

MANTLE MINING

ASX: MNM

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ASX Release

17 October 2011

50 metre thick Coal at Bacchus Marsh.

Mantle Mining Corporation Limited (ASX: MNM) "Mantle", is pleased to provide the following update on activities at the Company's 100% owned Bacchus Marsh Brown Coal Project:

The Bacchus Marsh project, located 50km west of Melbourne and a similar distance north of the Port of Geelong (Figure 1), contains an Exploration Target of 1-2 Billion tonnes brown coal (details on last page).

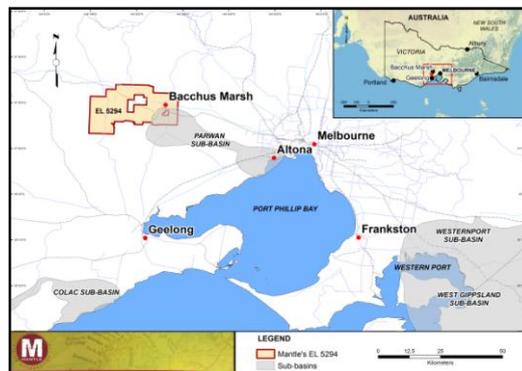


Figure 1: Bacchus Marsh Project Location. **Figure 2:** Typical coal (from hole MBM3).

Highlights:

- The first 4 holes of a 15 hole drill program have been completed.
- In excess of 50m coal thickness was intersected in 2 of the holes.
- Total cumulative coal thickness intersected in the 4 holes was >25% increase on that predicted (146m Vs 116m).
- The program is designed to report an Inferred Resource in accordance with the principles and guidelines of the JORC Code.

Further information:

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Drill Hole	Depth to top of seam (m)	Depth to base of seam (m)	Seam Thickness (m)	Total Moisture (%)	Proximate Analysis (% dry basis)			Calorific Value (Gross Dry) (MJ/Kg)
					Ash	Volatile Matter	Fixed Carbon	
MBM 1	86.3	91.8	5.5	55.7	14.0	45.2	40.8	23.2
MBM 2	70.0	126.3	51.8	Analytical Results Pending				
MBM 3	75.4	132.8	52.4	Analytical Results Pending				
MBM 4	47.9	84.4	36.5	59.1	12.8	47.8	39.3	23.8

Table 1: Drilling program results to date (analytical results are weighted averages over 1.5m sample intervals).

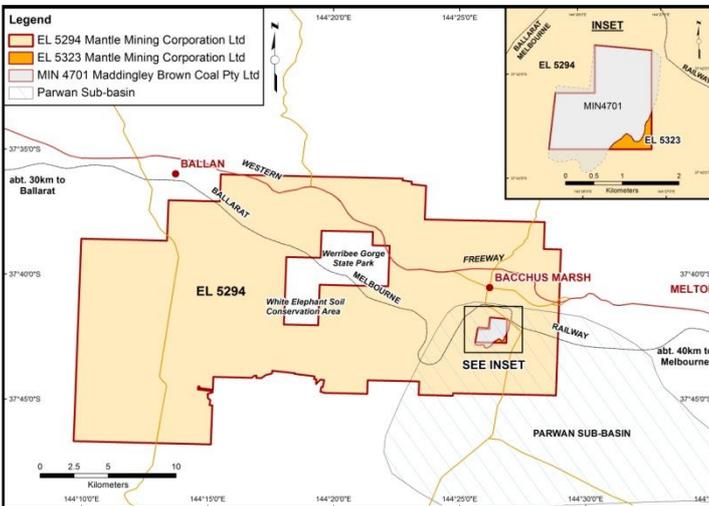


Figure 3: Bacchus Marsh tenement location plan.

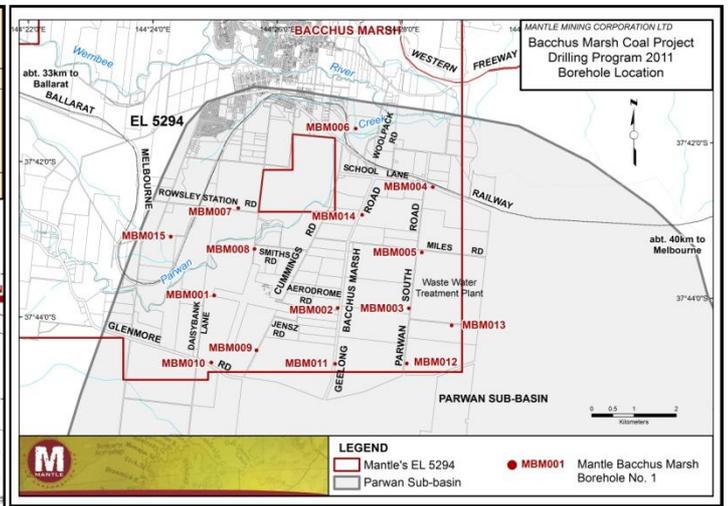


Figure 4: Drill hole location plan.



Figure 5: Maddingley Mine (MIN 4701 owned by others). Figure 6: Drilling hole MBM4. Figure 7: Rehabilitated site.

Mantle has executed preliminary agreements with Exergen Pty Ltd to develop the Bacchus Marsh Coal Project. Exergen has developed a clean coal technology that, when teamed with modern coal-fired power station technology, is expected to deliver up to 40% CO₂ emissions reductions.

The technology is known as Continuous Hydrothermal Dewatering (CHTD) and is patented worldwide including in Australia, Indonesia and China.



Figure 8: The Exergen Consortia Partners.

Exergen’s major cornerstone investors include; TATA Power, India’s largest private power utility, as major coal off-taker, Leighton subsidiary Thies, the world’s largest supplier of outsourced mining services, Itochu, Japan’s 3rd largest trading house with extensive coal trading experience, and Sedgman, a global specialist provider of mineral engineering solutions.

The agreements executed to date (MOU and Pre-JVA) contemplate the following:

- Executing Substantive Agreements for a 50/50% JV for exploration and mine development,
- Construction of a 50tph demonstration facility and then an export project by Exergen,
- Mantle being licenced to utilise CHTD on its 50% of the coal deposit.



Figure 9: CHTD Pilot Plant Processing of Bacchus Marsh coal (56.7% moist) and resulting briquettes (9.5% moist).

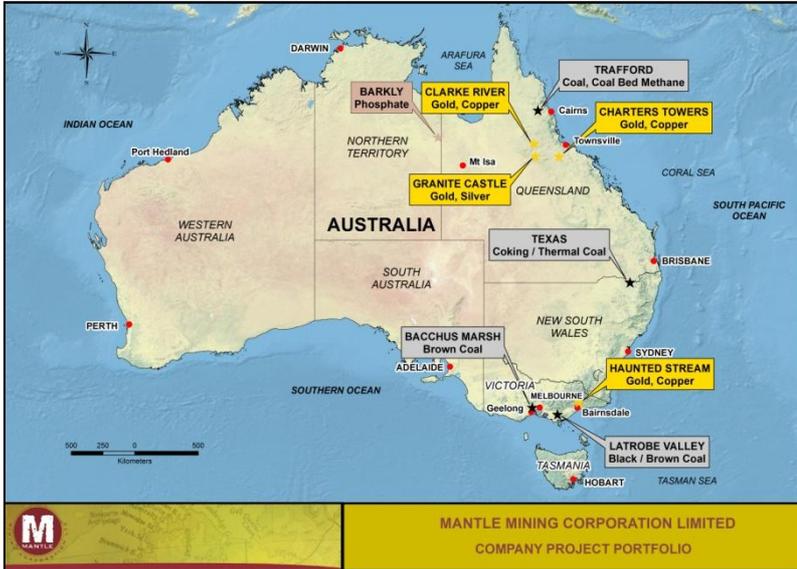
A two tonne bulk sample of Bacchus Marsh coal was processed at the CHTD pilot plant. Laboratory analysis of the bulk trial product confirmed that transformation of the coal had successfully occurred on a continuous basis. Secondary dewatering and pressing of a representative sample of low moisture briquettes was also achieved at the pilot plant. Run of Mine coal moisture content of 56.7% was reduced to a briquette moisture content of 9.5% (Figure 9).

COMPETENT PERSONS STATEMENT:

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Callum Lamont, an Executive of Mantle Mining Corporation Ltd. Mr Lamont is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Lamont consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.



MANTLE MINING CORPORATION LIMITED'S COMPANY PROJECT PORTFOLIO:



- ★ Granite Castle Gold & Silver (QLD)
- ★ Charters Towers Gold & Copper (QLD)
- ★ Haunted Stream Gold & Copper (VIC)
- ★ Clarke River Gold & Copper (QLD)
- ★ Trafford Coal & Coal Bed Methane (QLD)
- ★ Latrobe Valley Black & Brown Coal (VIC)
- ★ Bacchus Marsh Brown Coal (VIC)
- ★ Texas Black Coal (QLD)
- ★ Barkly Phosphate (NT)

QLD Gold Projects

The **Granite Castle** Project area contains a JORC Compliant (Measured, Indicated and Inferred) gold and silver Resource¹. Mineralisation occurs in a 600m long portion of a single shear. Over 6km of additional shears have been located, with drill holes and/or rock chip samples at similar grades to the JORC Compliant shear. The **Charters Towers** Project area contains the Great Britain JORC Compliant Inferred gold Resource² as well as a number of historic mines, including Day Dawn West, immediately west along strike of Citigold's (ASX: CTO) proposed "City" mining area. The Gromac/Puzzler area is prospective for deposits of copper, gold, silver and molybdenum. The **Clarke River** Project area contains the Phantom Creek tenement which is located along structure from Kagara's (ASX: KZL) Balcooma Copper Project, and the Mt Brown tenement which is prospective for Ben Lomond style uranium deposits and copper gold deposits. Phantom Creek remains virtually unexplored.

VIC Gold Projects

The **Haunted Stream** Project area is prospective for gold and copper including many historical, high-grade, gold mines along the Haunted Stream fault corridor. Deep drilling at centrally located Anomaly 4, a major target for possible deep vein gold or porphyry copper-gold mineralisation, intersected multiple shear zones with visible base metals.

QLD Coal Projects

The **Trafford** Project area contains a large Exploration Target³ of black coal. Mantle is negotiating with the traditional custodians of Mt Mulligan towards an Indigenous Land Use Agreement (ILUA) and has commenced proceedings in QLD's Supreme Court to enforce an agreement for assignment of the tenements from the prior tenement holders. The **Texas** Project area is prospective for both thermal and coking coals of a similar quality to Surat and Bowen Basin coals. The tenements are adjacent to the NSW border and along strike from known coking coal deposits and thermal coal drill intercepts located to the south and north.

VIC Coal Projects

The **Bacchus Marsh** Project area contains a large Exploration Target⁴ of brown coal surrounding the Maddingley mine. Mantle executed a Pre-JVA with Exergen Pty Ltd to develop the deposit utilising Exergen's patented Continuous Hydro-Thermal Dewatering (CHTD) technology. Exergen's partners include Tata Power, Itochu, Thiess and Sedgman. The **Latrobe Valley** Project area is prospective for both black and brown coal deposits including many historical mines within the Gippsland Basin. The tenements immediately about the main Latrobe Valley depression. There is a high level of prospectivity that the historic Wonthaggi Black coal seams exist at depth within the project area.

NT Phosphate Project

The **Barkly** Project area sits in the Georgina Basin between Minemaker's (ASX: MAK) Wonarah deposit and Phosphate Australia's (ASX: POZ) Highland Plains deposit. Historic phosphate rock intercepts exist within the tenements and Mantle is undertaking a series of annual drilling programs to more closely define the potential for covered deposits.

1, 2, 3 & 4: Mineral Resource and Exploration Target tables and associated Competent Persons Statements on next page.



MINERAL RESOURCES, EXPLORATION TARGETS and COMPETENT PERSONS STATEMENTS:

1. Granite Castle Gold & Silver Project:

Granite Castle Gold and Silver Resource Estimate @ 0.2 g/t Au lower cut-off					
Class	Tonnes	Au g/t	Au oz	Ag g/t	Ag oz
Measured	122,614	3.99	15,727	53.3	209,941
Indicated	264,021	3.44	29,198	67.6	574,182
Inferred	460,443	2.32	34,375	50.4	746,680
Total	847,078	2.91	79,301	56.2	1,530,803

Granite Castle Gold and Silver Exploration Target			
Target	Tonnes	Au g/t	Ag g/t
Below Granite Castle JORC Resource	300,000 – 400,000	2.5 – 3.5	55 - 70
Total	300,000 – 400,000	2.5 – 3.5	55 - 70

Statements in this report relating to the Granite Castle Gold and Silver Mineral Resource are based on a report provided to the Company by Hellman and Schofield Pty Ltd, dated 16th May 2008 and first released to the ASX by Mantle on 28th May 2008: "The information in this report that relates to Mineral Resources is based on information compiled by Dr William Yeo, a full time employee of Hellman and Schofield Pty Ltd. Dr Yeo is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Yeo consents to the inclusion of the matters based on his information in the form and context in which it appears in this report." The report also covered mineralised structures below the resource and quantified a contained exploration potential (Exploration Target) within those structures. Note that the potential quantity and grade of the Exploration Target is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource, and that it is uncertain if further exploration will result in the determination of a Mineral Resource

2. Charters Towers Gold Project:

Great Britain Gold Resource Estimate @ 0.5 g/t Au lower cut-off				
Class	Tonnes	Au g/t	Au oz	
Inferred	2,128,000	1.8	125,000	
Total	2,128,000	1.8	125,000	

Statements in this report relating to the Great Britain Gold Mineral Resource are based on a report provided to Glengarry Resources Ltd by Resource Evaluations Pty Ltd dated August 2004 and independently confirmed by Ravensgate Minerals Industry Consultants and included in Mantle's 2006 Prospectus as released to the ASX by Mantle on 2nd October 2006. The Resource Evaluations Pty Ltd report was compiled by Mr Mark Drabble, a Member of the Australasian Institute of Mining and Metallurgy and Mr Gerry Fahey, also a Member of the Australasian Institute of Mining and Metallurgy: "This report was completed under the overall supervision and direction of Gerry Fahey and the 3D modelling and Mineral Resource estimation was carried out by Mark Drabble both of whom are Competent Persons as defined by the Australasian Code for the Reporting of Mineral Resources and Ore reserves (JORC Code) 1999 edition and who consent to the inclusion in this report of the matters based on his information in the form and context in which it appears."

3. Trafford Coal Project:

Mount Mulligan Black Coal Exploration Target						
Target	Tonnes	TM %	Ash %	VM %	FC %	CV MJ/kg
Mulligan Sub-basin	100 Million – 500 Million	2 - 3	11 - 18	28 - 34	50 - 70	26 - 28
Total	100 Million – 500 Million	2 – 3	11 - 18	28 - 34	50 - 70	26 - 28

Statements in this report relating to the Mt Mulligan Coal Exploration Target are based on data provided to the Company by the vendors of the project, as first released in a report to the ASX by Mantle on 25th September 2007: "Under the Guidelines for the Estimation and Reporting of Australian Black Coal Deposits (1999), Mount Mulligan had an identified Class 1 deposit of 144m tonnes and an identified Class 2 deposit of 507m tonnes". Upon review of the geological data in consultation with Mantle's consultant geologists, it was considered appropriate that the range of the Exploration Target be considered as 100m to 500m tonnes. Information in this report that relates to Exploration Results is based on information compiled by Mr Ian Kraemer an Executive of Mantle Mining Corporation Ltd. Mr Kraemer is a Fellow of the Australasian Institute of Mining and Metallurgy and 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 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Kraemer consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. In addition, Mr Kraemer notes that the potential quantity and grade of the Black Coal Exploration Target is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource, and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

4. Bacchus Marsh Coal Project:

Bacchus Marsh Brown Coal Exploration Target					
Target	Tonnes	TM %	Ash %		
Parwan Sub-basin	1 Billion – 2 Billion	35 – 61	4 - 11		
Total	1 Billion – 2 Billion	35 – 61	4 - 11		

Statements in this report relating to the Bacchus Marsh Brown Coal Exploration Target are based on preliminary review of existing data and drill hole logs as first released in a report to the ASX by Mantle on 17th June 2010: "Information in this report that relates to Exploration Results is based on information compiled by Mr Ian Kraemer an Executive of Mantle Mining Corporation Ltd. Mr Kraemer is a Fellow of the Australasian Institute of Mining and Metallurgy and 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 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Kraemer consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. In addition, Mr Kraemer notes that the potential quantity and grade of the Brown Coal Exploration Target is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource, and that it is uncertain if further exploration will result in the determination of a Mineral Resource."