.
- Finest two size fractions now achieving significant purity improvements
- Results are from a conventional flotation circuit

Screen Size Microns	Distribution %	TGC Assay %	Cumulative distribution %	Weighted Av. grade %
+300 $\mu$ m	17.4	98.8	17.4	98.8
+180 $\mu$ m	34.8	99.2	52.2	99.1
+150 $\mu$ m	10.4	99.0	62.7	99.1
+106 $\mu$ m	14.7	98.8	77.4	99.0
+75 $\mu$ m	11.1	99.4	88.5	99.1
+25 $\mu$ m	11.1	98.6	99.6	99.0
-25 $\mu$ m	0.4	95.5	100.0	99.0

Table 1. Ulanzi bulk sample assay results by size fraction and %TGC. TGC assays are by double LOI method. Appropriate rounding applied to table.

**Black Rock Mining Limited (ASX:BKT) (“Black Rock Mining” or “the Company”)** is pleased to announce ongoing metallurgical testwork results from its flowsheet optimisation program. 99.0% TGC concentrate purity has been achieved for the entire size fraction whilst increasing the overall proportion of >75 micron sized fractions and significantly increasing the purities the <75 micron fractions.

The entire +75 to +300 micron portion of flake graphite is achieving 99.1% TGC purity, representing 88.4% of the sample by weight.

The key outcome from this test is that exceptionally high purities in the 98-99% range can be achieved from a straightforward processing circuit whilst preserving flake size. Graphite at this high purity level will be sought after for battery and other applications and is expected to attract a price premium.

Following the highly successful expandable test results announced on 4<sup>th</sup> August, spherical graphite test work is underway in Europe to determine the suitability of Mahenge graphite for battery applications with results expected in late August. A bulk sample has been collected from Ulanzi and core samples are being drilled to conduct larger scale test work over the next three months. In addition, samples are being collected from the Cascades prospect to test both the oxide and primary zones.

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## 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, Tanzania, a Country that hosts world-class graphite mineralisation. The Company announced a maiden JORC compliant resource of 131mt @ 7.9% TGC for 10.4m tonnes of contained Graphite in February 2016, making this one of the largest JORC resources Globally. A positive scoping study in March 2016 led into the current Pre Feasibility Study which is expected to be released in October 2016. The Company intends to complete a Definitive Feasibility study in March 2017.

An infill drill programme for Ulanzi was completed in July 2016 to convert the majority of this resource into Measured and Indicated Classification. The updated JORC resource for Ulanzi is expected in September 2016 and a JORC resource for Cascades is expected in October 2016. The Cascades infill drilling programme has been expanded to incorporate significantly wider mineralised zones, as reported to ASX on 11 August 2016.

## Competent Person Statements

The information in this report that relates to Exploration Results is based on information compiled by Steven Tambanis, who is a member of the AusIMM. He is an employee of Black Rock Mining Limited. Steven Tambanis has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 and 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Steven Tambanis consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information in this report that relates to Metallurgical test work and results is based on information compiled by Mr David Pass, a Competent Person who is a member of Australian Institute of Mining and Metallurgy. Mr Pass is a full time employee of Battery Limits Pty Ltd, a specialist metallurgical consultancy and an independent consultant to Black Rock Mining Limited. Mr Pass has sufficient experience that is relevant to the style of mineralogy and type of deposit under consideration and the typical beneficiation thereof. Mr Pass consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Appendix 1: JORC Mineral Resource Statement released February 2016

Prospect	Category	Tonnes (Millions)	TGC (%)	Contained TGC (Millions tonnes)
Ulanzi	Indicated	35.0	8.3	2.9
	Inferred	<u>45.5</u>	<u>8.7</u>	<u>4.0</u>
	<b>Sub-total</b>	<b>80.5</b>	<b>8.5</b>	<b>6.9</b>
Epanko Nth	Indicated	17.6	6.4	1.1
	Inferred	<u>20.8</u>	<u>5.9</u>	<u>1.2</u>
	<b>Sub-total</b>	<b>38.4</b>	<b>6.1</b>	<b>2.3</b>
Cascade	Indicated	-	-	-
	Inferred	<u>12.3</u>	<u>9.5</u>	<u>1.2</u>
	<b>Sub-total</b>	<b>12.3</b>	<b>9.5</b>	<b>1.2</b>
COMBINED	INDICATED	52.5	7.7	4.0
	INFERRED	<u>78.6</u>	<u>8.1</u>	<u>6.4</u>
	<b>TOTAL</b>	<b>131.1</b>	<b>7.9</b>	<b>10.4</b>