



DECEMBER 2014 QUARTERLY ACTIVITIES REPORT

ASX ANNOUNCEMENT

30 JANUARY 2015

Mantle Mining Corporation Limited (ASX: MNM or the Company) is pleased to provide the following update on its activities for the quarter ended 31 December 2014:

AT THE TIME OF WRITING, GOLD PRICE EXCEEDED A\$1,600 PER OUNCE

Mantle is progressing three 100% owned gold projects located in Queensland with the most advanced being the recently acquired high grade Norton Gold Mine. The company is also well positioned in the emerging brown coal upgrade sector with substantial holdings and a technology joint venture in Victoria:

Norton Gold Mine:

- Product samples from stockpile sample Sorter trials were returned from Germany and sent for Lab analysis,
- Detailed Sorter trials were being undertaken in Germany on a fresh bulk sample of in-situ shear material,
- Detailed gravity table processing trials were also being undertaken on the bulk sample of in-situ shear material,
- A primary crusher was acquired, overhauled and delivered to the Norton Gold Mine site in good working order,
- Discussions were advanced with potential high grade gold concentrate off take parties in QLD, VIC and China,
- High grade gold concentrate samples from gravity tabling were provided to these parties for gold recovery tests.

The crusher provides an ability to prepare bulk high grade samples from selective crushing of visibly high grade material from the existing stockpiles as well as from fresh bulk samples of in-situ shear material for trucking to interested off-take parties' processing plants for bulk processing trials.

Victorian Coal Projects:

- The Company awaits any new policy announcements in relation to Victorian Brown Coal upgrade sector developments following the Labour Government success in the recent State election,
- A Performance Notice was issued to Exergen Pty Ltd in relation to a demonstration plant construction milestone for the Bacchus Marsh Coal Joint Venture. Following detailed discussions with Exergen, Mantle determined that it was in the best interests of the JV to continue with the current 50/50% Joint Venture structure.

No major exploration activity was undertaken at Mantle's projects during the quarter except for that related to the ongoing development of the Norton gold mine geologic database. No mining activities were undertaken during the quarter however a primary crusher was acquired and relocated to the Norton gold mine.

Corporate:

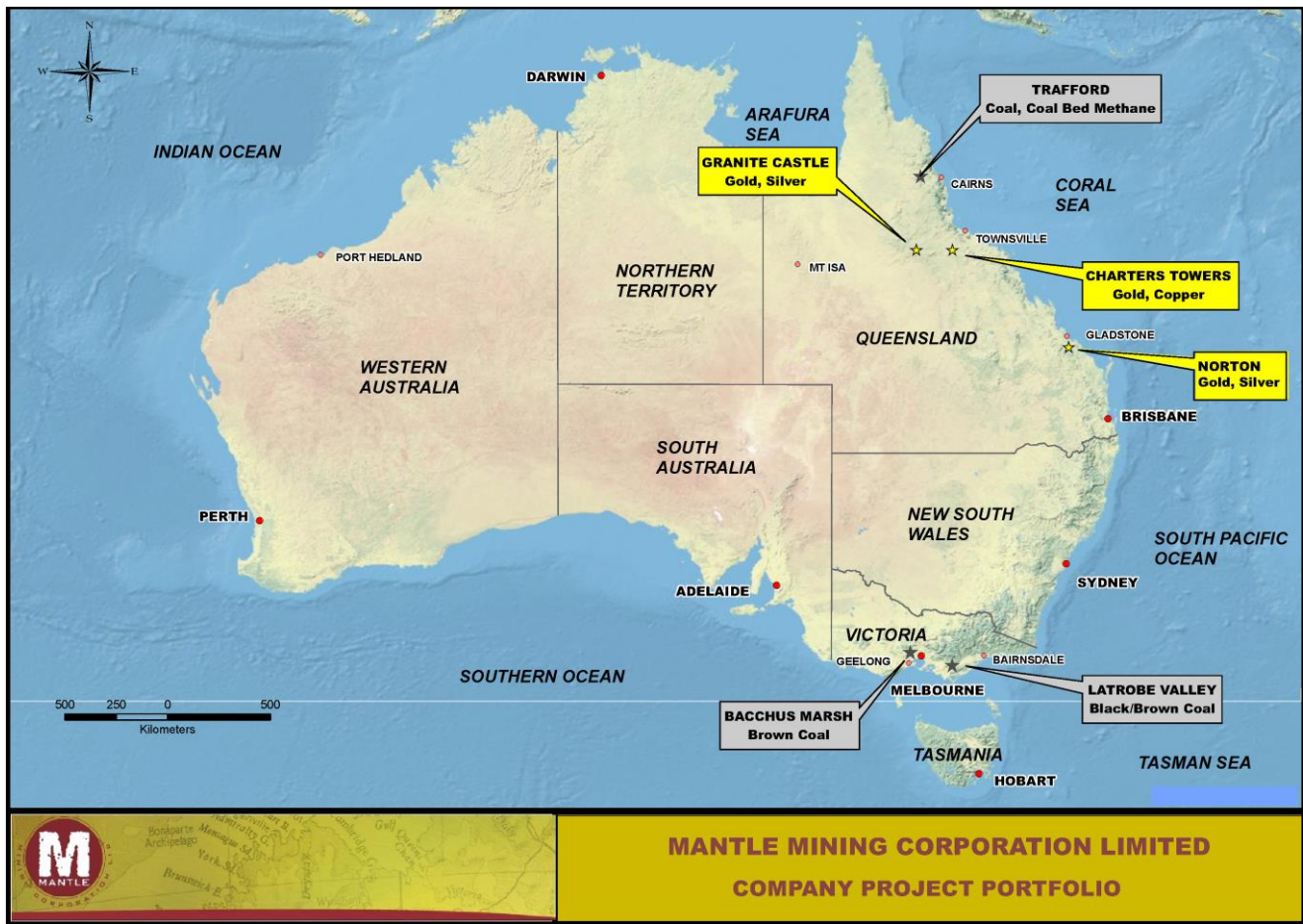
- The Company's cash at bank balance as at 31 December 2014 was \$187,929;
- Subsequent to quarter end, the Company raised \$200,000 under the placement to an existing shareholder who is both a sophisticated investor and a long term supporter of the Company ("Placement");

- Further, during December 2014 and January 2015 the Company accepted \$25,000 and \$50,000 respectively, in subscriptions on identical terms to the Placement (other than that these subscriptions are subject to shareholder approval in accordance with the ASX Listing Rules), from related parties of the Company (Directors Ian Kraemer and Martin Blakeman). The funds are currently held as unsecured interest free loan funds pending shareholder approval which the Company intends to seek as soon as practicable; and
- The new capital raised will be used to fund the Company's existing exploration programs and for general working capital purposes.

For further information please contact:

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Mantle's Project Portfolio and Tenement Schedule:



TENEMENT SCHEDULE							
Number	Project	Name	Grant Date	Period (yrs)	Expiry Date	Area	Interest (%)
Queensland							
						sub-blocks	
ML 80035	Norton	Norton	4/04/96	21	30/04/17	22.23Ha	100
EPM 14388	Charters Towers	Charters Towers	24/02/05	15	23/02/20	10	100
EPM 14179	Granite Castle	Range Creek	25/11/04	13	24/11/17	6	100
EPM 15527	Granite Castle	Oaky Creek	30/11/07	7	29/11/15	27	100
MDL 493	Granite Castle	Range Creek	Applic			1168Ha	100
EPC 772	Trafford	Mount Mulligan	5/12/02	13	4/12/15	41	100
ATP 718 ¹	Trafford	Mount Mulligan	Applic			150	100
Victoria							
						grat-sects	
EL 5294 ²	Bacchus Marsh	Bacchus Marsh	23/03/11	5	22/03/16	291	50
EL 5323 ²	Bacchus Marsh	Bacchus Marsh	10/08/11	4	9/08/15	1	50
EL 5210	Latrobe Valley	Yalungah	3/06/09	5	Renewal	46	100
EL 5336	Latrobe Valley	Jeeralang	Applic			368	100
EL 5337	Latrobe Valley	Thorpdale	20/04/11	5	19/04/16	148	100
EL 5338	Latrobe Valley	Baromi	Applic			3	100
EL 5428	Latrobe Valley	Mirboo	Applic			25	100
EL 5429	Latrobe Valley	Callignee	Applic			29	100
^{1.} Held by Calcifer Industrial Minerals Pty Ltd pending transfer to Mantle which holds 100% beneficial interest via its 100% owned subsidiaries: Trafford Coal Pty Ltd (87.5% beneficial interest) and Mt Mulligan Coal Pty Ltd (12.5% beneficial interest).							
^{2.} Held 50/50% in Joint Venture with Exergen Pty Ltd.							

Mantle's Mineral Resource Base:

The **Granite Castle Gold Project** area contains a Measured, Indicated & Inferred gold and silver Resource.

Granite Castle Shear Gold and Silver Resource Estimate (@ 0.2 g/t Au low grade & 30 g/t Au high grade cut-offs)					
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

Statements in this report relating to the Granite Castle Gold and Silver Resource Estimate 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 **Charters Towers Gold Project** area contains an Inferred gold Resource.

Great Britain Gold Resource Estimate (@ 0.5 g/t Au low grade & 30 g/t Au high grade cut-offs)				
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 Resource Estimate 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."

The **Bacchus Marsh Coal Project** area contains an Inferred coal Resource.

Bacchus Marsh (Maddingley Seam) Brown Coal Resource Estimate (@ 30% Ash upper cut-off)							
Class	Tonnes (Bt)	TM (%)	Ash (% db)	VM (% db)	FC (%db)	TS (% db)	GDSE (Mj/Kg)
Inferred	1.6	52.9	10.4	47.2	42.4	3.4	24.5
Total	1.6	52.9	10.4	47.2	42.4	3.4	24.5

Statements in this report relating to the Bacchus Marsh Brown Coal Resource estimates are based on a report provided to the Company by AMC Consultants Pty Ltd, and first released to the ASX by Mantle on 18th August 2012: "Information in this report that relates to Coal Resource estimates prepared by AMC Consultants Pty Ltd is based on information compiled by Ms K Zunica, who is a Member of the Australasian Institute of Mining and Metallurgy and is a full time employee of AMC Consultants Pty Ltd. The estimates are based on exploration data provided by Mantle Mining Corporation Ltd. Ms Zunica has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which she 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". Ms Zunica has provided written consent to the inclusion in the report of the matters based on her information in the form and context in which it appears."

The **Latrobe Valley Coal Project** area contains an Inferred coal Resource.

Yarragon Brown Coal Inferred Resource Estimate					
Region	Grid Mean Thickness (m)	Area (km2)	Density (g/cc)	Tonnage (Mt)	
Yarragon A seam	7.73	5.51	1.25	53	
Yarragon B seam north	11.33	3.39	1.25	48	
Yarragon B seam south	17.06	8.84	1.25	188	
Total				289	

Statements in this report relating to the Yarragon Brown Coal Resource estimate are based on a report provided to the Company by Resolve Geo Pty Ltd, and first released to the ASX by Mantle on 23rd August 2013. "The information compiled in this report relating to Resources is based on information compiled by Mr Gordon Saul, who is a member of the Australian Institute of Geoscientists and who is employed by Resolve Geo Pty Ltd. Mr Saul 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 Saul consents to the inclusion in the report of the matters based on his information in the form and context in which it appears."

No material changes to existing Mineral Resources have been made. As such, Mineral Resources discussed in this report are those previously reported in compliance with the 1999 and 2004 Editions of the JORC Code.

Background of the Norton Gold Mine Project:

The Norton Gold Mine is located less than 100km by road south of the port city of Gladstone in Central Queensland.

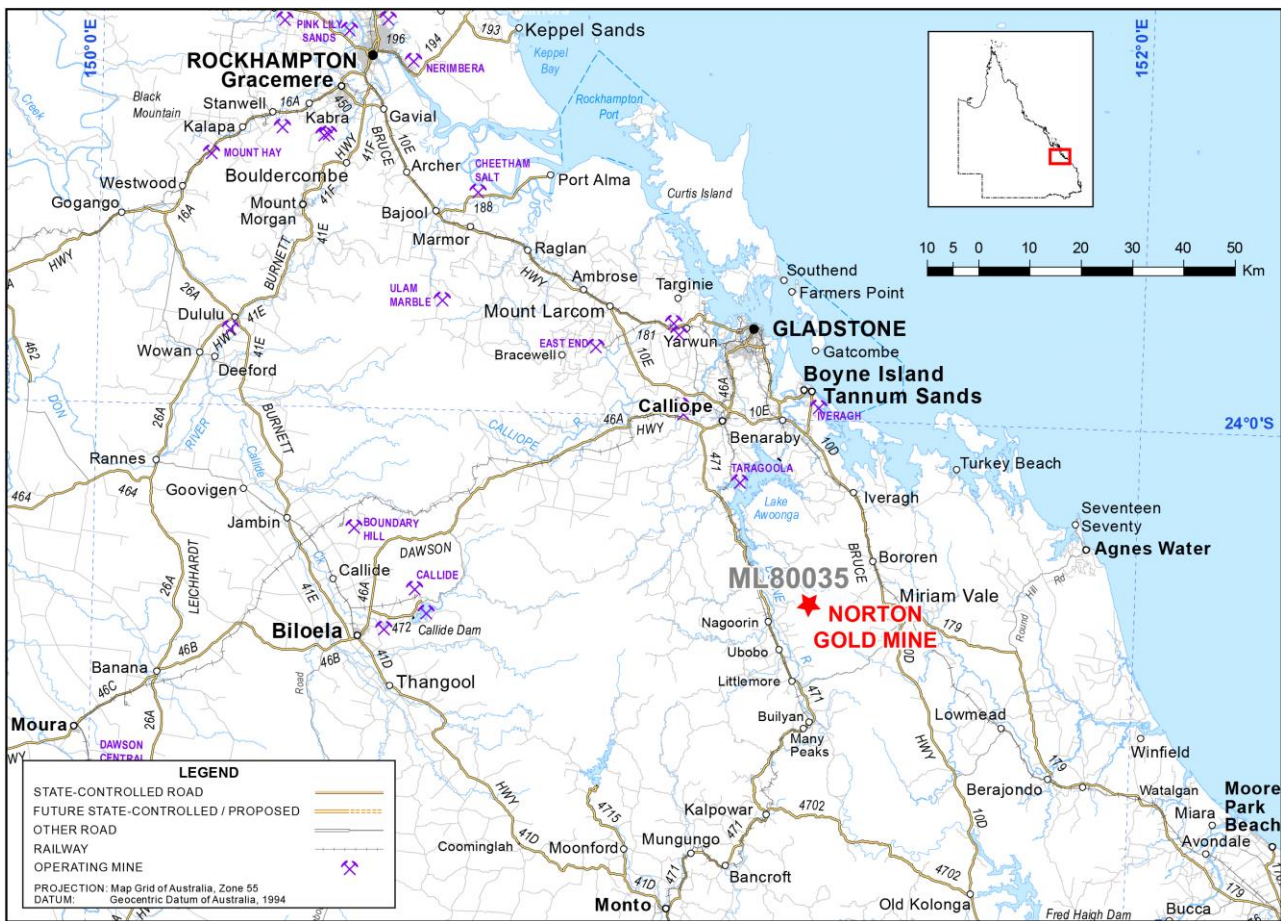


Figure 1: Norton Gold Mine project location.

Mantle acquired the mine in early 2014 and aims to restart operations in 2015 pending sufficient financing. The strategy is to produce a high-grade gold concentrate for direct sales or toll processing. The mine benefits from an existing Plan of Operations based on drill and blast and an excavator loading trucks hauling to the ROM stockpile.



Pictures 1 and 2: Prior operations at Norton Gold Mine charging blast holes and mining with excavator and trucks.

Mining Licence (ML) 80035 contains the existing mine within which 8 main shears make up the currently defined deposit. Three shears have previously been mined or pre-stripped and remain open for future mining, pending final re-approvals, minor site preparation and earthworks. Mantle's geologic database includes all geologic, topographic, drilling and laboratory analysis data and results, existing roads and mining voids and planned future mining zones.



Norton Gold Mine

7309500 N

7309400 N

7309300 N

7309200 N

7309100 N

7309000 N

7308900 N

334700 E

334800 E

334900 E

335000 E

335100 E

Legend

Mining Lease boundary (ML80035)

Drilling

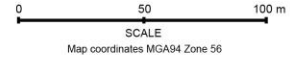
- NQ-85 or PG-86 diamond drill hole
- NRC or PG-87 RC drill hole
- 2005-06 RC drillhole
- Pre-1985 drillhole (No data)

Geology*

- Porphyrific microdiorite, microgabbro and micromonzonite dark colour.
- Porphyrific microgranite and microademellite pink to buff colour, minor biotite.
- Predominantly hornblende-biotite granodiorite with some quartz diorite. Extensively sheared and altered.
- Microgranodiorite, porphyritic fine-grained equivalent of granodiorite above.
- Mineralised shears: quartz-sulphide veins with varying amounts of silver and gold.

Mine workings

- Stockpile
- Road
- Open pit
- Areas of prestrip over veins
- Starter pit on prestrip



*Geology compiled from map by Amoco Minerals Aust. Co., 1985
Mantle Mining, April, 2014

Figure 2: Norton ML 80035 with geology, shears, drill holes and existing mine layout.

At Norton, gold and silver are contained in high-grade, sub vertical shears that occur from the surface. Interrogation of the database has yielded numerous drill hole intercepts greater than 10g/t gold at shallow depths.

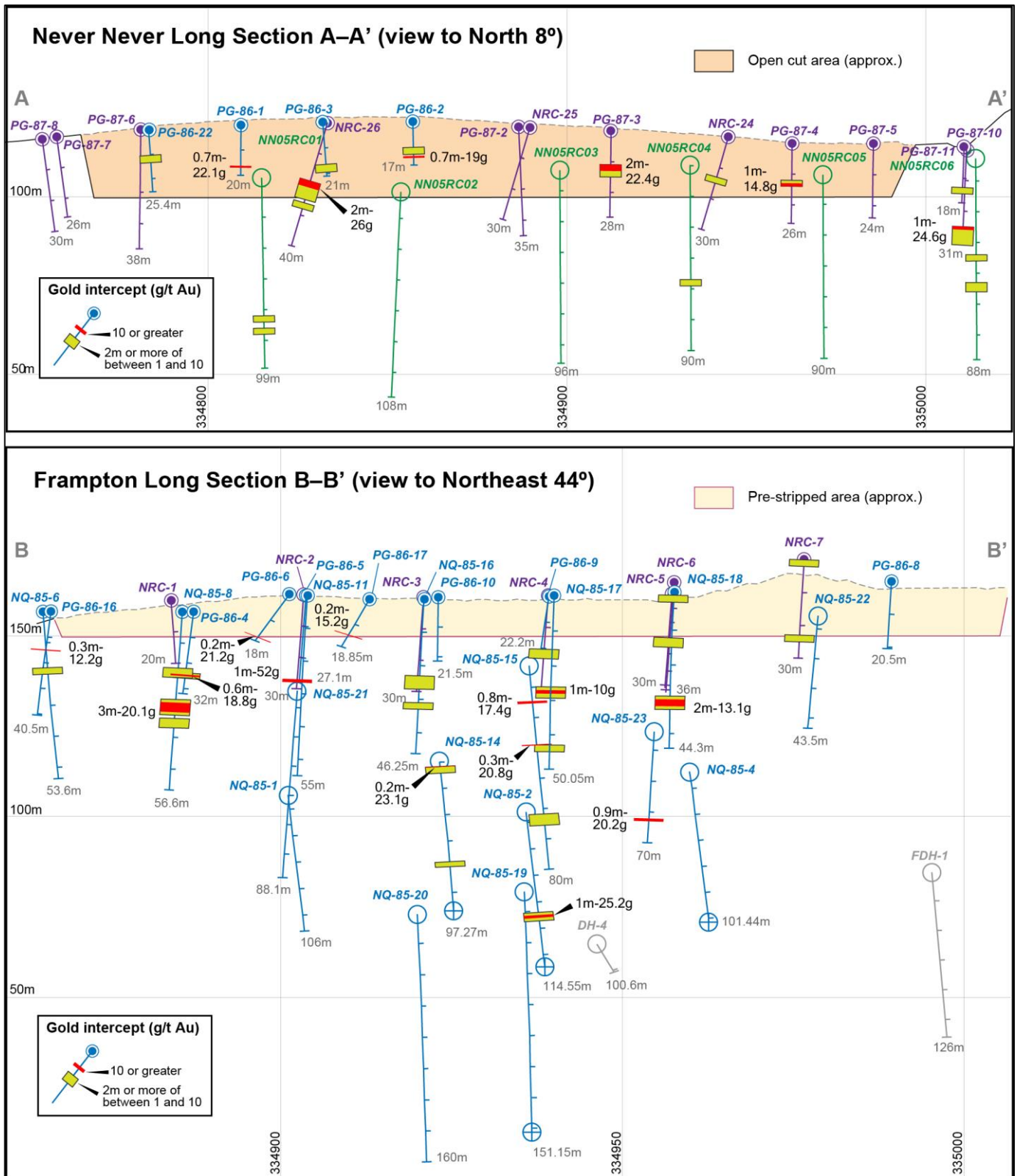


Figure 3: Long sections with drill hole intercepts with material grades and open cut and pre-strip areas.

Approximately 900 tonnes of Frampton shear material remains stockpiled onsite from the prior mining operation. The stockpiles essentially contain two types of material; grade carrying veins and barren wall rock. The grade carrying material is made up predominately of high and medium grade boulders, representing mineralised vein and breccia material from the core of the fault lode.

Low-grade boulders are also present, representing poorly mineralised granitic rock contained within, or peripheral to, the primary mineralised fault zones.



Pictures 3, 4 and 5: Frampton stockpiles, typical grade carrying shear material and typical barren wall rock.

A study of processing options for Norton Gold Mine is nearing completion. The company seeks to define the lowest cost, highest gold recovery method for application at Norton and to that end is currently focussed on two options:

1. A simplified method of crushing followed by feeding the crushed material onto a sorter machine, which separates barren waste from the grade carrying material, or
2. Conventional Hydrometallurgical processing, which consists of crushing and grinding followed by gravity table recovery of high and medium grade carrying material.

Preliminary sorter machine trials were undertaken on Run of Mine (ROM) samples taken from the Frampton stockpiles by Steinert in Germany. Close to 100% of the high grade and in excess of 90% of the medium grade material was successfully separated from the waste rock following a relatively coarse crush to 70mm top size.



Pictures 6 and 7: The shear material sized for sorting and a typical Steinert X-ray Sorting System (XSS) machine.

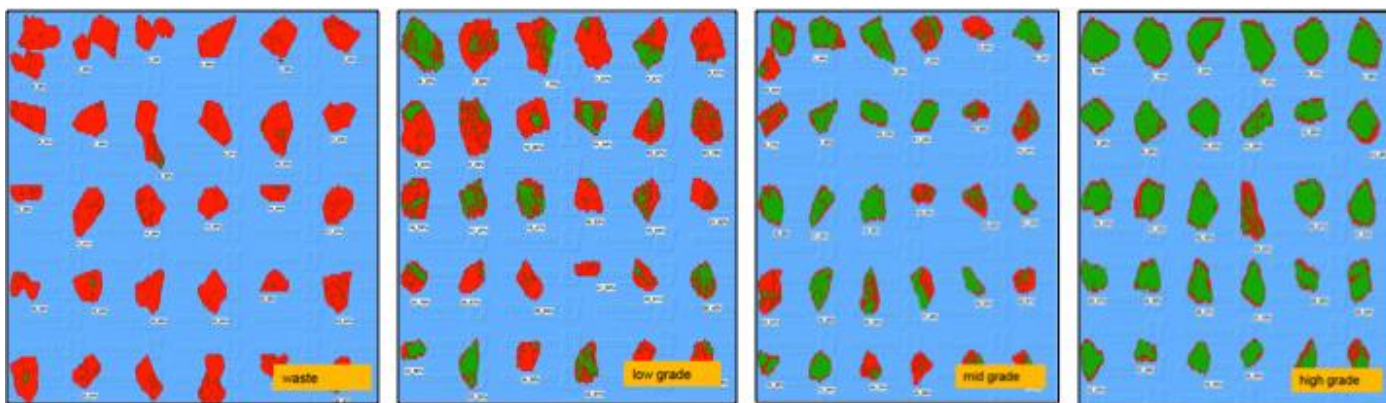


Figure 4: The Sorter separated shear material into products containing either red (waste) or green (grade carrying).

Successful trials were also undertaken using a simple gravimetric concentration table to produce a high-grade gold concentrate from the stockpile samples. Gravity tables are essentially low cost capital equipment capable of producing high-grade concentrates from material with differential density characteristics.

As such, shipping volumes, transportation costs and per tonne processing costs for final gold recovery are all minimised



Pictures 8, 9 and 10: Gravity table trial with distinct separation of high and medium grade concentrates and waste.

Laboratory analyses of the concentrates produced from the gravity table were as follows:

- Stockpiled ROM material fed onto the gravity table: 8.6 g/t gold
- Medium grade concentrate produced from the table: 83.0 g/t gold = 2.67 oz/t
- High grade concentrate produced from the table: 95.6 g/t gold = 3.07 oz/t

Based on the successes of the initial sorter machine and gravity table trials, Mantle proceeded to excavate a bulk sample of fresher material from the mine. Approximately 1.2 tonnes of Frampton zone material was extracted, prepared and sent for more detailed process design trials with both methods.



Pictures 11, 12 and 13: Excavation of bulk sample, size reduction and separation into various mineralisation types.

During the Quarter at the Norton Gold Mine Project:

The product samples from stockpile sample Sorter trials that were run by Steinert in Germany were returned and sent for laboratory analysis. A fresh bulk sample of approximately 350kg of in-situ shear material was shipped to Steinert in Germany where detailed Sorter trials were being undertaken.

Approximately 370kg of the same fresh bulk sample of in-situ shear material was also provided for detailed gravity table processing trials. The trials were undertaken and the various products were returned and sent for laboratory analysis.

A primary crusher was acquired, overhauled and delivered to the Norton Gold Mine site in good working order. The crusher provides an ability to prepare bulk high grade samples from selective crushing of visibly high grade material from the existing stockpiles as well as from fresh bulk samples of in-situ shear material for trucking to interested off-take parties' processing plants for bulk processing trials.



Picture 14: Primary crusher being transported to site.



Picture 15: Primary crusher ready for final assembly.

A number of discussions were advanced with potential high grade gold concentrate off take parties located in QLD, VIC and in China. 5kg samples of the approximate 95g/t gold concentrate derived from the gravity table trial were sent to a number of these parties for preliminary leach gold recovery trials.

Background of the Bacchus Marsh Coal Project:

Mantle and Exergen are partners in a 50/50% Joint Venture to upgrade and commercialise the Bacchus Marsh brown coal deposit. The JV covers Exploration Licences (ELs) 5294 and 5323, located to the west of Melbourne. The ELs contain a 1.6 billion tonne Inferred Resource of brown coal.

Exergen has successfully developed Continuous Hydro-Thermal Dewatering (CHTD), a technology that transforms low grade, high moisture brown coal into cleaner utilisation products with lower carbon dioxide emissions. CHTD has been proven at pilot scale and Exergen’s current focus is to prove CHTD at commercial scale by developing a \$50 million Pre-Commercial Demonstration Project (PCDP).

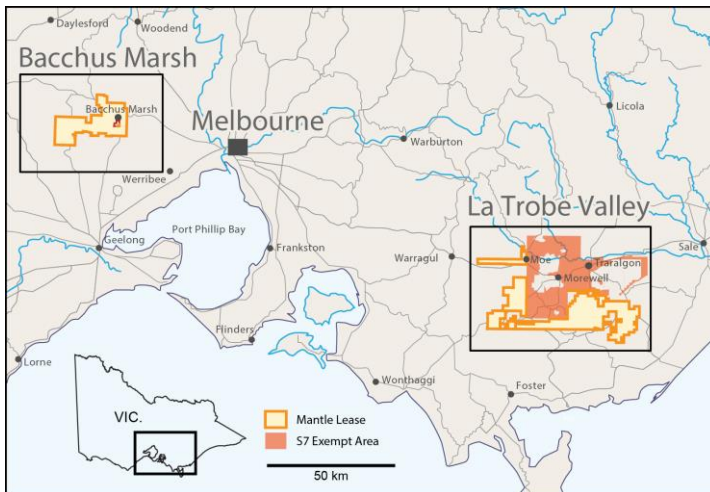


Figure 5: Mantle’s Victorian coal project locations.

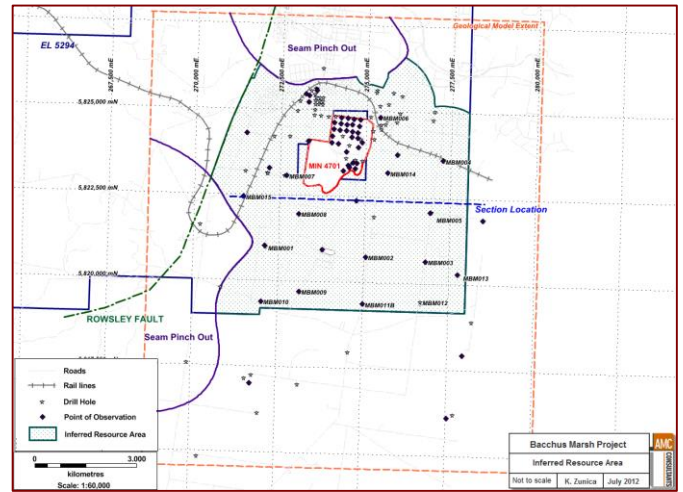


Figure 6: Inferred coal Resource area.

CHTD slurry will be pumped through pipelines to processing facilities at port locations, where it will be dewatered and processed into valuable commercial products including thermal coal products, char, fertilisers, pyrolysis oils and liquid fuels. Liquid fuels can be used to feed Direct Injection Coal Engines.

Preferred pipeline routes from Latrobe Valley to the Port of Hastings and from Bacchus Marsh to the Port of Geelong have been defined.

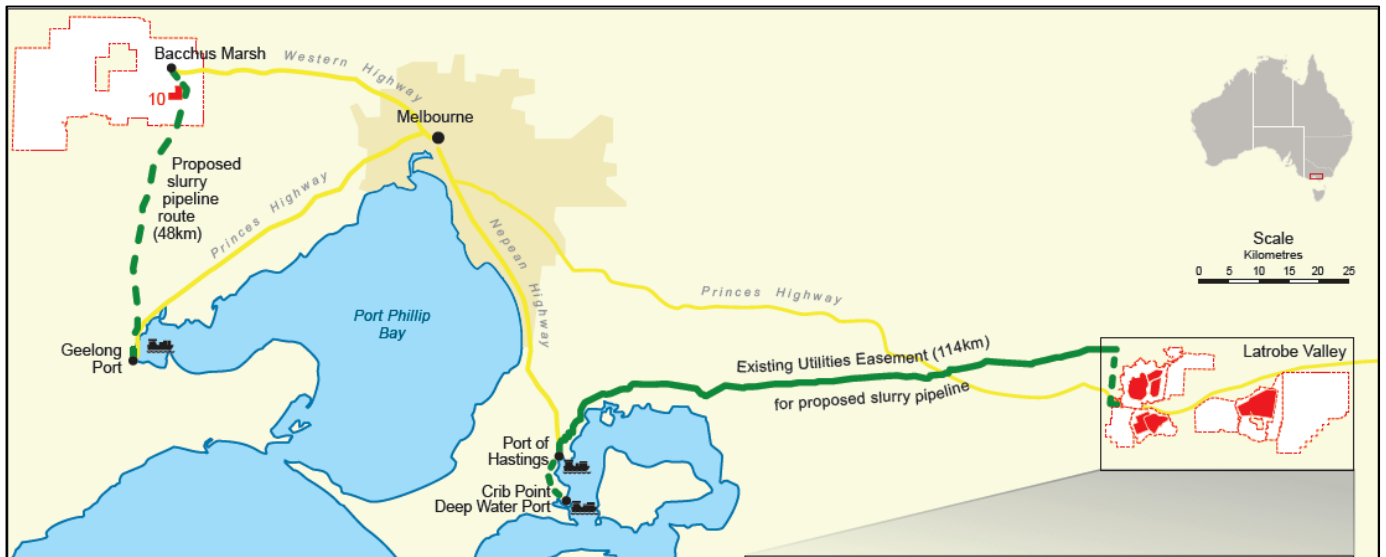


Figure 7: Exergen's proposed export infrastructure map (Bacchus Marsh tenement has since been reduced in size).

While Exergen can bring value to a number of downstream uses for upgraded brown coal, collaborations with other proponents in the brown coal upgrading sector are being sought to reduce process risk and development costs and expand product market potential for all parties. Exergen is generating a high level of interest in this strategy due to its unique position as a low cost solution to front-end dewatering, coal upgrading and overland transportation.

The Bacchus Marsh Joint Venture Agreement was executed on 30 June 2012. The JVA includes two key milestones; that within 24 months Exergen must commence construction of the large-scale demonstration plant and that within 48 months the demonstration plant must be constructed and have commenced operation. Exergen is responsible for 100% of the PCDP funding.

The terms of the JVA further allow that should either milestone not be met that Mantle may give Exergen a Notice to Perform that obligation and that in the event that the obligations were subsequently still not met that Mantle could either acquire Exergen's JV interest at a 50% discount to Exergen's share of JV expenditure to date, or that Mantle could dilute Exergen's JV equity interest by 50%.

During the Quarter at the Bacchus Marsh Coal Project:

Mantle issued a Performance Notice to Exergen in relation to the missed commencement of demonstration plant construction milestone for the Bacchus Marsh Coal Joint Venture. Following detailed discussions with Exergen, Mantle determined that it was in the best interests of the JV to continue with the current 50/50% Joint Venture structure.

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Mark Maxwell and Mr Stuart Moore, both Employees of Mantle Mining Corporation Ltd. Mr Maxwell and Mr Moore are both Members of the Australasian Institute of Mining and Metallurgy and both have 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 a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Maxwell (for Coal) and Mr Moore (for Minerals) consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.