

# **DECEMBER 2018 QUARTERLY ACTIVITIES REPORT**

# HIGHLIGHTS

- Mahenge Graphite Mine Definitive Feasibility Study completed
  - The Definitive Feasibility Study (DFS) was completed with the study demonstrating major geographical and geological advantages including high purity product, low strip ratio, brilliant utilities and product logistics
  - Exceptional project economics with NPV10 of US\$895M, IRR 42.8%, and AISC Margin of 63.6%
  - Highest purity flake graphite achieved from conventional flotation circuit processing with no acid treatment
  - Sustained low cost operation with direct access to rail, port and grid power; and
  - Lowest peak capital expenditure per annual tonne of production of any development stage global graphite project.

# • Three binding offtake agreements secured

- First offtake released on 22 October 2018 with Heilongjiang Bohao Graphite Company Limited for up to 90k tonnes of graphite product in year three
- Second offtake released on 29 October 2018 with Qingdao Fujin Graphite Company Limited for 15k tonnes of graphite product per annum
- Third offtake released on 7 January 2019 with Taihe Soar (Dalian) Supply Chain Management Co Ltd for up to 100k tonnes of graphite product in year three
- Offtake contracts are binding term sheets with pricing to be agreed close to first delivery with reference to prevailing prices. A summary is presented below:

	Year 1	Year 2	Year 3
Heilongjiang Bohao	30,000	50,000	90,000
Qingdao Fujin	15,000	15,000	15,000
Taihe Soar	37,500	80,000	100,000
Total	82,500	145,000	205,000

# • Mining Licence Application

- Subsequent to completion of the Definitive Feasibility Study, Black Rock's 100% owned Tanzanian subsidiary Mahenge Resources, applied for two Mining Licences for the Mahenge project area
- Mining Licence applications Mining Licences ML 00668/2018 and ML 00669/2018 were lodged 9 November 2018
- The licence status was upgraded from submitted to recommended on 10 January 2019.

# PLANS FOR CURRENT QUARTER

- Continue to progress financing and strategic cooperation discussions
- EPC partner Yantai Jinyaun Mining Machinery to complete metallurgical due diligence and commence contract formation and detailed design
- Expected receipt of mining licence
- Ongoing work relating to commencement of construction.

Black Rock Mining Ltd ACN 094 551 336 ASX:BKT **Issued Capital** 537.7m 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



Tanzanian graphite developer Black Rock Mining Limited (BKT: ASX) ("Black Rock" or "the Company") pleased to provide its December 2018 Quarterly report.

## **Mahenge Definitive Feasibility Study Completed**

On 24 October 2018, Black Rock announced results of a Definitive Feasibility Study (DFS) for its Mahenge Graphite Project in Tanzania. The study demonstrated major geographical and geological advantages including:

- Exceptional project economics with NPV<sub>10</sub> of US\$895M, IRR 42.8%, and AISC Margin of 63.6%
- Highest purity flake graphite achieved from conventional flotation circuit processing with no acid treatment
- Sustained low cost operation with direct access to rail, port and grid power; and
- Lowest peak capital per annual tonne of product.

Black Rock's pilot plant, the largest any graphite developer has constructed delivered 8 tonnes of graphite concentrate from 90 tonnes of ore has supported the DFS.

Black Rock has also secured binding offtake agreements with Heilongjiang Bohao, Qingdao Fujin, and Taihe Soar companies, with the combined tonnage of all three offtake agreements up to 205k tonnes per annum of product by year three. These agreements represent approximately 82% of proposed steady state annual production of 250,000 tonnes.

Post-tax, unlevered NPV <sub>10</sub>	US\$895m
Post-tax, unlevered IRR	42.80%
Capex for Phase One (83k tonnes per annum)	US\$115m
Contingency for Phase One	10% (included in US\$115m)
Capex for Phase Two (83k tonnes per annum)	US\$69.5m
Capex for Phase Three (83k tonnes per annum)	US\$84.2m
Contingency for Phases Two and Three	15% (included in US\$69.5m and US\$84.2m)
Life of Mine C1 Costs, FOB Dar	US\$401 /t
Life of Mine All in Sustaining Costs, FOR Dar*	US\$473 /t
Concentrate basket FOB Dar es Salaam**	USD \$1,301/t
Life of Mine	32 years
Average steady state production rate	250k tonnes per annum
Total Life of Mine Concentrate production	6.6m tonnes
Ore reserves	70m tonnes @ 8.5% TGC
Reserve life	23 years
Resources	212m tonnes @ 7.8% TGC

The DFS demonstrated exceptional financial metrics as shown in Table 1 below.

The complete Definitive Feasibility Study report is available in the ASX Announcement dated 24 October 2018.

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# **Offtake Agreements**

Black Rock continues to make significant progress on marketing. On 7 January 2019 Black Rock announced a third offtake agreement with Taihe Soar a Dalian based trading house. Taihe Soar is a significant trading house with annual turnover of over US\$400m and specialises in imports and exports and providing trade credit for smaller entities who would not normally have access to international markets

Pricing to be agreed under the terms of a formal agreement to be entered into within 12 months of execution of the offtake agreement and will be set quarterly with reference to the prevailing market price for flake size and concentrate grade.

Black Rock now has three offtake agreements with a combined tonnage of up to 205k tonnes per annum of product, by year three as outlined in the table below:

	Year 1	Year 2	Year 3
Heilongjiang Bohao	30,000	50,000	90,000
Qingdao Fujin	15,000	15,000	15,000
Taihe Soar	37,500	80,000	100,000
Total	82,500	145,000	205,000

In light of strong market demand for Mahenge Premium and Ultra products, Black Rock has commenced work on optimising its mine plan to compress its development schedule and increase ultimate production by adding a fourth self-funding module.

# **Mining Licence Application**

Post completion of the Definitive Feasibility Study, Black Rock's 100% owned subsidiary Mahenge Resources has applied for two Mining Licences ML 00668/2018 and ML 00669/2018 which were lodged on 9 November 2018. Status on both licence applications were upgraded from submitted to recommended on 10 January 2019.

The Company notes that post the announcement of the Tanzanian Mining Code update to the mining regulations during 2017/2018, the Tanzanian authorities have commenced routine processing and approval of new and renewal of mining licences including those submitted by Australian mining companies. The Company is not aware of any reason why the licence applications would not be granted.

# Strategic Cooperation Agreement with Yantai (Yantai) Jinyuan Mining Machinery Limited

Ore samples have been shipped from Canada to Yantai for due diligence metallurgical testing, to be completed as part of Yantai vendor financing bid of up to US\$40m. Samples include 150kg of oxides ores, 300kg of drill core and 20 tonnes of bulk sample for a small pilot plant run. The pilot plant is scheduled to be run post Chinese Spring Festival.

In addition to providing due diligence support, metallurgical testing will position Black Rock to work with Yantai to target further Capex reduction. The pilot plant run will optimise the milling circuit, and provide additional confidence about flake size and purity to Chinese based offtake partners.

Initial metallurgical data is expected to be available in the March-19 quarter.

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Following completion of the Yantai pilot plant run, Black Rock intends to quickly move into finalising detailed engineering, and is aiming for construction to commence in mid-CY2019 with initial production slated for end-CY2020.

# Sale of Shares in Strike Energy Limited

Following completion of an all script takeover for UIL Energy Limited by Strike Energy, Black Rock divested its holding in Strike Energy and received proceeds of approximately AUD\$300,000. Funds from the share sale will be used for general working capital of the company.

# **Change of Registered Address**

Black Rock's registered address details as of 10<sup>th</sup> of January 2019 45 Ventnor Ave West Perth 6005 WA

#### For more information:

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#### Tanzanian Office

Mahenge Resources Ltd 202 Village Walk Building Toure Drive, PO BOX 80003 Dar es Salaam Tanzania



# 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. The Company confirms that it is not aware of any new information that materially affects the resources estimate.

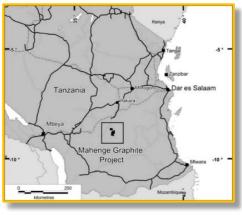
In October 2018, the Company released a Definitive Feasibility Study for the Project demonstrating exceptional financial metrics including:

- 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 8 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.

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	



Location of Black Rock's Mahenge Graphite Project in Tanzania

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

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#### Tanzanian Office Mahenge Resources Ltd 202 Village Walk Building Toure Drive, PO BOX 80003 Dar es Salaam Tanzania

+Rule 5.5

# 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 2018

Con	solidated 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	(1,603)	(2,758)
	(b) development	0	0
	(c) production	0	0
	(d) staff costs	(120)	(326)
	(e) administration and corporate costs	(553)	(1,065)
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	(2,274)	(4,145)

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment	(13)	(17)
	(b) tenements (see item 10)	0	0
	(c) investments	0	0
	(d) other non-current assets	0	0

+ See chapter 19 for defined terms

1 September 2016

# Appendix 5B Mining exploration entity and oil and gas exploration entity quarterly report

Con	solidated 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	0
	(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	(13)	(17)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	500	3,000
3.2	Proceeds from issue of convertible notes	0	0
3.3	Proceeds from exercise of share options	0	0
3.4	Transaction costs related to issues of shares, convertible notes or options	(34)	(192)
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	466	2,808

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,723	1,788
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,274)	(4,145)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(13)	(17)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	466	2,808
4.5	Effect of movement in exchange rates on cash held	381	848
4.6	Cash and cash equivalents at end of period	1,283	1,282

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	1,283	2,273
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)	1,283	2,273

6.	Payments to directors of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	120
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	0

6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

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

7.	Payments to related entities of the entity and their associates	Current quarter \$A'000
7.1	Aggregate amount of payments to these parties included in item 1.2	0
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	0
70	 	

7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

8.	<b>Financing facilities available</b> Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$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.

9.	Estimated cash outflows for next quarter	\$A'000	
9.1	Exploration and evaluation	300	
9.2	Development	-	
9.3	Production	-	
9.4	Staff costs	150	
9.5	Administration and corporate costs	150	
9.6	Other (provide details if material)	50	
9.7	Total estimated cash outflows	650	

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 & Company Secretary

30 January 2019

# Notes

- The quarterly report provides a basis for informing the market how the entity's activities have been 1. financed for the past guarter 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.
- 4. The Company undertakes that it will disclose the following in each annual report, annual audited accounts, half-yearly report and quarterly cash flow report issued by the Company, in respect of any period during which the Performance Shares remain on issue or are converted or redeemed. The number of Performance Shares on issue during the relevant period. (a)
  - A summary of the terms and conditions of the Performance Shares, including without (b)
  - limitation the number of ordinary shares into which the Performance Shares are convertible and the relevant milestones that have to be satisfied in order for the Performance Shares to be converted.
  - Whether any of the Performance Shares were converted or redeemed during that (c) period.
  - (d) Whether a milestone for the Performance Shares was met during that period.