Maules Creek Project

Analyst Visit 5 May, 2014

Boggabri, Australia
5 May, 2014
BUSINESS CASE

“Maules Creek Coal – A World Class Resource and Project“

- The Project is a realistic and feasible plan for the development of the Maules Creek Coal resource

- Federal Ministerial signoff of conditions to be satisfied for commencement of construction achieved

- Maules Creek will become a significant and valued supplier of premium thermal export coals and premium semi-soft coking coals to the Australian and export markets

- The mine plan and project timeline are considered reasonable and achievable

- Cost estimating and economic analysis confirm that Maules Creek Coal is a high value coal project with relatively low capital intensity when compared to development projects in other emerging coal basins
OVERVIEW

- High quality resource which can be mined at relatively low cost
- Simple well understood geology
- Provides both thermal and metallurgical coal products
- 17 km from the main railway line
- Above and below rail capacity available
- 380km from the Newcastle port where significant capacity expansion has been delivered
- Attractive economics from large scale of the project and ability to utilise ultra class equipment
“Maules Creek is one of the largest Australian coal deposits“

- One of the last major undeveloped coal deposits in NSW with JORC Resources of 679Mt
- Geology well understood and mine planning undertaken with high degree of confidence
  - Definitive feasibility study completed July 2011 and project economics updated in October 2012
  - Over 650 boreholes (~76,000m) drilled and geo-physically logged within the original tenement area prior to 2010
  - 2010 exploration project complete, 14,000m of HQ and LD drilling
WORLD CLASS RESERVES

- Recoverable Reserves of 362Mt and Marketable Reserves of 329Mt
  - Provides for an expected mine life of 30 years
- Potential to produce both metallurgical and thermal coal
  - DFS confirmed potential production profile with a high percentage of metallurgical coal
  - Coal quality and CHPP plant design provides significant flexibility to target the production mix to suit market conditions

Maules Creek JORC Reserves

Recoverable

- Proved 171Mt
- Probable 191Mt

Probable 362Mt

Marketable

- Proved 141Mt
- Probable 188Mt

Probable 329Mt

(MCC-400500-140505 Analyst Presentation)
OVERVIEW OF PROGRESS

- Estimated Capital cost remains at $767M
- Following delays due to court cases and approval, construction commenced in December 2013, with water supply pipeline. Rail commenced in mid January 2014
- Progress currently:
  - All major contracts in place
  - Including:
    - Water supply
    - Rail and access road
    - Bulk earthworks
    - Erection of CHPP
    - 123kV HV Power supply
    - 22kV HV Power reticulation
    - Batch Plant
    - Portal reclaimers
    - Belt Press Filters
    - Communications
CONSTRUCTION SETTING

- Construction commencement was contingent on:
  - Primary State and Federal Approvals
  - Sign off on Management Plans by State and Federal agencies
  - Sign off of cultural heritage salvage on the construction site
- Sign off of management plans was achieved in July 2013
- Legal challenge to the Minister’s EPBC approval launched in July 2013
- Threats of an injunction pending the outcome of the legal challenge resulted in an undertaking that clearing would be limited to defined footprint
- Rail contract executed in late October 2013
- Project schedule revised to reflect approvals / legal delays
- Rail available excluding signals Early March 2015
- Rail works form the critical path
- Signoff of salvage of rail and infrastructure footprint by RAP’s achieved in early Nov 2013
- Sign off of salvage work by DoPl obtained late December 2013
Construction of water pipeline commenced late December 2013
Rail works commenced in mid January 2014
Bulk earthworks contractor mobilised in mid February 2014
CHPP erection contractor mobilised on site early May 2014
132kV and 22kV power supply contracts executed
Some early delays in start ups plus two weeks wet weather delay due to extremely heavy rain, but schedule for ability to rail coal in Q1, 2015 being maintained
Mining fleet (both ultra class and conventional) secured
Mobilisation of crew to erect ultra class fleet scheduled for June 2014
Mining schedule being synchronised with infrastructure schedule to optimise coal railings
Forecast capital cost remains within estimate
Opex model forecasts FOB costs consistent with market expectations.
SCOPE OF PROJECT – Key Packages

- C001 – Rail and Access Road
- C003 – HV Power Supply
- C101A – Bulk Earthworks
- C104 – MIA Facilities
- C108 – Water Supply
- C109 – 22KV Power Distribution
- C115 – Portal Reclaimers
- C117 – CHPP Construction
### PROGRESS

<table>
<thead>
<tr>
<th>Area</th>
<th>Contractor</th>
<th>% Complete at End of March 2014</th>
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<tbody>
<tr>
<td>Rail</td>
<td>Leighton</td>
<td>18%</td>
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<tr>
<td>Bulk Earthworks</td>
<td>Ditchfield</td>
<td>8%</td>
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<tr>
<td>CHPP Design, Supply, CHPP Erect</td>
<td>Sedgman Downer</td>
<td>44%</td>
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<tr>
<td>Water Supply</td>
<td>Stripes</td>
<td>100%</td>
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<tr>
<td>Power Supply</td>
<td>Transgrid</td>
<td>5%</td>
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<tr>
<td>Mine Infrastructure</td>
<td>Various</td>
<td>15%</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>36%</strong></td>
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## WORKPLACE HEALTH AND SAFETY

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<th>Year to Date Jul 13 – Mar 14</th>
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<td>Total Hours</td>
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<tr>
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<td>Total Incidents</td>
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<tr>
<td>LTIFR</td>
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<tr>
<td>12 month moving ave</td>
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<td>TRIFR</td>
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<tr>
<td>LTIFR</td>
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<tr>
<td>Year to date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRIFR</td>
<td>4.8</td>
<td>4.88</td>
</tr>
<tr>
<td>LTIFR</td>
<td>0.0</td>
<td>0.0</td>
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C001 - RAIL WORKS & ACCESS ROAD
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Maules Creek Section

Common Section
Design, construction & commissioning of:

- 11.9km rail spur and balloon loop
- 7.9km common section
- 9.5km mine access road
- 2km creek diversion
- 27 transverse pipe and box culverts
- 1.6 Mm3 of cut, approx. 500 Km3 each free dig, rip, blast

Common Section Namoi River Crossing
Maules Creek section tracking in accordance with the early schedule despite losing 10 days due to rain

As at end March construction activity was 18% complete – excluding design and early works

Clearing 100% complete

Topsoil stripping 100% completed

Foundation treatments commenced

Work progressing in cuts 1, 2 and 3 concurrently

Volume of material moved to date approximately 500,000m³
Bulk Earthworks scope:

- CHPP
- ROM
- Train Load Out (TLO)
- MIA Area Works
- Site Access Roads
- Area Pavement Works
- Dams
- Water Management Structures.
C101A - BULK EARTHWORKS

➢ Bulk Earthworks Key Dates:

- Milestone 1 – ROM to TLO
  Jun 2014 : On schedule

- Milestone 2 – Overall PC
  Jan 2015 : On Schedule

TLO Platform Complete ready for Piling
Progress to Date:

- Contract Executed 20 Jan 2014
- Commenced clear and grubbing activities 11 Feb 2014
- Lost time due to major rain event >200mm
- Worked through Easter and Anzac breaks to recover time
- Planning double shift on ROM slot wall and stockpile areas
- CHPP construction office pad, CHPP laydown pad and TLO areas handed over, 60Ml borrow pit dam created for construction water
C117 - COAL HANDLING & PREP PLANT

WHITEHAVEN COAL
Class-leading CHPP design by Sedgman
Bypass system rated for 1,850tph (13.3Mtpa)
Wash plant system rated at over 1,700tph (12.3Mtpa)
Critical, long lead time, equipment ordered and fabricated and stored at Narrabri
Configuration allows for some staging of construction
Train loading capacity and stockpile handling systems to deliver operational efficiencies
- Downer EDI appointed Principal Contractor for construction
- Full Audit of all equipment completed
- Bulk earthworks handover of train load out area completed. Piling activities commencing after Easter
- Pre assembly of equipment at the Narrabri yard has commenced
- Additional equipment orders have been placed for sections of the plant that have been redesigned.
Piling activities for Train Load Out Bin commenced on 29 April

Piling Rig will move to CV853 trestle supports during the second week of May
- Design Hazop has been completed with final sign off expected in Germany on May 5th
- GSI heavy industries in China have commenced procurement of materials and will commence fabrication in May
- GSI quality assessment visit planned for June
- Temporary loading facilities for the stockpile are being finalised
All six filters have been fabricated and QA testing completed

Filters passed Factory Performance Testing in March

Filters have been despatched via sea freight and are due to arrive in Australia in May

The Filters will be stored at the Narrabri storage facility until they are required for installation in late October
Key points of note as follows:

- Piling activities commence 29 Apr 2014
- Site deliveries for pre-assembly works commence 5 May 2014
- CHPP Construction offices assembled on site 19 May 2014
- Site civil works commence 5 Jun 2014
- Erection of structure commences late Jul 2014
- Bypass system commissioning commences Jan 2015
- Bypass ready Feb 2015
- CPP commissioning May 2015
MINE INFRASTRUCTURE

C108 - Water Supply

C003 & C109 Power Supply

C104 - MIA Facilities

C116 – Site Communications
C108 – WATER SUPPLY - Scope

- Water infrastructure installed from Velyama to Top Tank
- 10ML Dam Complete
- Construction water supply operations in place
- 100% Completed – mid March
- Project 100 – campaign to have 100ML of water stored on site due to Keepit Dam water restrictions - complete
C108 – WATER SUPPLY - Progress

River Pump Station – 100%

Velyama 100%

50MI Construction Water Dam

Top Tank 100% - Dam 100%
C104 INFRASTRUCTURE - MIA

- **Works packages**
  - Workshops, MIA and CHPP offices
  - Site services – Water backbone including Potable and Fire water
  - Bulk fuel and oil storage and HV / LV refuelling
  - HV / LV wash bays
  - Equipment spares laydown area and goline parking area
  - Visits conducted to Werris Creek and Mangoola

- **Self Manage works packages**

- **Key dates:**
  - Packaging and schedule dates under review
  - Target Tender date – May 2014
  - Target Award date – Jun 2014
  - Completion Target – February 2014
C003 – POWER INFRASTRUCTURE

- Power Infrastructure consists of 2 parts:
  - C003 - 132kV Transmission Infrastructure – Transgrid
  - C109 - 22kV Power Supply – Downer

- C003 - 132kV TransGrid Power Supply
  - 4.5km Transmission Line
  - 132kV Switching Station
  - Power Agreement finalised with Transgrid 17 April
  - BCEP Constructed in 8 months
  - Target Date Jan 2015

- Key Interactions
  - BCEP – shared transmission line
  - 22kV Contractor – interface of 132kV to 22kV equipment
C109 – 22kV POWER

- C109 - 22kV Power Supply
  - 132kV / 22kV Substation
  - 4.5km Transmission Line
  - 22kV Distribution Substation

- Key Dates
  - Contract Award – 30 April 2014
  - Target completion – January 2015

- Key Interactions
  - Leightons – pad construction
  - Transgrid - 132KV Power Supply
Scope:

- Microwave Link for data scope being reviewed
- Mine Hardwired Fibre Optic infrastructure
- Fibre Optic Link to public telecommunications infrastructure

Status:

- Construction Microwave Link being set up for construction – Vertel
- Investigations ongoing for Fibre Optic installation for permanent Telecommunications services – VOICE/DATA
PORT AND RAIL INFRASTRUCTURE

- 7.5Mtpa of contracted below-rail capacity available to Maules Creek from July 2014
- Provisional notice provided for an additional 2.8Mtpa in below-rail capacity from 2016
- ARTC track expansion projects in relation to these contracted and prospective volumes are underway and on target for completion prior to first railed coal
- In December 2012 finalised an agreement with Aurizon to haul up to 16Mtpa
- 8.5Mt of contracted port capacity
- Can access both PWCS and NCIG coal terminals and will require additional capacity as the mine ramps up to full production
- Additional capacity is available
MINING

- Mine method is by shovel and truck
- Robust mobilisation & build-up
  - After thorough analysis have adopted owner operate model.
  - Leveraging internal mining capability
  - Have secured ultra class mining fleet.
- Detailed mining sequence for LOM created (Month x Month)
Yr2 X-Section

[Diagram showing various locations such as Meriown, Jeralong, Braymont, Thornfield, Teston, Onavale, Herndale, Velyama, Nagero, Upper Northam, Lower Northam, Therribi, Flixton, Tarrawonga, Northam, Upper Northam, and Lower Northam.]
MINING STRATEGY

First stage Ramp up of production to target 6Mtpa ROM rate from February 2015
- Blasting to commence July 2014
- Waste removal to commence August 2014
- Staged introduction of mining fleet
- Four excavators to be introduced successively between August and February
- First coal being mined from January 2015
- Coal mined at 6MT rate from March 2015

Second stage Ramp up to 9Mtpa rate from February 2016
MINING FLEET STRATEGY

- Hitachi Equipment Selected For Excavators and Large Trucks
  - 2 x EX3600 Excavators (350t)
  - 2 x EX8000 Excavators (800t)
  - 11 x EH5000 Trucks (304t)

- Westrac (CAT) to supply bulk of ancillary fleet
  - 4 x CAT 789D’s
  - 6 x Dozers
  - 4 x CAT MD6290 Drills
  - 3 x Graders

- Emeco to supply other ancillary equipment
  - 4 x CAT 789D’s
  - Water Carts
  - Opportunity to provide Maintenance Services
OPERATIONS TEAMS

- Staged introduction of Operations teams with successive fleet installation
  - Each excavator will be scheduled to ramp up over a period of 4 weeks from commissioning
  - This will allow adequate time for induction and training on equipment

- Initial roster to include 10.5 hour shifts
  - This is consistent with other existing WHC Open Cuts
  - Equipment to be serviced during 3 hour window
  - Ability to achieve ~5,600 hours per annum on Tier 1 machines
RECRUITMENT

- Target experienced operators in initial Ramp Up
- Incorporate Indigenous recruitment program
- Incorporate local candidates

![Graph showing Operations - Total Workforce Incl. Contractors from Jan-14 to Jun-15.](image)
Average real FOB cash costs over first three years currently forecast to be approximately A$67/t

- Detailed mine planning is currently underway to determine the optimum mining strategy
  - Low strip ratio (6.4:1)
  - Simple, open cut, truck and shovel operations
  - High mine yield of 86%
  - Current and future market conditions.

- Maules Creek expected to improve its competitive cost position over time
  - Low strip ratio remains relatively constant over the first 20 years of production

- Owner operate model shown to be most competitive.
  - Ultra class fleet secured.
  - Also conventional coaling and auxiliary fleet secured as well.
**INDEPENDENT RANKING**

Wood Mackenzie ranked Maules Creek second highest out of a large number of international projects. The project will deliver significant value to Whitehaven shareholders when it commences production.

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**Top 7 based on NPV, IRR, payback, price risk and PI criteria**

<table>
<thead>
<tr>
<th>Country</th>
<th>Operator</th>
<th>Asset</th>
<th>NPV</th>
<th>IRR</th>
<th>Payback</th>
<th>Price risk</th>
<th>P/I ratio</th>
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<tbody>
<tr>
<td>Australia</td>
<td>QCoal</td>
<td>Byerwen</td>
<td>2,713</td>
<td>22%</td>
<td>8.0</td>
<td>3%</td>
<td>2.8</td>
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<tr>
<td>Australia</td>
<td>Whitehaven</td>
<td>Maules Creek</td>
<td>2,490</td>
<td>31%</td>
<td>7.0</td>
<td>3%</td>
<td>3.2</td>
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<tr>
<td>Canada</td>
<td>Canadian Dohua</td>
<td>Murray River</td>
<td>2,038</td>
<td>37%</td>
<td>6.3</td>
<td>3%</td>
<td>2.0</td>
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<tr>
<td>Indonesia</td>
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<td>Selo Argokencono Sakti</td>
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<td>4%</td>
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<td>Cokal</td>
<td>Bumi Barito Mineral</td>
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<td>4.2</td>
<td>3%</td>
<td>3.6</td>
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<tr>
<td>Indonesia</td>
<td>Itochu</td>
<td>Suprabari Mapanindo Mineral</td>
<td>229</td>
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<td>Indonesia</td>
<td>Harum Energy</td>
<td>Tambang Batubara Harum</td>
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<td>3%</td>
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<td>Altura Mining</td>
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<td>92</td>
<td>58%</td>
<td>4.2</td>
<td>4%</td>
<td>6.2</td>
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</table>

*Source: Wood Mackenzie Coal GEM*

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**High ranking, high value project**
CLOSING COMMENTS

- Construction has been in progress for three months for the rail and two months for the earthworks
- Today you will see what has been achieved in that time
- The site has been cleared and topsoil removed
- Excavations of the major cuts on the rail have been commenced and opened up to show the nature of the ground
- Aiming to complete earthworks by around September
- Handover of early earthworks accomplished
- Contractor for erection of CHPP has commenced assembly at the storage yard and is mobilising on site
- Mining equipment secured with assembly to commence in June
- Groundwork to move forward to complete the project on time has been achieved
- Opportunities to bring future milestone dates forward are being pursued.
Thank you