

DECEMBER 2016 QUARTERLY ACTIVITIES REPORT

Highlights

- Upgraded Cascades Mineral Resource Estimate of 52.8Mt @ 8.3% TGC including a high-grade portion of 14Mt @ 12.1% TGC.
- Likely mine target of Ulanzi and Cascade now 164m tonnes at 8.2% TGC including a high-grade subset of 44.2m @ 10.6% TGC.
- PFS upgraded to incorporate high-grade Cascades Mineral Resource as part of a two stage, 120,000tpa overall mine development.
- Additional Scoping Study level assessment of 100,000 tpa third phase being prepared in parallel to take final targeted production to 220,000 tpa.
- Three phase staged ramp up profile proposed to substantially increase steady state production to take advantage of 15.9Mt of contained graphite and growing global market profile, whilst ensuring pre-production capex remains at an industry leading low level.
- Spherical graphite Scoping Study underway and expected to demonstrate significant downstream processing margin opportunities.
- Successful spherical graphite manufacture, battery cell testing, concentrate purification and evaluation of Mahenge concentrates into existing natural flake graphite markets. Ultra high thermal purification results up to 99.9999% TGC for graphite concentrate.
- 99.2% concentrate grade achieved via flotation circuit processing across all flake sizes.
- 120t bulk sample enroute for pilot scale test programme to finalise processing flowsheet and manufacture volume graphite concentrates for end user evaluation.
- Former Managing Director of ASX listed Highfield Resources Limited, Anthony Hall, appointed Head of Strategy to further develop and help execute corporate strategy. Further key management appointments underway to build the development team.

Plans for March Quarter 2017

- Completion of Mahenge Graphite Mine 220,000 tpa PFS and Scoping Study.
- Completion of spherical graphite Scoping Study.
- Further key management appointments.

Black Rock Mining Limited
ACN 094 551 336
ASX: BKT

Issued Capital
314.5 million shares
9.1 million escrowed shares
77.0 million options

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Directors
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Gabriel Chiappini
Steven Tambanis

Company Secretary
Gabriel Chiappini

Tanzanian graphite developer, Black Rock Mining Limited (ASX:BKT) ("Black Rock" or the "Company"), is pleased to provide its December 2016 Quarterly report. During the December Quarter, the Company delivered a number of key items for its 100%-owned Mahenge Graphite Project. The JORC Mineral Resource Estimate increased by 56% to 203Mt due to the completion of infill drilling at Ulanzi and Cascades. More significantly, the Mineral Resource Estimate contains a higher grade portion of 44.2Mt @ 10.6% TGC.

Graphite concentrate test work saw the production of 99.2% concentrates that were distributed to end users for evaluation with confirmation of high tap density for concentrate due to the thick nature of the graphite flakes.

Chemical purification test work produced 99.95% TGC spherical graphite and thermal purification produced up to 99.9999% pure concentrate.

Significant progress was made manufacturing spherical graphite for battery test work with test cells currently under evaluation and test results to be reported in the first half of 2017.

Mahenge Graphite Project PFS

The Company reported a substantial increase in its Cascades Prospect Mineral Resource Estimate to 53Mt @ 8.3% TGC (refer ASX announcement 12 December 2016), including a high grade portion of 14Mt @ 12.1% TGC. This high grade portion is expected to have similar metallurgical characteristics to the Ulanzi Prospect, which should deliver a high purity concentrates from simple flotation circuit processing; expected to deliver the Mahenge Graphite Project industry leading-low capital and operating costs.

Coupled with this development, the Company has also decided to plan for a much larger mine to be delivered in stages to take advantage of the sizeable 15.9Mt of contained graphite at Mahenge and the projected growth in global demand for its product over the next decade. As a result, the Company is now expecting completion of its PFS in the current Quarter.

The Cascades Mineral Resource Estimate is being integrated into a base case PFS and is targeting two phases of 60,000tpa concentrate production from 550,000t feed. The key objective for the base case scenario is lowest possible capex at optimum production levels.

Further Expansions

Various industry observers have prepared battery grade graphite demand forecasts to 2025 indicates that spherical graphite demand could grow to in excess of 1Mtpa of flake graphite precursor from the current low base of approximately 100,000t. Should this growth eventuate, the Mahenge Graphite Mine will be ideally positioned for capacity increases. The Mahenge Mineral Resource Estimate is capable of delivering a multi-generational mine at annual production levels of over 200,000 tpa.

To this end, the Company is currently completing a Scoping Study level assessment of a third phase expansion of 100k tpa. This will take annual production to 220,000 tpa.

Spherical Graphite Scoping Study

The Company has completed a substantial first pass evaluation of spherical graphite potential for its high purity graphite concentrates. Spherical graphite has been produced in Europe, Japan and the USA. Purification tests have been successfully conducted using acid and thermal processes, demonstrating the ability to make high purity graphite that exceeds the strictest battery specifications and in the case of thermal purification, achieving up to 99.9999% purity.

Coated spherical graphite was manufactured in December 2016 and is being used for the Company's first battery cell test programme.

Bulk and pilot scale testing of graphite ore will take place in the current quarter to confirm a final flotation processing flowsheet and to provide bulk quantities of high purity graphite for commercial scale spheronising tests. Quotes are being received to provide detailed capital and operating costs of spherical graphite production and purification with the objective of delivering preliminary results by the end of April 2017.

Appointment of Head of Strategy

Mr Anthony Hall, the former Managing Director of the ASX-listed Highfield Resources Limited, has been appointed Head of Strategy under an initial 12-month consulting contract. Mr Hall has been recruited to further develop and help execute the Company's strategy.

Mr Hall is a qualified lawyer and company secretary with 20 years' commercial experience in venture capital, risk management, strategy and business development. He was Managing Director and CEO of the ASX listed Highfield Resources Ltd between October 2011 and September 2016. During his tenure, Highfield's market capitalisation grew from \$10m to over \$500m and was successful in raising over \$140m to progress five potash projects in Spain. Mr Hall holds a Bachelor of Laws (Honours), Bachelor of Business and a Graduate Diploma in Applied Finance and Investment.

Further Management Appointments

The Company has commenced a process to continue to build out its core management team to ensure it is in a position to construct and operate the Mahenge Graphite Mine. Further key appointments are expected to be made during the current Quarter.

Further Information

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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 of Tanzania.

In December 2016, the Company announced a JORC compliant Mineral Resource Estimate of 203m tonnes at 7.8% TGC for 15.9m tonnes of contained Graphite, making this one of the largest JORC compliant flake graphite Mineral Resource Estimates globally. 50% of the Mineral Resource is in the Measured and Indicated categories.

The Company is currently completing a Pre-Feasibility Study likely to target the high grade portion of the Cascade Mineral Resource Estimate that contains 14.0m tonnes at 12.1% TGC. This Study is expected to demonstrate industry leading operational cash costs and a multi-generational mine for a project that can deliver a high purity product from conventional flotation circuit processing.

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>

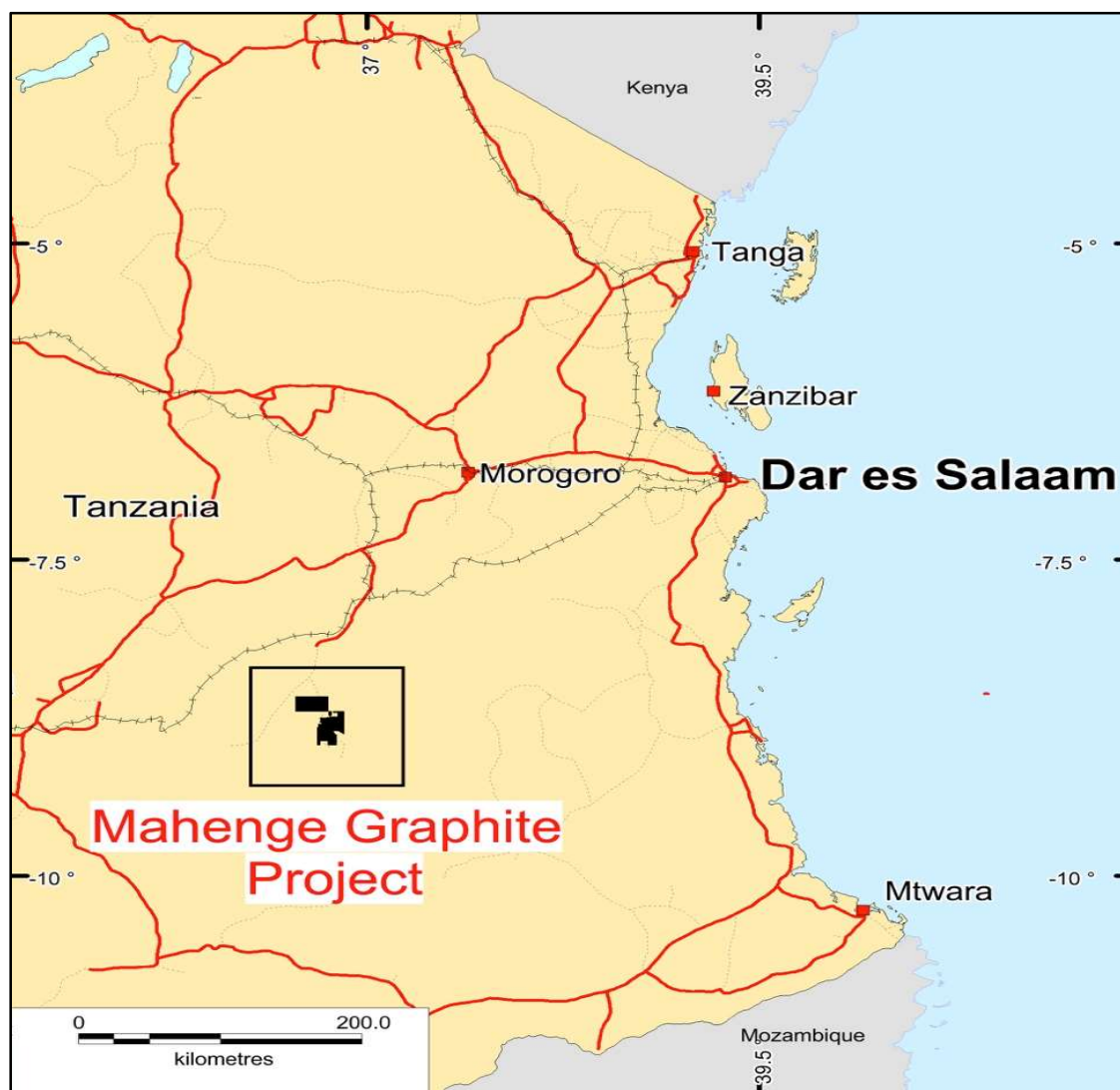


Figure 1: Location of Black Rock's Mahenge Graphite Project within Tanzania

Appendix 1. Mahenge Graphite Project JORC Mineral Resource, December 2016

Category	Tonnes (Millions)	TGC (%)	Contained TGC (Millions tonnes)
Measured	21.2	8.6	1.8
Indicated	81.1	7.8	6.4
Inferred	100.7	7.7	7.7
TOTAL	203.0	7.8	15.9

Prospect	Category	Tonnes (Millions)	TGC (%)	Contained TGC (Millions tonnes)
Ulanzi	Measured	13.3	8.9	1.2
	Indicated	48.0	8.2	3.9
	Inferred	50.5	8.0	4.0
	Sub-total	111.8	8.2	9.2
Epanko	Measured			
	Indicated	17.6	6.4	1.1
	Inferred	20.8	5.9	1.2
	Sub-total	38.4	6.1	2.3
Cascades	Measured	7.8	8.0	0.6
	Indicated	15.5	8.4	1.3
	Inferred	29.4	8.4	2.5
	Sub-total	52.8	8.3	4.4
COMBINED	MEASURED	21.2	8.6	1.8
	INDICATED	81.1	7.8	6.4
	INFERRED	100.7	7.7	7.7
	TOTAL	203.0	7.8	15.9

Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity

Black Rock Mining Limited

ABN

59 094 551 336

Quarter ended ("current quarter")

31 December 2016

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	0	0
1.2 Payments for		
(a) exploration & evaluation	(1,626)	(3,512)
(b) development	0	0
(c) production	0	0
(d) staff costs	(123)	(248)
(e) administration and corporate costs	(226)	(468)
1.3 Dividends received (see note 3)	0	0
1.4 Interest received	2	4
1.5 Interest and other costs of finance paid	0	0
1.6 Income taxes paid	0	0
1.7 Research and development refunds	0	0
1.8 Other (provide details if material)	0	0
1.9 Net cash from / (used in) operating activities	(1,973)	(4,224)

2. Cash flows from investing activities		
2.1 Payments to acquire:		
(a) property, plant and equipment	(14)	(14)
(b) tenements (see item 10)	0	0
(c) investments	0	0
(d) other non-current assets	0	0

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	0	0
	(b) tenements (see item 10)	0	0
	(c) investments	0	200
	(d) other non-current assets	0	0
2.3	Cash flows from loans to other entities	0	0
2.4	Dividends received (see note 3)	0	0
2.5	Other (provide details if material)	0	0
2.6	Net cash from / (used in) investing activities	(14)	186

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	225	5,000
3.2	Proceeds from issue of convertible notes	0	0
3.3	Proceeds from exercise of share options	28	147
3.4	Transaction costs related to issues of shares, convertible notes or options	(46)	(267)
3.5	Proceeds from borrowings	0	0
3.6	Repayment of borrowings	0	0
3.7	Transaction costs related to loans and borrowings	0	0
3.8	Dividends paid	0	0
3.9	Other (provide details if material)	0	0
3.10	Net cash from / (used in) financing activities	207	4,880

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	4,791	2,359
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,973)	(4,224)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(14)	186
4.4	Net cash from / (used in) financing activities (item 3.10 above)	207	4,880
4.5	Effect of movement in exchange rates on cash held	570	380
4.6	Cash and cash equivalents at end of period	3,581	3,581

5. Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1 Bank balances	3,581	4,791
5.2 Call deposits	0	0
5.3 Bank overdrafts	0	0
5.4 Other (provide details)	0	0
5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)	3,581	4,791

6. Payments to directors of the entity and their associates

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

Current quarter \$A'000
123
0

Director related payments – relate to both Executive and Non-Executive Director fees.

7. Payments to related entities of the entity and their associates

- 7.1 Aggregate amount of payments to these parties included in item 1.2
- 7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

Current quarter \$A'000
0
0

Mining exploration entity and oil and gas exploration entity quarterly report

8.	Financing facilities available <i>Add notes as necessary for an understanding of the position</i>	Total facility amount at quarter end	Amount drawn at quarter end
		\$A'000	\$A'000
8.1	Loan facilities	0	0
8.2	Credit standby arrangements	0	0
8.3	Other (please specify)	0	0
8.4	Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

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9.	Estimated cash outflows for next quarter	\$A'000
9.1	Exploration and evaluation	250
9.2	Development	1,000
9.3	Production	-
9.4	Staff costs	180
9.5	Administration and corporate costs	100
9.6	Other (provide details if material)	-
9.7	Total estimated cash outflows	1,530

Development costs includes expected outflows associated with Prefeasibility and definitive feasibility costs.

Included in Corporate costs are marketing costs

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
10.2	Interests in mining tenements and petroleum tenements acquired or increased				

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Gabriel Chiappini, Director, 31 January 2017

Notes

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.