

ASX Release 31 October 2016

SEPTEMBER 2016 QUARTERLY ACTIVITIES REPORT

Mantle Mining Corporation Limited (ASX: MNM, "Mantle" or "the Company") provides the following update on its activities for the quarter ended 30 September 2016.

Highlights:

- Continuing its strategy of Board and Management renewal, the Company appointed two high calibre senior gold mining executives to the Board and transferred executive management to a new team
- The Morning Star Gold Project identified as the company's highest priority, with focused site activities including:
 - Corporate decision taken to focus efforts on the high-grade Morning Star gold mine and district;
 - Site-based geological review of Morning Star, Rose of Denmark and other regional targets in the newly expanded 650 square km tenement area;
 - Submission for analysis of previously unsampled 2012 drillholes covering high priority reefs – positive results returned subsequent to quarter end (see ASX announcement dated 27 October);
 - Detailed planning for activities leading to reopening of the Mine commenced, focusing on identification and prioritisation of mineralised reefs which can most easily be accessed from existing development;
 - A detailed geologic database is being developed and 3D modelling is ongoing focusing on the development and application of an improved structural model for the deposit which can guide development activities.
- Norton Gold Mine development activities put on hold awaiting completion of gold processing studies and permitting
 - Ongoing analysis of the results of the Ore Sorter and Gravity circuit trials continued,
 with process recommendations to be delivered in the December Quarter;
 - Studies required for submission of a modified Environmental Authority were completed, and the application was submitted.

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Mantle's Executive Director, Richard Valenta, commented, "After a comprehensive review of the Company's projects and activities, and a critical evaluation of achievable budgets and timelines, several significant decisions were made regarding the Company's portfolio and strategy. It has been determined that the Company's focus and efforts will be better rewarded by focusing on Morning Star, which is a significantly larger and higher grade gold mine than Mantle's other project, Norton, near Gladstone in Queensland, which does remain an attractive project in its own right" Dr Valenta said. "Very few companies have the opportunity to have a dominant land position and a fully-permitted operation in one of Australia's great high-grade gold districts in and around Morning Star, and we intend to take full advantage of that situation."

Strengthening the Board and management:

Continuing its strategy of Board and Management renewal, the Company appointed Dr Valenta to take overall executive leadership of the Company.

Mantle's long-term Managing Director, Mr Ian Kraemer, stepped down from the Board and ceased association with the Company at the end of August. The Company thanks Mr Kraemer for his valued contribution and support over a long period.

The Company also announced the appointment of experienced underground gold miner and senior executive, Mr Matthew Gill, as Non-Executive Director and consultant to the Board. Mr Gill joins Executive Director Rick Valenta to create a gold mining team with a solid track record of development and operational mining experience and value delivery to shareholders.

Mr Gill is a mining engineer and senior executive with over 30 years' experience in Australia and internationally, including the successful re-commissioning, development and operation of three underground gold mines (Ballarat, Beaconsfield and Porgera). He has a broad depth of technical, operational and corporate experience with large blue chip companies and smaller emerging miners. He is currently MD and CEO of White Rock Minerals Limited (ASX:WRM). Based in the city of Ballarat, Victoria, Matt is well placed to make a significant contribution to the Company, in particular in relation to its Morning Star mine.

Morning Star Gold Mine Development:

Developments during the quarter included:

- Recommencement of data compilation, which had been suspended in June 2016;
- Site-based review of Morning Star, Rose of Denmark and other regional targets;
- Submission for chemical analysis of previously unsampled 2012 drillholes covering high priority reefs;
- the Company announced that it had submitted an application for a major exploration licence over the remaining northern extent of the gold field. The application has been accepted by the relevant authority with no competing applicants; and
- Subsequent to the end of the September quarter, the decision was made to activate the

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agreed mechanism in the Recapitalisation Deed which allows the Company to make the \$1,000,000 October 31 payment within approximately 120 days of 31 October. Under this mechanism, an additional payment of \$100,000 must be made by the Company within 60 days of 31 October.

Ongoing review of the Morning Star mine has resulted in a modified staged plan for returning the Morning Star mine to production in a way that minimises risk, including:

- Continued data compilation, structural modelling of the Morning Star mine during the December Quarter, combined with the commencement of underground sampling of the Stacpoole (Donaldson's) reef;
- A decision point in early 2017 on reactivation of the shaft or pursuit of other underground access options such as adit refurbishment;
- Commencement of underground and surface drilling along with ongoing underground sampling in the first half of 2017;
- Commencement of trial mining in the second half of 2017;
- A decision point in late 2017 as to the transition to full scale underground mining, which would commence in early 2018; and
- Concurrently in 2017, consideration of options for processing plant modifications.

Norton Gold Mine Development:

During the quarter, development activities were put on hold awaiting completion of the gold processing studies and permitting.

- Preliminary analysis of the results of the Ore Sorter and Gravity Circuit tests on the Norton bulk samples were encouraging but not yet conclusive, with advice from external consultants pointing to mid-2017 as the earliest possible start for the operation assuming positive results and no further delays;
- Application submitted for the Norton Environmental Authority following completion of Hydrogeologic and Dam wall Engineering Design completed for Tailings Storage Facility (TSF) and Water Storage Facility (WSF); and
- Project put on hold pending final results of the metallurgical tests and receipt of EA permits.

Other projects

The Charters Towers Gold Project:

The Charters Towers Gold Project is located around the township of Charters Towers in north Queensland. Mantle's tenement (EPM 14388) contains two main project areas; Great Britain and Puzzler/Balfes Creek.

During the quarter, a field-based review was carried out over the project, in order to evaluate options for realisation of value from the project.

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Granite Castle Gold Project:

During the quarter, a field-based review was carried out over the project, in order to evaluate options for realisation of value from the project.

Bacchus Marsh & Latrobe Valley Coal to Renewables Projects:

The Latrobe Valley Coal EL's were relinquished during the quarter, and discussions were commenced for transfer of ownership of the Bacchus March project to the JV partner.

Organisational Improvements:

The Board completed a review of key people, functions, tasks and processes to improve efficiency and generate cost savings from non-essential projects and functions. Changes arising from this review included:

- Transfer of the Brisbane office to smaller shared premises;
- Future administrative support to be sourced on a contractual/as needs basis;
- Closure of the Townsville office, with future exploration tasks to be completed on a contractual/as needs basis; and
- Subsequent to Quarter end, appointment of a new Brisbane-based Company Secretary.

These changes will reduce the corporate overheads of the company and ensure maximum expenditure on project-based activities.

Capital Raising Activities:

Capital raising activities during the September Quarter included:

- The previously announced three tranche placement to s708 Investors during June 2016 under which the Company issued 100 million shares at a placement price of 1 cent per share to raise a total placement amount of \$1 million. The placement was structured and of the moneys raised, approximately one third was received during the June quarter under Tranche 1, with the remaining funds for Tranche 2 and 3 due to be received in July and August respectively. Partial funds were received for Tranches 2 and 3, with approximately \$365,000 still pending receipt at end of quarter;
- Completion of a placement to an s708 Investor on 7 July 2016 for a further 20 million shares at a placement price of 1 cent per share to raise a total of \$200,000; and
- Announcement of an additional placement on 26 July 2016 under which the Company received firm commitments from s708 investors to raise a further \$1.5 million upon the issue of 100 million shares at an issue price of 1.5 cents per share. Shareholder approval was received subsequent to the end of the September quarter for the final \$150,000 of placement funds.

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Cash Position & Use of Funds:

As at 30 June 2016, the Group had a cash balance of \$672,000 as outlined in the accompanying Appendix 5B.

In addition, the Company has received, or is due to receive, during the December 2016 quarter a further \$515,000 in subscription moneys from investors who participated in the Company's recent capital raisings as noted above.

The Company has also finalised its submission to the Australian Taxation Office to access rebates under the Australian Government's Research and Development Tax Incentive scheme. In line with the Company's successful submissions of previous years, and based on the quantum of eligible expenditure incurred by the Company during the 2015-16 financial year, the Company is anticipating a cash rebate in the order of \$400,000, however this remains subject to ATO assessment.

The funds raised will provide further working capital to advance the Company's key projects to production.

For further information, please contact:

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Competent Persons Statement:

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr Richard Valenta, Executive Director of Mantle Mining Corporation Ltd. Dr Valenta is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience 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 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Valenta consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Mantle's Projects and Tenements:



Figure 3: Mantle's Project Locations.

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Table 1: Mantle's Tenement Schedule.

Table 1. Wantle 5 Tenenient Schedule.						
Tenement	Project	Name	Grant Date	Expiry Date	Area	Interest (%)
MIN 5009 ³	Morning Star	Morning Star	21/09/1990	Renewal	657 Ha	95
EL 4320 ³	Morning Star	Morning Star	16/11/2008	Renewal	101 km ²	95
MIN 5299 ³	Morning Star	Rose of Denmark	10/11/1981	Renewal	211 Ha	47
MIN 5560 ³	Morning Star	Wallaby	17/12/2013	16/12/2018	10 Ha	95
EL 6321	Morning Star	Morning Star	Application		547 km ²	95
ML 80035 ¹	Norton	Norton	04/04/1996	30/04/2017	22 Ha	90
EPM 14388	Charters Towers	Charters Towers	24/02/2005	23/02/2020	7 sub blocks	100
EPM 14179	Granite Castle	Range Creek	25/11/2004	24/11/2017	6 sub blocks	100
EPM 15527	Granite Castle	Oaky Creek	30/11/2007	29/11/2019	25 sub blocks	100
MDL 2005	Granite Castle	Range Creek	application		1,935 Ha	100
EL 6074	Lionsville	Lionsville	06/05/2003	Renewal	4 units	100
EL 5878 ³	Black Range	Overflow	24/07/2001	Renewal	3 units	13
EL 5294 ²	Bacchus Marsh	Bacchus Marsh	23/03/2011	Renewal	154 graticules	50

^{1.} Norton is 10% held by Avanti Mining and Contracting Pty Ltd.

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^{2.} Bacchus Marsh is 50% held by Exergen Pty Ltd.

Morning Star is 100% held by Morning Star Gold NL, in turn held 95% by Mantle. MIN 5299 is a Joint Venture wherein Morning Star Gold NL holds 49%.



Mantle's Mineral Resources:

Table 2: Morning Star Mineral Resource (95% held by Mantle).

For information on the existing resource, please refer to the report entitled "910,000 Ounces Gold JORC Resource" created on 30 July 2008, which is available to view at www.asx.com.au under ASX code MCO.

Table 3: Norton Mineral Resource (90% held by Mantle).

Class	Tonnes	Au (g/t)	Au (oz)	Ag (g/t)	Ag (oz)
Indicated	107,000	6.2	21,100	15	50,300
Inferred	141,000	3.9	17,700	12	52,600
Total	248,000	4.9	38,800	13	103,000

The information in Table 3 is extracted from the report entitled "Norton Gold Mine Resource Estimate" created on 15 May 2015 and is available to view on www.mantlemining.com

Table 4: Granite Castle Mineral Resource.

Class	Tonnes	Au (g/t)	Au (oz)	Ag (g/t)	Ag (oz)
Measured	111,000	4.3	15,500	58	205,800
Indicated	250,000	3.6	28,800	71	567,900
Inferred	403,000	2.5	32,900	56	727,200
Total	765,000	3.1	77,200	61	1,500,900

The information in Table 4 is extracted from the report entitled "Improved Confidence Levels for Granite Castle Resource" created on 28 May 2008 and is available to view on www.mantlemining.com

Table 5: Charters Towers Mineral Resource.

Class	Tonnes	Au (g/t)	Au (oz)	
Inferred	1,535,000	2.2	109,000	
Total	1,535,000	2.2	109,000	

The information in Table 5 is extracted from the report entitled "Disclosure Document" created on 2 October 2006 and is available to view on www.mantlemining.com

Table 6: Bacchus Marsh Mineral Resource (50% held by Mantle).

Class	Tonnes (Billion)	TM (%)	Ash (% db)	VM (% db)	FC (% db)	TS (% db)	GDSE (MJ/kg)
Inferred	1.6	56.3	10.4	47.2	42.4	3.4	24.5
Total	1.6	56.3	10.4	47.2	42.4	3.4	24.5

The information in Table 6 is extracted from the report entitled "Victorian Brown Coal Resources Update" announced on 1 December 2015 and is available to view on www.mantlemining.com

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In relation to Tables 3 through 6, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

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