GLOBAL OFFERING

Volume 1

YANCOAL AUSTRALIA LTD
(Incorporated in Victoria, Australia with limited liability)
STOCK CODE: 3668

YANCOAL 兖煤澳大利亚有限公司

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This Prospectus is printed in two parts that together form the Prospectus. You should read each part of the Prospectus in conjunction with the other part in order to understand the matters to which the Prospectus relates, particularly the Hong Kong Public Offering. Prospective investors should read each part of the Prospectus before making any application in response to the Hong Kong Public Offering. Copies of the two parts of the Prospectus are available at the locations set out in the section headed "*How to Apply for Hong Kong Offer Shares*" in this Prospectus. In addition, the complete Prospectus is available at www.hkexnews.hk and www.yancoal.com.au.

IMPORTANT

If you are in any doubt about any of the contents of this prospectus, you should obtain independent professional advice.

Yancoal Australia Ltd

ACN 111 859 119

兖煤澳大利亞有限公司*

(Incorporated in Victoria, Australia with limited liability)

GLOBAL OFFERING

Number of Offer Shares under the Global Offering	**:**	**59,441,900 Shares (subject to the Over-allotment Option)**
Number of Hong Kong Offer Shares	**:**	**5,944,200 Shares (subject to reallocation)**
Number of International Offer Shares	**:**	**53,497,700 Shares (subject to reallocation and the Over-allotment Option)**
Maximum Offer Price	**:**	**HK$25.84 per Offer Share plus brokerage of 1.0%, SFC transaction levy of 0.0027% and Stock Exchange trading fee of 0.005% (payable in full on application in Hong Kong dollars and subject to refund)**
Stock Code	**:**	**3668**

Joint Sponsors

Morgan Stanley　招银国际 CMB INTERNATIONAL　BOC INTERNATIONAL

Joint Global Coordinators, Joint Bookrunners and Joint Lead Managers

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Joint Bookrunners and Joint Lead Managers
(In alphabetical order)

建银国际 CCB International　光大證券 EBS INTERNATIONAL　信達國際 CINDA INTERNATIONAL　海通國際 HAITONG　中泰國際 ZHONGTAI INTERNATIONAL

Hong Kong Exchanges and Clearing Limited, The Stock Exchange of Hong Kong Limited and Hong Kong Securities Clearing Company Limited take no responsibility for the contents of this prospectus, make no representation as to its accuracy or completeness and expressly disclaim any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this prospectus.

A copy of this prospectus, having attached thereto the documents specified in "*Appendix VIII – Documents Delivered to the Registrar of Companies and Available for Inspection*", has been registered by the Registrar of Companies in Hong Kong as required by Section 342C of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Chapter 32 of the Laws of Hong Kong). The Securities and Futures Commission and the Registrar of Companies in Hong Kong take no responsibility as to the contents of this prospectus or any other documents referred to above.

The Offer Price is expected to be determined by agreement between the Joint Global Coordinators (on behalf of the Underwriters) and the Company on the Price Determination Date, which is expected to be on or about Thursday, 29 November 2018 and, in any event, not later than Wednesday, 5 December 2018. The Offer Price will not be more than HK$25.84 per Offer Share and is expected to be not less than HK$23.48 per Offer Share, unless otherwise announced.

The Offer Shares have not been and will not be registered under the U.S. Securities Act or any state securities law in the United States and may not be offered, sold, pledged or transferred within the United States, except that Offer Shares may be offered, sold or delivered (a) in the United States solely to QIBs in reliance on Rule 144A or another exemption from, or in a transaction not subject to, the registration requirements of the U.S. Securities Act or (b) outside the United States in offshore transactions in reliance on Regulation S.

Prior to making an investment decision, prospective investors should consider carefully all of the information set out in this prospectus, including the risk factors set out in "*Risk Factors*". The obligations of the Hong Kong Underwriters under the Hong Kong Underwriting Agreement are subject to termination by the Joint Global Coordinators (on behalf of the Underwriters) if certain grounds arise prior to 8:00 a.m. on the Listing Date. Such grounds are set out in "*Underwriting*".

* *For identification purposes only*

26 November 2018

IMPORTANT

The Company will be relying on Section 9A of the Companies (Exemption of Companies and Prospectuses from Compliance with Provisions) Notice (Chapter 32L of the Laws of Hong Kong) and will be issuing the **WHITE** and **YELLOW** Application Forms without them being accompanied by a printed prospectus. The contents of the printed prospectus are identical to the electronic version of the prospectus which can be accessed and downloaded from the websites of the Company at **www.yancoal.com.au** and the Stock Exchange at **www.hkexnews.hk** under the "*HKExnews* > *Listed Company Information* > *Latest Listed Company Information*" section, respectively.

Members of the public may obtain a copy of the printed prospectus, free of charge, upon request during normal business hours from 9:00 a.m. on Monday, 26 November 2018 until 12:00 noon on Thursday, 29 November 2018 at the following locations:

1. any of the following branches of the receiving bank for the Hong Kong Public Offering:

Bank of China (Hong Kong) Limited

	Branch Name	Address
Hong Kong Island	King's Road Branch	131-133 King's Road, North Point, Hong Kong
	Central District (Wing On House) Branch	B/F-2/F, Wing On House, 71 Des Voeux Road Central, Hong Kong
Kowloon	Lam Tin Branch	Shop 12, 49 Kai Tin Road, Lam Tin, Kowloon
	Tsim Sha Tsui Branch	24-28 Carnarvon Road, Tsim Sha Tsui, Kowloon
New Territories	Tseung Kwan O Plaza Branch	Shop 112-125, Level 1, Tseung Kwan O Plaza, Tseung Kwan O, New Territories
	Tuen Mun Town Plaza Branch	Shop 2, Tuen Mun Town Plaza phase II, Tuen Mun, New Territories

2. any of the following offices of the Joint Global Coordinators:

   (a) **Morgan Stanley Asia Limited**, at 46/F, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong;

   (b) **CMB International Capital Limited**, at 45/F, Champion Tower, 3 Garden Road, Central, Hong Kong;

   (c) **BOCI Asia Limited**, at 26/F, Bank of China Tower, 1 Garden Road, Central, Hong Kong; and

   (d) **Citigroup Global Markets Asia Limited**, at 50/F, Champion Tower, 3 Garden Road, Central, Hong Kong; and

3. the Depository Counter of HKSCC at 1/F, One & Two Exchange Square, 8 Connaught Place, Central, Hong Kong.

Details of where printed prospectuses may be obtained will be displayed prominently at every branch of Bank of China (Hong Kong) Limited where WHITE Application Forms are distributed.

During normal business hours from 9:00 a.m. on Monday, 26 November 2018 until 12:00 noon on Thursday, 29 November 2018, at least three copies of the printed prospectus will be available for inspection at every location where the **WHITE** and **YELLOW** Application Forms are distributed as set out in "*How to Apply for Hong Kong Offer Shares*".

Hong Kong Public Offering commences and **WHITE** and **YELLOW** Application Forms available from . . . . . 9:00 a.m. on Monday, 26 November 2018

Latest time for completing electronic applications under the **White Form eIPO** service through the designated website at **www.eipo.com.hk**[2] . . . . . 11:30 a.m. on Thursday, 29 November 2018

Application lists open[3] . . . . . 11:45 a.m. on Thursday, 29 November 2018

Latest time for (a) lodging **WHITE** and **YELLOW** Application Forms, (b) completing payment for **White Form eIPO** applications by effecting internet banking transfer(s) or PPS payment transfer(s) and (c) giving **electronic application instructions** to HKSCC . . . . . 12:00 noon on Thursday, 29 November 2018

Application lists close[3] . . . . . 12:00 noon on Thursday, 29 November 2018

Expected Price Determination Date . . . . . Thursday, 29 November 2018

(1) Announcement of the Offer Price, the level of indications of interest in the International Offering, the level of applications in the Hong Kong Public Offering and the basis of allocations of the Hong Kong Offer Shares to be published in the South China Morning Post (in English) and the Hong Kong Economic Times (in Chinese) on or before . . . . . Wednesday, 5 December 2018

(2) Results of allocations in the Hong Kong Public Offering to be available at **www.iporesults.com.hk** (alternatively: English **https://www.eipo.com.hk/en/Allotment**; Chinese **https://www.eipo.com.hk/zh-hk/Allotment**) with a "search by ID" function from . . . . . Wednesday, 5 December 2018

(3) Announcement containing (1) and (2) above to be published on the websites of the Company and the Stock Exchange at **www.yancoal.com.au** and **www.hkexnews.hk** from . . . . . Wednesday, 5 December 2018

Despatch of Share certificates and **White Form** e-Refund payment instructions/refund cheques on or before[4] . . . . . Wednesday, 5 December 2018

Dealings in the Shares on the Stock Exchange expected to commence on . . . . . Thursday, 6 December 2018

Notes:

(1) All dates and times refer to Hong Kong dates and times.

(2) You will not be permitted to submit your application under the **White Form eIPO** service through the designated website at **www.eipo.com.hk** after 11:30 a.m. on the last day for submitting applications. If you have already submitted your application and obtained a payment reference number from the designated website prior to 11:30 a.m., you will be permitted to continue the application process (by completing payment of the application monies) until 12:00 noon on the last day for submitting applications, when the application lists close.

(3) If there is a "black" rainstorm warning signal or a tropical cyclone warning signal number 8 or above in force in Hong Kong at any time between 9:00 a.m. and 12:00 noon on Thursday, 29 November 2018, the application lists will not open and close on that day. See "*How to Apply for Hong Kong Offer Shares*".

(4) The Share certificates will only become valid at 8:00 a.m. on the Listing Date, which is expected to be Thursday, 6 December 2018, provided that the Global Offering has become unconditional in all respects at or before that time. Investors who trade Shares on the basis of publicly available allocation details or prior to the receipt of the Share certificates or prior to the Share certificates becoming valid do so entirely at their own risk.

For details of the structure of the Global Offering, including its conditions, and the procedures for applications for Hong Kong Offer Shares, see "*Structure of the Global Offering*" and "*How to Apply for Hong Kong Offer Shares*", respectively.

If the Global Offering does not become unconditional or is terminated in accordance with its terms, the Global Offering will not proceed. In such a case, the Company will make an announcement as soon as practicable thereafter.

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IMPORTANT NOTICE TO INVESTORS

You should rely only on the information contained in this prospectus and the Application Forms to make your investment decision. The Hong Kong Public Offering is made solely on the basis of the information contained and the representations made in this prospectus. Neither the Company nor any of the Relevant Persons has authorised anyone to provide you with any information or to make any representation that is different from what is contained in this prospectus. Any information or representation not made in this prospectus must not be relied on by you as having been authorised by the Company or any of the Relevant Persons.

CONTENTS

This summary is intended to provide you with an overview of the information contained in this prospectus. As it is a summary, it does not contain all the information that may be important to you. You should read the whole prospectus before you decide whether to invest in the Offer Shares. Some of the particular risks of investing in the Offer Shares are set out in "Risk Factors" and you should read that section carefully before you decide to invest in the Offer Shares.

As used in this prospectus, except as otherwise indicated:

- "***The Group***", "***we***" *and "****our****" means the Company, its consolidated subsidiaries and the Company's interests in its associates, joint ventures and joint operations.*
- "***Our mines***" *or "****mines we have ownership interests in and operate***" *means HVO, MTW, Moolarben, Stratford Duralie and Yarrabee, each as defined below.*
- "***100% basis***" *means the aggregate of the resources, reserves, production or sales data, or other amount or measure, without taking into account our effective ownership interest therein.*
- "***Attributable basis***" *means our effective ownership interest in the resources, reserves, production or sales data, or other amount or measure, whether established contractually or otherwise.*

OVERVIEW

Introduction

We are Australia's largest pure-play coal producer based on aggregate Coal Reserves and marketable coal production, and have been listed on the ASX since 2012. Of all Australian coal producers, we rank third on both these aforementioned metrics, behind only Glencore and BHP. Our principal business activity is the production of thermal and metallurgical coal for use in the power generation and steel industries in Asian markets. In contrast to coal companies that are currently listed on the Stock Exchange, all of the coal we produce is sold for export to customers located overseas, whether directly, through overseas traders or through other Australian coal companies. We believe that the export-oriented nature of our business is a key differentiator as it allows us to obtain global and market-determined indexed pricing for most of our coal sales.

We have ownership interests in, and operate, five coal mine complexes across New South Wales and Queensland, and manage five others across New South Wales, Queensland and Western Australia. Our mining interests in New South Wales include the Hunter Valley Operations, which is now operated as an unincorporated joint venture with Glencore ("**HVO**"), the integrated operations of the Mount Thorley and Warkworth open cut mines which are located adjacent to each other ("**MTW**"), the open cut and underground mines comprising the Moolarben coal complex ("**Moolarben**"), and the integrated operations of the Stratford and Duralie mines which are located in proximity to each other ("**Stratford Duralie**"). Our mining interests in Queensland are located in the Bowen basin and include the Yarrabee mine ("**Yarrabee**"), and a near-50% share in the Middlemount mine through an incorporated joint venture with Peabody Energy

("**Middlemount**"). Our mining interests also include the Ashton, Austar and Donaldson mines (the "**Watagan Mines**") in New South Wales, which we manage on behalf of Watagan Mining Company Pty Ltd ("**Watagan**"), our unconsolidated, wholly-owned subsidiary. Additionally, we manage the Cameby Downs and Premier coal mines in Queensland and Western Australia, respectively, on behalf of our Shanghai and Hong Kong listed controlling shareholder, Yanzhou Coal Mining Company Limited ("**Yanzhou**"). We also have shareholding interests in three major Australian coal export terminals.

As at 30 June 2018, the mines we have ownership interests in and operate ("**our mines**"), Middlemount and the Watagan Mines had, in the aggregate, Coal Reserves of 1,710 Mt, Marketable Coal Reserves of 1,218 Mt, and Measured and Indicated Coal Resources of 5,414 Mt (all on a 100% basis). On an attributable basis, we had Coal Reserves of 1,178 Mt, Marketable Coal Reserves of 837 Mt and Measured and Indicated Coal Resources of 3,964 Mt as at that date. In 2017 and the six months ended 30 June 2018, we sold 19.3 Mt and 16.2 Mt of coal products, respectively, and reported revenue from continuing operations of A$2,601 million and A$2,347 million, respectively.

Our mines and operations employ approximately 4,000 people in addition to the contractors and service providers who support our business, and we seek to continue contributing to the economic growth of the regional Australian areas in which we operate.

History and Material Transactions

We have become the largest Australian pure-play coal producer through both organic growth and a series of corporate acquisitions since our incorporation in November 2004.

We acquired the Southland mine (renamed Austar) in December 2004 and Felix Resources (assets of which included interests in the Moolarben, Yarrabee and Ashton mines) in December 2009. We acquired further interests in the Ashton mine in 2011. We listed on the ASX in June 2012, following our merger with Gloucester Coal, assets of which included interests in the Middlemount, Stratford Duralie and Donaldson mines and the Monash exploration project. Since our listing on the ASX, we have acquired the remaining interests in the Ashton mine and further interests in the Moolarben mine.

In 2014, during the global coal market downturn, we made a major strategic commitment to expand mining operations at Moolarben. Development approval for the Moolarben Stage Two expansion project was received in early 2015 and provided for an increase in Run of Mine ("**ROM**") production capacity at the low cost Moolarben complex from 8 Mtpa of open cut production to 21 Mtpa across both open cut (13 Mtpa) and underground operations (8 Mtpa). With efficient project management and careful cost control, we were able to execute the Moolarben expansion ahead of schedule and within budget. With construction now complete at both the open cut and underground operations, Moolarben is one of the ten largest producers of thermal coal in Australia based on 2017 saleable production. We have entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben.

In March 2016, we transferred our interests in the Ashton, Austar and Donaldson mines to Watagan as part of a structured financing transaction, further details of which are set forth in "*Business – Our Mining Operations – Watagan Mines – Watagan Agreements*" and "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation*".

On 1 September 2017, we completed the acquisition of 100% of the equity interest in C&A from Rio Tinto (the "**C&A Acquisition**"). The consideration for the C&A Acquisition was US$2.69 billion, comprising US$2.45 billion cash payable on completion and US$240 million in future non-contingent royalty payments over five years following completion, and a coal price-linked contingent royalty. On completion, we acquired:

(i) interests in two of Australia's leading tier-one large-scale, long-life and low-cost coal mines located in the Hunter Valley region of New South Wales, including:

  (a) a 67.6% interest in HVO; and

  (b) an 80.0% interest in the Mount Thorley mine and a 55.6% interest in the Warkworth mine, which are located adjacent to each other and are operationally integrated as MTW; and

(ii) a 36.5% interest in Port Waratah Coal Services ("**PWCS**"), which provides the export infrastructure for the acquired mines.

The C&A Acquisition contributed to a substantial increase in our total assets from A$7,660 million as at 31 December 2016 to A$11,914 million as at 30 June 2018. In addition, we began consolidating the profit and loss accounts of C&A from 1 September 2017, the date of completion of the C&A Acquisition, and our results of operations for 2017 and the six months ended 30 June 2018 reflect the consolidation of C&A's results from 1 September 2017 to 30 June 2018. This contributed to the increase in our total revenue from A$1,238 million in 2016 to A$2,601 million in 2017, and our profit after income tax of A$246 million in 2017 compared to a loss after income tax of A$227 million in 2016. A significant contributor to our profitability in 2017 was other income, consisting of a gain on acquisition of A$177 million in connection with mine assets acquired from C&A and a reversal of impairment of mining tenements of A$100 million for the Moolarben mine, both of which are non-recurring items. Our total revenue increased from A$832 million in the six months ended 30 June 2017 to A$2,347 million in the six months ended 30 June 2018, and we had a loss after income tax of A$14 million and a profit after income tax of A$361 million in the same periods, respectively.

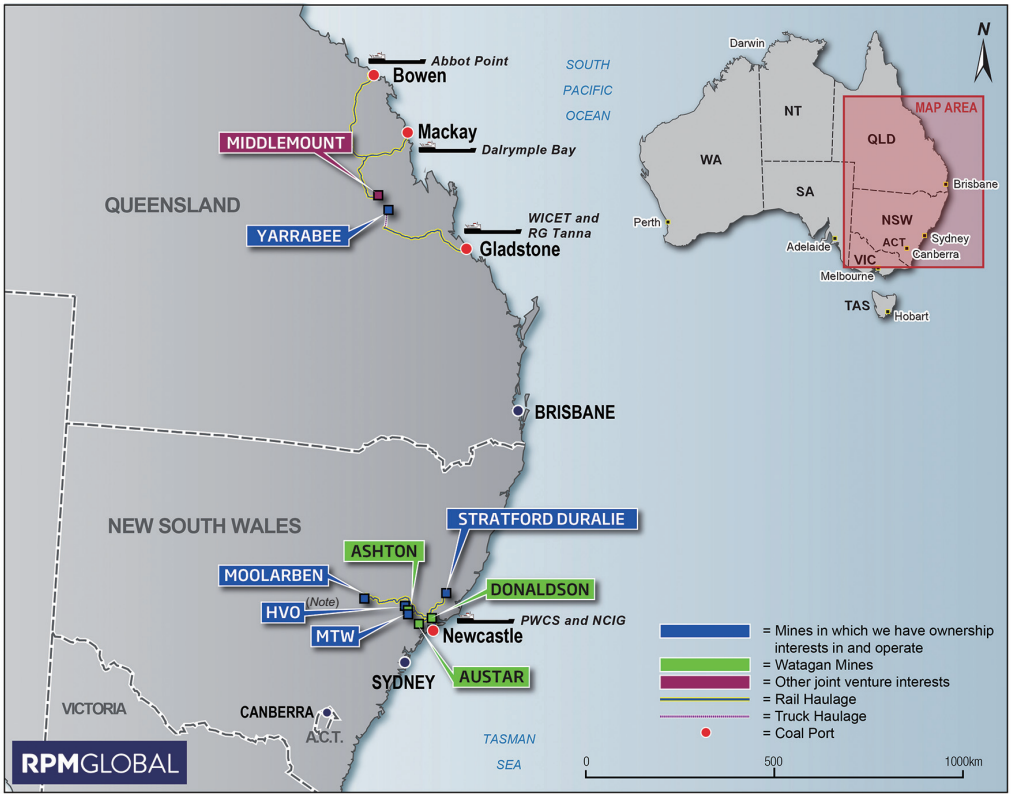
On 7 March 2018, we completed a transaction to acquire an additional 28.9% interest in the unincorporated Warkworth joint venture from MDP for consideration of US$230 million, subject to final post-closing working capital adjustments (the "**Warkworth Transaction**"), which increased our ownership of the Warkworth joint venture from 55.6% to 84.5%.

On 4 May 2018, we completed the sale of a 16.6% interest in the HVO mine to Glencore, reducing our interest in the HVO unincorporated joint venture from 67.6% to 51%, resulting in a 51%:49% unincorporated joint venture between us and Glencore (the "**Glencore Transaction**"). Glencore acquired its 49% interest for consideration of US$1,139 million, of which (i) US$710 million was paid to HVO Resources Pty Ltd ("**HVOR**") for its 32.4% interest in HVO and (ii) US$429 million (with further post-closing adjustments) was paid to us for a 16.6% interest in HVO. As part of this transaction, our effective ownership interest in PWCS was reduced to 30%.

We have entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben for total consideration of A$84 million, which will be paid in four installments through to 31 December 2019 (the "**Moolarben Acquisition**"), and adjusted for the economic benefit of the 4% interest from 15 April 2018 that will flow to us. We intend to finance the Moolarben Acquisition with a portion of the expected proceeds from the Global Offering. See "*Future Plans and Use of Proceeds*" for further details. The Moolarben Acquisition will raise our interest in the unincorporated Moolarben JV to 85%.

Locations

The following map shows the location of the coal mines we have ownership interests in and operate, the Middlemount joint venture, the Watagan Mines, and the ports and railway network serving these areas:



Note:

HVO is operated as a 51:49 unincorporated joint venture with Glencore. The HVO JV is jointly controlled by us and Glencore through a joint venture management committee ("**JVMC**") and is operated by a manager, HV Operations Pty Ltd ("**HV Ops**"), which is appointed by us and Glencore and reports to the JVMC. See "*Business – Joint Venture Agreements – HVO*" for further details of the joint venture agreement with Glencore.

OUR BUSINESS OPERATIONS

Our principal coal products are thermal coal and metallurgical coal. Thermal coal is primarily used as an energy source in the generation of electricity, as well as in cement manufacturing and other major energy intensive industries which use heat and/or steam in their production processes. As a result, thermal coal demand is strongly driven by electricity generation and is generally sold at prices which reflect demand and quality. Metallurgical coal is also known as coking coal. Hard coking coal ("**HCC**") is essential for the production of a strong coke which is used primarily in the steel making process. Semi-hard coking coal ("**SHCC**") and semi-soft coking coal ("**SSCC**") are lower grades of coking coal that are often blended with HCC to reduce the overall cost of coal for steel production. SSCC can also be used as a substitute for thermal coal. Pulverised coal injection ("**PCI**") coal is generally a high calorific value coal, which is injected directly into a blast furnace to provide the carbon and heat in the iron-making process and can be used as a cost effective replacement for coking coal to some extent. The table below sets forth average coal characteristics of the coal sold by the mines we have ownership interests in and operate, and Middlemount:

Coal type	Region	Calorific value	Ash	Total moisture	Fixed carbon	Sulphur	Phosphorous	Volatile matter (%)	HGI	Free swelling index	Fluidity
		(Kcal/kg)	*(%)*	*(%)*	*(%)*	*(%)*	*(%)*	*(%)*			*(ddpm)*
Low Ash Thermal	Hunter Valley	6,322	⩽15%	10	53	0.55	0.008	31	50	NA	NA
High Ash Thermal	Hunter Valley	<6,322	>15%	10	53	0.55	0.008	31	50	NA	NA
SSCC	Hunter Valley	6,784	9.5	10	52	0.65	0.023	36	50	7	800
PCI	Queensland	6,767	11.5	9	77.8	0.68	0.096	9.2	72	NA	NA
Coking Coal	Queensland	NA	10	10	69.5	0.43	0.039	19	85	6	20

All of the coal we produce is sold for export to customers located in various key markets across the Asia Pacific region, whether directly, through overseas traders or through other Australian coal companies.

Mines we have ownership interests in and operate

Our flagship mines are Moolarben, HVO (which is operated as an unincorporated joint venture with Glencore) and MTW, which are respectively the second, third and fifth largest majority Australian-owned thermal coal mines (meaning mines for which thermal coal comprises at least 50% of saleable production) in terms of aggregate thermal and metallurgical coal production on a 100% basis in the first half of 2018. All of these mines are located in New South Wales, and in the aggregate accounted for approximately 91.6% of total attributable coal we sold from our mines in the six months ended 30 June 2018 on a pro forma basis (as if the C&A Acquisition, the Warkworth Transaction, the Glencore Transaction and the Moolarben Acquisition had been completed on 1 January 2017). All three mining operations are large, with long mine life, and produce coal at relatively low cost that is in the first and second quartiles of the FOB cash cost curve and the first quartile of the FOB cash margin curve. Our other mines in which we have ownership interests and operate include Stratford Duralie located in New South Wales and Yarrabee located in Queensland. See "*Business – Our Mining Operations*" for further details.

Middlemount joint venture

Middlemount is an open cut mine operated by Middlemount JV, an incorporated joint venture in which we have a near 50% interest. We acquired our interest in the joint venture as a result of our merger with Gloucester Coal Ltd in June 2012.

Watagan Mines

Our interests in the Ashton, Austar and Donaldson mines are held under Watagan, which is one of our wholly-owned subsidiaries. On account of certain financing transactions, however, from 31 March 2016 we were determined to have lost accounting control of Watagan and its subsidiaries and ceased to consolidate it, further details of which are set forth in "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation*".

Mining ceased at Donaldson's Abel underground mine in June 2016. Donaldson's coal operation was moved to a "care and maintenance" phase and feasibility studies have been commenced to explore potential future mining options including the introduction of a longwall mining method. As at the Latest Practicable Date, Donaldson had not recommenced operations. Moreover, during the Track Record Period, Austar experienced geotechnical issues, safety issues and suspension of longwall production as a result of coal burst incidents, which resulted in investigations and discussions with the Resources Regulator and certain prohibition notices being issued against Austar. Operations at Austar recommenced on 14 August 2018 subject to certain restrictions and remediation measures set out in a notice issued by the Resources Regulator on 3 August 2018. This prohibition notice imposes certain conditions (e.g. with respect to stress measurement tests, amongst other things) relating to mining up to a particular location in the current B4 longwall panel where the longwall equipment will then be recovered and relocated to the next longwall panel for further mining. As at the Latest Practicable Date, the prohibition notice issued on 3 August 2018 remained in force. Further details of geotechnical issues at Austar are set out in "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown", "Appendix III – JORC Coal Reserves – Reserves Comments"* and in *"Business – Health, Safety and Environmental Matters – Safety Incidents*". Furthermore, the open cut project of the Ashton operation (the "**South East Open Cut**") requires that we come to a commercial arrangement with a privately owned property which forms part of the proposed mining area. We have until April 2020 (or April 2022 if extended) to secure such an arrangement. No such arrangement has been agreed to date. We may seek to extend the deadline beyond 2022 to reach agreement with the owner of such property. Given that the South East Open Cut is not included in the Ashton mine's current five-year plan forecasts and Ashton otherwise remains fully operational, we do not expect any material near-term impact on our operations.

The following table sets forth certain information relating to each of the coal mines in which we have ownership interests and operate, the Middlemount joint venture and the Watagan Mines:

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total[11]
Background data										
Location	NSW	NSW	NSW	NSW	QLD	QLD	NSW	NSW	NSW	–
Date of initial operation	1949	1981	2010	1995	1982	2011	2005	1916	2006	–
Interest at the Latest Practicable Date (%)	51.0	Mount Thorley: 80 Warkworth: 84.5 Share of coal production: 82.9	81	100	100	49.9997	100	100	100	–
Designed annual production capacity (Mt)[4]	20.0	18.5	21.0	4.6	3.5	5.4	5.5	5.0	5.1	88.6
Permitted annual production capacity (Mt)[4]	38.0	28.0	21.0	5.6	4.0	5.7	8.6	3.6	6.1	120.6
Tenement expiry dates[5]	14 Apr 2019 – 19 Apr 2038	23 Feb 2020 – 17 Mar 2038	12 Feb 2020 – 31 Aug 2036	5 Apr 2019 – 8 Apr 2037	13 Nov 2018 – 31 May 2044	30 Apr 2020 – 30 Sep 2031	21 May 2020 – 16 May 2035	7 Dec 2018 – 3 Feb 2039	21 Jul 2019 – 30 Jun 2038	–
Remaining mine life (years)	43	23	20	35	38	20	13	17	11	–
Coal Resources (as at 30 June 2018)[4][12]										
Measured (Mt) (100% basis)	704	MT:27 W:197	OC:438 UG: 287	OC:11 UG: –	94	73	OC:25 UG: 52	70	OC: 10 UG: 178	2,165
Indicated (Mt) (100% basis)	1,430	MT:75 W:713	OC:105 UG: 131	OC:196 UG: 1	80	47	OC:49 UG: 18	80	OC: – UG: 326	3,249
Measured and Indicated (Mt) (100% basis)	2,134	MT:102 W:910	OC: 543 UG: 418	OC:207 UG: 1	174	120	OC:74 UG: 70	150	OC: 10 UG: 503	5,414
Inferred (Mt) (100% basis)	1,654	MT: 153 W: 527	OC: 69 UG: 129	OC:76 UG: 35	20	1	OC:70 UG: 15	69	OC: – UG: 95	2,913
Total (100% basis)	3,788	MT:255 W: 1,437	OC:612 UG: 547	OC:283 UG: 36	194	121	OC:144 UG: 85	219	OC: 10 UG: 598	8,327
Attributable to the Group[7]										5,916

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total[11]
Coal Reserves (proved and probable, as at 30 June 2018)[6][12]										
Coal Reserves (Mt)										
100% basis	796	MT:8 W:314	OC:189 UG: 67	44	55	87	OC:14 UG: 33	41	62	1,710
Attributable to the Group[7]										1,178
Marketable Coal Reserves (Mt)										
100% basis	554	MT:5 W:220	OC:148 UG: 67	26	42	67	OC:7.8 UG: 18	31	32	1,218
Attributable to the Group[7]										837
Product type	Met/ Thermal	Met/ Thermal	Thermal	Met/ Thermal	Met/ Thermal	Met/ Thermal	Met	Met/ Thermal	Thermal	–

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total
ROM coal production (Mt)[8]										
2015	–	–	9.0	1.9	3.4	5.5	3.0	0.8	1.8	25.4
2016	–	–	12.2	1.2	3.6	5.3	2.4	1.2	0.3	26.2
2017	19.5	17.7	14.7	0.9	3.4	5.3	2.8	2.0	–	66.3
1H2018	9.1	8.5	9.8	0.3	1.3	2.5	1.0	0.4	–	32.9
Marketable coal production (Mt)[8]										
2015	–	–	6.9	1.4	2.8	4.4	1.4	0.7	1.3	18.9
2016	–	–	9.3	0.9	3.1	4.1	1.1	1.1	0.2	19.8
2017	14.8	11.8	12.4	0.7	2.9	3.9	1.2	1.9	–	49.4
1H2018	6.4	6.0	8.8	0.2	1.1	2.1	0.4	0.4	–	25.4
Coal sales volume (Mt)[9]										
2015	–	–	5.6	1.5	3.0	–	1.3	0.6	1.4	13.4
2016	–	–	7.4	0.9	3.2	–	0.4	0.1	0.1	12.1
2017	3.1	2.5	10.2	0.7	2.8	–	–	–	–	19.3
1H2018	3.8	4.5	6.5	0.3	1.1	–	–	–	–	16.2

Notes:

(1) UG refers to underground mining operations and OC refers to open cut mining operations.

(2) HVO is operated as a 51:49 unincorporated joint venture with Glencore. The HVO JV is jointly controlled by us and Glencore through the JVMC and is operated by a manager, HV Ops, which is appointed by us and Glencore and reports to the JVMC. See "*Business – Joint Venture Agreements – HVO*" for further details of the joint venture agreement with Glencore.

(3) Owned but not controlled by us under the applicable accounting standards. See "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation", "Business – Our Mining Operations – Watagan Mines – Watagan Agreements*" and "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents or outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes including permanent shutdown*" for further details.

(4) As defined in the JORC Code and as at 30 June 2018.

(5) See "*Business – Mining and Exploration Licences – Approvals, Permits and Licences to be Obtained*" and "*Appendix III – Competent Person's Report – Appendix F. Tenements*" for further details of the expiry dates of the tenements for each mine site.

(6) As defined in the JORC Code and as at 30 June 2018.

(7) Attributable data is based on our effective ownership interest as at the Latest Practicable Date and is provided on an aggregate, not per mine, basis.

(8) Reported on a 100% basis and subject to the limitations and qualifications set forth in *"Appendix III – Competent Person's Report"*.

(9) Represents ex-mine sales volume reported on an attributable basis and does not include the sales of Middlemount, which is an incorporated joint venture, and Watagan following its deconsolidation from the Group in March 2016.

(10) HVO and MTW were not part of the Group in 2015 and 2016.

(11) Data is subject to rounding, which may result in minor tabulation differences.

(12) The coal resources and reserves stated above must be read in conjunction with the Competent Person's Report in Appendix III to this prospectus which includes disclosures required as per the JORC Code.

Managed Mines

We manage the Cameby Downs and Premier Coal mines, located in Queensland and Western Australia, respectively, on behalf of Yanzhou, our majority shareholder. The management services provided by us include corporate support (comprising human resources, treasury, payroll, insurance, financial accounting, reporting, compliance, management support, technical support, marketing and logistics, corporate communications, government and industry relations, business development, IT services and corporate procurement services), operations management (comprising carrying out exploration programs, preparing business plans, using all reasonable endeavors to meet business KPIs, preparing plans of operations as may be required by laws, and other operational services) and other general services. For the provision of these services, we charge a fee on cost plus 5% margin basis, except for any third party charges attributable to the provision of the management services which will be charged (proportionately) at cost. We will also purchase coal produced by the managed mines for back-to-back on-sale to end customers, with the purchase price being determined with reference to industry index prices and coal quality characteristics.

Production Process and Blending

We utilise large scale open cut mining methods in our open cut mining operations, which include the removal and storage of topsoil material via truck and front-end-loader ("**FEL**") methods, drilling of a blast pattern, blasting of fragment rock, excavation of waste material with truck and shovel or excavator in the upper benches and by draglines in lower benches, and digging, loading and hauling of coal via truck and excavator or FEL methods. Our open cut mines include HVO, MTW, Stratford Duralie, Middlemount and Yarrabee, as well as portions of Moolarben and Ashton.

We utilise longwall mining in our underground mining operations. Longwall mining roadways are cut by continuous miners around the perimeter of a rectangular block or panel of coal to form ventilation and access passageways. Our underground mines include Austar and portions of Moolarben and Ashton.

The products produced by our operations are a mix of premium thermal coal (<15% Ash), semi-soft coking and PCI coals together with mid – high ash thermal coals (15% – 30% Ash). Our premium grade products are typically sold to premium markets where the value of the coal can be reflected by the quality of the product. However, in some circumstances and some markets coal may be blended to satisfy customer requirements. We focus on ensuring that blends satisfy the customers' requirements, but we also pursue blending strategies to optimise our revenue return that would otherwise have been received by selling the products independently. Due to the number of pits, product types and required product specification of our customers, we have the ability to blend ROM coal and washed coal to optimise products and add value.

Infrastructure, Transport and Logistics

Product coal at each of our mines is transferred from loading points within the mines to coal carts (save for Yarrabee in Queensland which is road hauled to the Boonal load out facility on the Blackwater railway system) for transport by rail to PWCS or the Newcastle Coal Infrastructure Group ("**NCIG**") coal terminals in the Port of Newcastle (for HVO, MTW, Moolarben, Ashton, Austar and Donaldson in NSW) or Abbot Point Coal Terminal at the Port of Abbot Point or the Dalrymple Bay Coal Terminal at the Port of Hay Point (for Middlemount in Queensland) or RG Tanna or Wiggins Island Coal Terminals at the Port of Gladstone (for Yarrabee in Queensland). The table below sets forth the allocated capacity and utilisation of our port and rail allocations in 2017:

Infrastructure[(Note)]	Service provider	Capacity allocated to	Contracted capacity in 2017 (Mt)	Utilisation percentage	Excess (Mt)
New South Wales					
Port	PWCS, NGIC	Austar, Ashton, Donaldson, Hunter Valley Operations, Moolarben, Mt Thorley Warkworth, Stratford.	54.56	77%	12.63
Above Rail	Pacific National, Aurizon		42.40	96%	1.50
Below Rail	ARTC		46.13	95%	2.44
Queensland					
Port	RGTanna, WICET, APCT		6.20	92%	0.47
Above Rail	Aurizon, Pacific National	Yarrabee, Middlemount	6.20	94%	0.37
Below Rail	Aurizon Network		6.20	94%	0.37

Note:

The above rail infrastructure consists of locomotives and wagons and the below rail infrastructure consists of train tracks.

Our contracts for port and rail infrastructure are generally under long-term take-or-pay agreements with the relevant operators. See "*Business – Infrastructure, Transportation and Logistics*" for further details.

OUR CUSTOMERS AND SUPPLIERS

Our customers are located throughout the Asia-Pacific region, with South Korea, the PRC, Singapore and Japan comprising our largest jurisdictions by revenue during the Track Record Period. We have established long term relationships with major power utilities and steel mills in these and other countries. During the Track Record Period, we also supplied coal to power and steel mills in India, South America and Europe on an ad hoc basis. See "*Financial Information of the Group – Description of Major Line Items in Our Consolidated Statements of Profit or Loss and Other Comprehensive Income – Revenue*" for a breakdown of our revenue by geographic region. We also sell coal to customers in the commodities trading business, who purchase our coal for trading purposes or to on-sell the coal to their end customers. However, we are reducing our focus on trading customers in favour of end customers such as power utilities and steel mills. For the financial years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018, revenue from our five largest customers in aggregate amounted to A$630 million, A$480 million, A$839 million and A$788 million, respectively, representing approximately 47.8%, 38.8%, 32.3% and 33.8% of our revenue, respectively, and revenue from our largest customer in those periods amounted to A$247 million, A$162 million, A$216 million and A$225 million, respectively, representing approximately 19%, 13%, 8% and 9.7% of our revenue, respectively.

Our main supply contracts include those for infrastructure, fuel and electricity, explosives for blasting and critical spare parts from original equipment manufacturer suppliers. We have entered into master supply agreements at the Group level with fuel suppliers for the supply of diesel and lubricants to our mining operations. We contract with blasting services experts for the provision of explosives and related explosive application and blasting services. We also have master supply agreements for the supply of spare parts which support our heavy mining equipment. For the financial years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018, our purchases from our five largest suppliers in aggregate amounted to A$333 million, A$353 million, A$508 million and A$326 million, respectively, representing 20.8%, 24.8%, 21.5% and 23.4% of our total purchases for the relevant period, and our purchases from our largest supplier amounted to A$89 million, A$94 million, A$133 million and A$89 million, respectively, representing 5.6%, 6.6%, 5.6% and 6.4% of our total purchases for the relevant period.

MINING AND EXPLORATION LICENCES

Our mining operations in New South Wales are conducted in accordance with the conditions of Mining Leases and Coal Leases granted under the NSW Mining Act, 1992, while exploration activities are undertaken in accordance with Exploration Licences, Authorisations and Assessment Leases, each as issued by the NSW Department of Resources and Energy.

Our mining operations in Queensland are conducted in accordance with the conditions of Mining Leases granted under the *Mineral Resources Act 1989 (QLD)*, while our exploration activities are undertaken in accordance with Exploration Permits for Coal and Mineral Development Licences issued under the *Mineral Resources Act 1989 (QLD)*.

See "*Appendix III – Competent Person's Report – Appendix F. Tenements*" for details on our licences with respect to each mine.

OUR COMPETITIVE STRENGTHS

We believe that the following key strengths provide us with a competitive advantage and position us well to pursue current and future growth opportunities.

- We are Australia's largest pure-play coal producer with a seaborne business focused on major Asian export markets including the PRC.
- We have a diversified portfolio of world class assets that produce high value coal products for our major export markets.
- We have a sustainable platform for future growth.
- Our experienced management team is well positioned to pursue growth opportunities and create further shareholder value.
- We have valuable and strategic operational and trade relationships as well as strong support from our key shareholders.

See "*Business – Our Competitive Strengths*" for further details.

OUR BUSINESS STRATEGIES

We are committed to continuing our strategic growth and to maximising new opportunities to build our business as a leading low cost coal producer in the global seaborne market with a focus on creating long term value for our shareholders. Our management team remains focused on investing in the Australian resources sector, implementing operational efficiencies, reducing costs, exploring new market opportunities and providing our customers with the certainty of product quality and delivery. Key elements of our strategy include the following:

- Evaluate and execute portfolio expansion through value accretive organic and inorganic opportunities.
- Continued focus on operational efficiencies to increase mine productivity and reduce operating costs.
- Grow our business in existing markets and new markets, aided by a dynamic product mix strategy.
- Sustain financial discipline and strengthen our balance sheet to support future growth.
- Maintain high standards of safety and responsible working practices.

See "*Business – Our Business Strategies*" for further details.

KEY RISK FACTORS

Our business is subject to numerous risks and there are uncertainties relating to an investment in the Shares. These risks and uncertainties can be categorised as (i) risks relating to our business and industry and (ii) risks relating to the Global Offering. The following are some of the key risks that affect our business:

- The trading price of our Shares has been volatile and the Minimum Offer Price is higher than the recent trading price of the Shares, which may result in substantial losses for investors subscribing for or purchasing our Shares pursuant to the Global Offering.

- Coal prices are cyclical and subject to fluctuations, and any significant decline in the prices we receive for our coal products would materially and adversely affect our business, financial condition and results of operations.

- Our coal production is subject to conditions and events beyond our control that could result in high expenses and decreased supply.

- Coal markets are highly competitive and are affected by factors beyond our control.

- Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown.

- We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of operations.

- We derive a significant portion of our revenue from a limited number of customers, and the loss of, or a reduction in, sales to any of these customers could materially and adversely affect our business, financial condition and results of operations.

- Our existing and future indebtedness could restrict our financial and operational flexibility and adversely affect our financial condition.

- We may not be able to meet our capital expenditure requirements or secure additional financing on favourable terms, whether from external sources or our major shareholders, in the future.

- We have had negative reserves and accumulated losses during the Track Record Period, and did not declare or pay any dividends for 2015, 2016 or 2017.

- We operate through a number of joint venture and similar structures, and our operational and financial results will be affected by how these arrangements are managed.

- Our investments in, and obligations with respect to, the Wiggins Island Coal Export Terminal may be adversely impacted by, among other things, the insolvency of its other shareholders.

- We are exposed to fluctuations on exchange rates and interest rates.

See "*Risk Factors*" for further details.

OUR CONTROLLING SHAREHOLDERS

As at the Latest Practicable Date, Yankuang Group Company Limited ("**Yankuang**"), our ultimate controlling shareholder, was, directly and indirectly, interested in approximately 51.81% of the shares in Yanzhou, our controlling shareholder, and Yanzhou was interested in approximately 65.45% of the Shares in the Company. Yankuang is principally engaged in the production and sale of coal, coal chemicals and aluminium, power generation, machinery manufacturing and financial investments. Yanzhou is principally engaged in the production of coal and coal chemicals, manufacturing of mechanical and electrical equipment and power and heat generation. Yanzhou has been listed on the Shanghai Stock Exchange and the Hong Kong Stock Exchange since 1998.

Immediately following the completion of the Global Offering, (i) Yanzhou will be interested in approximately 62.5% of the Shares in issue (assuming the Over-allotment Option is not exercised), (ii) the Company will remain as a non-wholly owned subsidiary of Yankuang and Yanzhou and (iii) Yankuang and Yanzhou will be the controlling shareholders of the Company.

RECENT DEVELOPMENTS OF OUR BUSINESS SUBSEQUENT TO THE TRACK RECORD PERIOD

Since 30 June 2018,

(i) we have entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, for the Moolarben Acquisition. We intend to finance the Moolarben Acquisition with a portion of the expected proceeds from the Global Offering. See "*Future Plans and Use of Proceeds*" for further details; and

(ii) on 20 August 2018, we obtained a US$300 million term debt facility from certain banks which are party to our A$1,000 million bank guarantee facility from a syndicate of seven domestic and international banks. On 23 August 2018, we fully drew down the US$300 million under this facility. We used this amount to repay a portion of the Syndicated Facility, resulting in an outstanding balance on the Syndicated Facility of US$1,650 million. On 17 September 2018 and 17 October 2018, respectively, we further repaid US$150 million of our debt (US$75 million on the Syndicated Facility and US$75 million on our unsecured loans from related parties) and US$100 million of our debt (US$50 million on the Syndicated Facility and US$50 million on our unsecured loans from related parties) using excess cash flows generated from operations.

As far as the Directors are aware, other than as disclosed above, there have not been any material changes in our operations, nor in the general economic and market conditions in the regions or the industries in which we operate that materially and adversely affected our business operations or financial condition since 30 June 2018 and up to the date of this prospectus, and no material changes have occurred since the effective date of the Competent Person's Report.

SUMMARY FINANCIAL AND OPERATING INFORMATION

Summary Consolidated Statements of Profit or Loss and Other Comprehensive Income

	Year ended 31 December						Six months ended 30 June			
	2015		2016		2017		2017		2018	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
	A$ million	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*
							(unaudited)			
Revenue	1,319	100.0	1,238	100.0	2,601	100.0	832	100.0	2,347	100.0
Costs and expenses[(1)]	(1,672)	(126.8)	(1,553)	(125.4)	(2,630)	(101.1)	(885)	(106.4)	(1,980)	(84.3)
Others[(2)]	(1)	(0.1)	3	0.2	364	14.0	35	4.2	172	7.3
Income tax (expense)/benefit	63	4.8	85	6.9	(89)	(3.4)	4	0.5	(178)	(7.6)
Profit/(loss) after income tax	(291)	(22.1)	(227)	(18.3)	246	9.5	(14)	(1.7)	361	15.4
Other comprehensive (expense)/income for the year	(319)		63		404		274		(141)	
Total comprehensive (expense)/income for the year	(610)		(164)		650		260		220	

We incurred loss after tax of A$291 million in 2015 and A$227 million in 2016, due in significant part to the adverse coal price environment in those years. Our average selling price was A$80 per tonne in those years, compared to A$114 per tonne that we were able to obtain in 2017. As a consequence, our operating cash flows were negatively affected which, combined with increased finance costs, resulted in losses in those years.

Notes:

(1) Includes raw materials and consumables used, employee benefits expenses, depreciation and amortisation, transportation, contractual services and plant hire, government royalties expense, changes in deferred mining costs, coal purchases, other operating expenses and finance costs.

(2) Includes other income, changes in inventories of finished goods and work in progress and share of profit/(loss) of equity-accounted investees, net of tax. In 2017, our other income included a non-recurring gain on acquisition of A$177 million in connection with the acquisition of C&A and a reversal of impairment of mining tenements of A$100 million for the Moolarben mine, both of which were a significant contributor to our profitability in that year.

Price and Sales Volume of Coal

The table below sets forth, for the years indicated, a breakdown of our ex-mine[(1)] sales volume and average selling price between thermal and metallurgical coal[(2)], presented on an attributable basis:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
Thermal coal					
Average selling price (A$ per tonne)	68	71	102	90	117
Sales volume (Mt)	8.1	8.8	15.5	4.9	13.8
Total ex-mine thermal coal revenue (A$ million)	548	617	1,585	447	1,607
Average Newcastle 6,000 NAR spot price (A$ per tonne)[(3)]	76	90	115	107	135
Metallurgical coal					
Average selling price (A$ per tonne)	100	106	165	174	191
Sales volume (Mt)	5.3	3.3	3.8	1.3	2.4
Total ex-mine metallurgical coal revenue (A$ million)	526	350	619	224	468
Average premium hard-coking coal FOB spot price (A$ per tonne)[(3)]	118	195	246	240	273
Total coal					
Average selling price (A$ per tonne)	80	80	114	108	128
Sales volume (Mt)	13.4	12.1	19.3	6.2	16.2
Total ex-mine coal revenue (A$ million)	1,074	967	2,204	670	2,075
Coal purchases[(4)] (A$ million)	214	232	355	165	156
Other[(5)] (A$ million)	–	–	64	–	19
Total coal revenue from customers (A$ million)	1,288	1,199	2,623	835	2,250

Notes:

(1) Ex-mine coal represents coal directly produced at our mines, and excludes coal purchased from other parties.

(2) Includes our attributable interest in production from (a) in 2015, the Moolarben, Yarrabee, Stratford Duralie and Watagan mines, (b) in 2016, the Moolarben, Yarrabee, Stratford Duralie and Watagan mines (until 31 March 2016), (c) in 2017, the Moolarben, Yarrabee, Stratford Duralie, and C&A mines (HVO (67.6%) and MTW (64.1%), from 1 September 2017) and (d) in 2018, the Moolarben, Yarrabee, Stratford Duralie, and C&A mines (HVO (67.6% until 30 April 2018 and 51% thereafter) and MTW (64.1% until 28 February and 82.9% thereafter). Does not include the results of Middlemount, which is an incorporated joint venture in which we hold a 49.9997% interest. For accounting purposes, we equity account for our share of the profit or loss after tax of Middlemount as a single line item.

(3) According to the Industry Report. The A$ per tonne is calculated at an US$:A$ foreign exchange rate of 1.33, 1.35, 1.30, 1.33 and 1.33 in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. The average premium HCC price represents the most readily-available index price for metallurgical coal.

(4) Represents sales made as part of our coal blending strategy attributable to coal purchased from related parties and third parties and any increase or decrease in ex-mine revenue recognised on coal purchased from our mines. See "*Financial Information of the Group – Description of Major Line Items in Our Consolidated Statements of Profit or Loss and Other Comprehensive Income – Coal Purchases*" for further details.

(5) Other coal revenue mainly represented acquisition accounting fair value adjustments with respect to the below market customer contract with BLCP Power Limited ("**BLCP**"), which we took on as part of the C&A Acquisition and which obligates us to deliver coal to BLCP at a price that we deem to be below market relative to our long-term coal price forecast.

Operating and Production Costs

The tables below set forth, for the years indicated, a breakdown of our overall and per sales tonne costs:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ million		
Cash operating costs					
Workforce employment	227	184	299	100	253
Consumables	149	138	248	76	227
Fuel, electricity, water and other utilities services	64	49	101	33	109
Contractual services and plant hire	195	110	213	62	181
On and off site administration	17	14	22	5	12
Environmental protection and monitoring	8	5	9	4	5
Transportation of workforce	–	–	–	–	–
Product marketing and transport	261	267	312	122	274
Non-income taxes, royalties and other government charges	77	71	173	53	161
Contingency allowances	–	–	–	–	–
Total cash operating costs	998	838	1,377	455	1,222
Non-cash operating costs					
Depreciation and amortisation	200	133	256	80	244
Total production costs	1,198	971	1,633	535	1,466

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ per tonne		
Cash operating costs					
Workforce employment	17	15	15	16	16
Consumables	11	11	13	12	14
Fuel, electricity, water and other utilities services	5	4	5	5	7
Contractual services and plant hire	15	9	12	10	11
On and off site administration	1	1	1	1	1
Environmental protection and monitoring	1	1	–	1	–
Transportation of workforce	–	–	–	–	–
Product marketing and transport	19	22	16	20	17
Non-income taxes, royalties and other government charges	6	6	9	9	10
Contingency allowances	–	–	–	–	–
Total cash operating costs	75	69	71	74	76
Non-cash operating costs					
Depreciation and amortisation	15	11	14	12	15
Total production costs	90	80	85	86	91

Our total production cost per sales tonne was A$90, A$80, A$85, A$86 and A$91 in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. The decrease in 2016 was primarily due to the deconsolidation of the Watagan underground mines and reduced operations at Stratford Duralie, together with ongoing cost saving initiatives across all sites. The increase in 2017 and 2018 was primarily due to the additional depreciation and amortisation of property, plant and equipment and mining tenements recognised on the C&A Acquisition and an increase in raw materials and consumables used.

Our cash operating cost per sales tonne before non-income taxes, royalties and other government charges and contingency allowances, was A$69, A$63, A$62, A$65 and A$66 in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. The decrease in 2016 was primarily due to the deconsolidation of the Watagan underground mines and reduced operations at Stratford Duralie, together with ongoing cost saving initiatives across all sites. Between 2016 and 2017, there was a slight decrease from A$63 to A$62 per sales tonne, and between the six months ended 30 June 2017 and the six months ended 30 June 2018 there was a slight increase from A$65 to A$66 per sales tonne. Cash operating costs between these periods remained relatively unchanged despite an increase in market-driven costs of consumables such as diesel and electricity and despite the fact that in each of the former periods Moolarben (which is a low cost mine that is in the first quartile of the cash cost curve) had a materially high weighting in our overall portfolio. While HVO and MTW are higher operating cost mines than Moolarben, they still fall within the second quartile of the cash cost curve (and rank higher than Moolarben on the cash margin curve) and as such are considered low cost mines. See "*Industry Overview – Competitive Landscape – Cost Competitiveness Analysis*" and "*Financial Information of the Group – Significant Factors Affecting Our Results of Operations and Financial Condition – Operating and Production Costs*" for further details.

Summary Consolidated Statements of Financial Position

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Current assets	2,124	738	1,689	1,370
Current liabilities	(638)	(499)	(1,013)	(906)
Net current assets	1,486	239	676	464
Non-current assets	5,746	6,922	10,624	10,544
Non-current liabilities	(5,544)	(5,809)	(6,257)	(5,743)
Total equity	1,688	1,352	5,043	5,265

Indebtedness

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Indebtedness repayable within:				
Less than one year	11	20	17	17
One to two years	80	12	12	415
Two to five years	1,329	2,439	3,316	2,414
Five or more years	3,312	2,479	1,378	1,454
Total indebtedness	4,732	4,950	4,723	4,300

The above table excludes an amount of A$24 million and A$16 million as at 31 December 2017 and 30 June 2018, respectively, with respect to the fair value gain on refinancing of secured bank loans recognised during those periods on the adoption of IFRS 9. See "*Financial Information of the Group – Indebtedness*" for further details on the material terms of our indebtedness, including security interests and guarantees.

Summary Consolidated Cash Flow Statement

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ million	**(unaudited)**	
Net cash (used in)/generated from operating activities	(108)	(24)	408	282	712
Net cash (used in)/generated from investing activities	(314)	(466)	(3,449)	(133)	228
Net cash generated from/ (used in) financing activities	366	525	3,062	(14)	(698)
Net (decrease)/increase in cash and cash equivalents	(56)	35	21	135	242
Cash and cash equivalents at the beginning of the year	204	159	190	190	207
Effects of exchange rate changes on cash and cash equivalents	11	(4)	(4)	(8)	36
Transfer to assets held for sale	(5)	–	–	–	–
Cash and cash equivalents at the end of the period	154	190	207	317	485

Key Financial Ratios

	As at or for the year ended 31 December			As at or for the six months ended 30 June
	2015	**2016**	**2017**	**2018**
Return on assets[(1)]	(3.8)%	(2.9)%	2.5%	6.0%[(4)]
Return on equity[(2)]	(13.9)%	(14.9)%	7.7%	14.0%[(4)]
Gearing ratio[(3)]	2.80x	3.66x	0.93x	0.81x

Notes:

(1) Return on assets is calculated by dividing profit after income tax by average total assets and multiplying the resulting value by 100%. Average total assets equal total assets at the beginning of the period plus total assets as at the end of the period, divided by two.

(2) Return on equity is calculated by dividing profit after income tax by average total equity and multiplying the resulting value by 100%. Average total equity equals total equity at the beginning of the period plus total equity as at the end of the period, divided by two.

(3) Gearing ratio is calculated as gross debt divided by total equity at the end of the period. Gross debt consists of the total balance of interest-bearing liabilities as at the end of the period.

(4) On an annualised basis.

Non-IFRS Financial Measures

Operating EBITDA and operating EBIT are key metrics that our management uses to assess the performance of our individual segments and make decisions on the allocation of resources. Neither operating EBITDA nor operating EBIT is a standard measure under IFRS. As presented by our management, operating EBITDA represents profit or loss before income tax for the year as adjusted for net interest expense, depreciation and amortisation and any significant non-operating items, while operating EBIT represents profit or loss before income tax as adjusted for net interest expense and any significant non-operating items.

While operating EBITDA and operating EBIT provide additional financial measures for investors to assess our operating performance, the use of operating EBITDA and operating EBIT has certain limitations because they do not reflect all items of income and expense that affect our operations. In addition, operating EBITDA and operating EBIT do not reflect changes in working capital, capital expenditure or other investing and financing activities and therefore should not be considered a measure of our liquidity.

As a measure of our operating performance, we believe that the most directly comparable IFRS measure to operating EBITDA and operating EBIT is profit before income tax. The table below sets forth, for the periods indicated, a reconciliation of operating EBITDA and operating EBIT with profit before income tax under IFRS:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Profit before income tax	(354)	(312)	335	(18)	539
Adjustments for:					
Finance costs	162	209	294	105	152
Bank fees and other charges	116	113	109	49	62
Interest income	(50)	(125)	(114)	(57)	(58)
Stamp duty	–	12	167	3	16
Fair value losses recycled from hedge reserve	22	133	229	101	45
Gain on acquisition	(6)	–	(177)	–	–
Gain on disposal	–	–	–	–	(78)
Impairment reversal of mining tenements for Moolarben	–	–	(100)	–	–
Gain on refinance	–	–	(31)	–	–
GILTs and WIPs remeasurement and impairment[(1)]	–	–	–	–	50
Transaction costs	–	3	33	21	10
JV receipt	–	–	(5)	(5)	–
Royalty remeasurement	(2)	6	(8)	(2)	(2)
Operating EBIT	(112)	39	732	197	736
Adjustment for depreciation and amortisation	200	133	256	80	244
Operating EBITDA	88	172	988	277	980

Note:

(1) GILTs and WIPs represent our investments in long-term securities and preference securities, respectively, issued by WICET Holdings Pty Limited. See "*Risk Factors – Our investments in, and obligations with respect to, the Wiggins Island Coal Export Terminal may be adversely impacted by, among other things, the insolvency of its other shareholders*."

In 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, our operating EBIT margin (calculated as operating EBIT divided by revenue and multiplied by 100%) was (8.5)%, 3.2%, 28.1%, 23.7% and 31.4%, respectively, while our operating EBITDA margin (calculated as operating EBITDA divided by revenue and multiplied by 100%) was 6.7%, 13.9%, 38.0%, 33.3% and 41.8%, respectively.

Operating EBITDA and operating EBIT should not be considered in isolation or construed as a substitute for analysis of IFRS financial measures. In addition, because operating EBITDA and operating EBIT may not be calculated in the same manner by all companies, our operating EBITDA and operating EBIT may not be comparable to the same or similarly titled measures presented by other companies.

UNAUDITED PRO FORMA CONSOLIDATED FINANCIAL INFORMATION OF THE ENLARGED GROUP

The table below sets forth selected unaudited pro forma combined income statement data for the year ended 31 December 2017 and the six months ended 30 June 2018 as if the C&A Acquisition, the Glencore Transaction and the Warkworth Transaction (together, the "**Pro Forma Transactions**") had been completed on 1 January 2017. Such pro forma financial information has been prepared using the procedures and adjustments as described in more detail in Appendix IIB to this prospectus, and should be read in conjunction with the related notes thereto.

		Pro forma adjustments[1] for		
	The audited Group as at the six months ended 30 June 2018[2]	Acquisition of additional 28.9% interest in Warkworth	Disposal of 16.6% interest in HVO	Unaudited pro forma consolidated statement of profit or loss of the Group for the six months ended 30 June 2018
		A$ million		
Revenue	2,347	48	(89)	2,306
Other income	115	–	(78)	37
Changes in inventories of finished goods and work in progress	24	1	–	25
Raw materials and consumables used	(337)	(9)	18	(328)
Employee benefits	(254)	(5)	10	(249)
Depreciation and amortisation	(244)	(4)	–	(248)
Transportation	(274)	(3)	7	(270)
Contractual services and plant hire	(206)	(5)	11	(200)
Government royalties	(161)	(4)	7	(158)
Coal purchases	(182)	–	–	(182)
Other operating expenses	(170)	–	3	(167)
Finance costs	(152)	–	(1)	(153)
Share of profit of equity-accounted investees, net of tax	33	–	–	33
Profit before income tax	539	19	(112)	446
Income tax expenses	(178)	(6)	34	(150)
Profit for the period	361	13	(78)	296

	The audited Group for the year ended 31 December 2017	Audited C&A for the eight months ended 31 August 2017	Pro forma adjustments[1] for: Adjustment for acquisition accounting on C&A Acquisition, including 55.6% interest in Warkworth & 67.6% interest in HVO	Pro forma adjustments[1] for: Acquisition of additional 28.9% interest in Warkworth	Pro forma adjustments[1] for: Disposal of 16.6% interest in HVO	Unaudited pro forma consolidated statement of profit or loss of the Enlarged Group for the year ended 31 December 2017
	A$ million					
Revenue	2,601	1,424	46	261	(288)	4,044
Other income	325	26	–	–	78	429
Changes in inventories of finished goods and work in progress	7	(11)	–	3	(2)	(3)
Raw materials and consumables used	(349)	(274)	–	(50)	56	(617)
Employee benefits	(302)	(140)	–	(33)	27	(448)
Depreciation and amortisation	(256)	(78)	(97)	(27)	–	(458)
Transportation	(312)	(110)	26	(19)	20	(395)
Contractual services and plant hire	(274)	(169)	–	(26)	39	(430)
Government royalties	(173)	(111)	–	(21)	23	(282)
Coal purchases	(340)	–	–	–	–	(340)
Other operating expenses	(330)	(26)	–	(19)	7	(368)
Finance costs	(294)	(3)	(10)	–	1	(306)
Share of profit of equity-accounted investees, net of tax	32	(16)	–	–	–	16
Profit/(Loss) before income tax	335	512	(35)	69	(39)	842
Income tax (expense)/benefit	(89)	169	(320)	(20)	12	(248)
Profit/(Loss) for the year	246	681	(355)	49	(27)	594

Note:

(1) See the Unaudited Pro Forma Consolidated Financial Information of the Enlarged Group in Appendix IIB to this prospectus for further details on the adjustments for the Pro Forma Transactions.

(2) Includes the financial results of C&A for the six months ended 30 June 2018.

FUTURE PLANS AND USE OF PROCEEDS

The net proceeds from the Global Offering which the Company will receive, after deducting the underwriting commissions and the estimated expenses in relation to the Global Offering and assuming the Over-allotment Option is not exercised, will be:

- approximately HK$1,183 million, assuming an Offer Price of HK$23.48 (being the Minimum Offer Price);
- approximately HK$1,251 million, assuming an Offer Price of HK$24.66 (being the mid-point of the Offer Price Range); or
- approximately HK$1,320 million, assuming an Offer Price of HK$25.84 (being the Maximum Offer Price).

The Company intends to use the net proceeds of HK$1,251 million, assuming an Offer Price of HK$24.66 (being the mid-point of the Offer Price Range), from the Global Offering as follows:

- approximately HK$600.7 million (or approximately 48% of the net proceeds) will be used to repay outstanding indebtedness of the Group under the Syndicated Facility and, potentially, unsecured loans from related parties. The Syndicated Facility has an interest rate of LIBOR plus 2.8% to 3.1% plus Yanzhou guarantee fees and the unsecured loans from the related parties have an interest rate of 7%. The Syndicated Facility matures in instalments and the unsecured loans from the related parties are due between 2022 and 2024. In each case, the loans have been utilised primarily to finance our capital expenditure and working capital requirements. (See "*Financial Information of the Group – Indebtedness*" for further details);

- approximately HK$375.4 million (or approximately 30% of the net proceeds) will be used to finance potential acquisitions (as at the Latest Practicable Date, the Company has not identified any targets to be acquired). In deciding whether to invest in or acquire a particular asset or business, we consider multiple key factors, including, among others (i) strategic value-accretion, (ii) the return on investment and (iii) future growth potential and the level of synergies created by the investment;

- approximately HK$150.2 million (or approximately 12% of the net proceeds) will be used to finance the acquisition of an additional 4% interest in the unincorporated Moolarben joint venture (see "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Moolarben Acquisition*" for further details); and

- approximately HK$125.1 million (or approximately 10% of the net proceeds) will be used for working capital and general corporate purposes.

In the event that the Offer Price is fixed at a higher or lower level compared to the mid-point of the Offer Price Range, the net proceeds from the Global Offering will be allocated to the above purposes on a *pro rata* basis, except that if the proceeds to be allocated to the Moolarben Acquisition exceed the purchase price, the difference will be reallocated to repay outstanding indebtedness of the Group under the Syndicated Facility and, potentially, unsecured loans from related parties.

DIVIDENDS AND DIVIDEND POLICY

We did not declare or pay any dividends during the Track Record Period. On 15 August 2018, we declared a dividend of approximately A$130 million on our ordinary shares, which was paid on 21 September 2018. Subject in each case to applicable laws, the ongoing cash needs of the business, the statutory and common law duties of the Directors and shareholders' approval, the Directors may pay interim and/or final dividends, and in accordance with our Constitution must:

(i) subject to (ii) below, pay as interim and/or final dividends not less than 40% of net profit after tax (pre-abnormal items) in each financial year; and

(ii) if the Directors determine that it is necessary in order to prudently manage our financial position, pay as interim and/or final dividends not less than 25% of net profit after tax (pre-abnormal items) in any given financial year.

Our Australian legal advisers have advised that under Australian law, a company is able to pay dividends out of current year profits even though it has accumulated losses, and there is no restriction in our Constitution that would prevent current year profits from being paid out as dividends in this way. Accordingly, the Company's accumulated losses do not prevent it from being able to pay dividends, provided that current year profits are not used to offset prior period losses and the Company is otherwise able to satisfy the other legal requirements of paying a dividend under Australian law. As a result, the amount of any dividends to be declared or paid will depend on, among other things, our results of operations, cash flows, financial condition, operating and capital requirements and applicable laws and regulations.

GLOBAL OFFERING STATISTICS

	Based on an Offer Price of HK$23.48	Based on an Offer Price of HK$25.84
Market capitalisation of our Shares[(1)]	HK$30,888 million	HK$33,993 million
Unaudited pro forma adjusted net tangible asset value per Share[(2)]	HK$23.54	HK$23.65

Notes:

(1) The calculation of the market capitalisation is based on the assumption that 1,315,513,656 Shares will be in issue and outstanding immediately following the Global Offering (assuming the Over-allotment Option is not exercised).

(2) The unaudited pro forma adjusted net tangible asset value per Share is calculated after the adjustments referred to in the Unaudited Pro Forma Financial Information in Appendix IIA to this prospectus and on the basis of 1,315,513,656 Shares in issue immediately following the Global Offering (assuming the Over-allotment Option is not exercised).

The Company is applying for the Listing under the market capitalisation/revenue test of Rule 8.05(3) of the Listing Rules.

AUSTRALIAN ENTITLEMENT OFFER

In connection with the Global Offering, the Company will undertake an accelerated renounceable entitlement offer (or rights offer) of its Shares to the existing Shareholders of the Company (i.e. the Australian Entitlement Offer) which is expected to be announced on Friday, 30 November 2018. The Australian Entitlement Offer is made in compliance with the ASX Listing Rules.

Pursuant to the Australian Entitlement Offer, the Company will issue up to 67,667,409 Shares (representing an offer ratio of 0.05387 new Shares for each existing Share held) at the same price as the final Offer Price for the Global Offering. The Australian Entitlement Offer will be launched shortly after the Offer Price under the Global Offering has been determined. The Offer Shares to be offered pursuant to the Global Offering (other than any Shares which may be issued pursuant to the Over-allotment Option) will form part of the Shares offered pursuant to the Australian Entitlement Offer, as further explained below.

The Australian Entitlement Offer will consist of two tranches as follows:

(a) **institutional tranche:** this will comprise the offer of rights to subscribe for 59,441,900 Shares to the Company's major shareholders, being Yanzhou, CSIL and Cinda (the "**Major Shareholders**"), which hold in aggregate approximately 87.8% of the Shares as at the Latest Practicable Date. The institutional tranche will be conducted immediately following the launch of the Australian Entitlement Offer and settlement of the institutional tranche will take place on the Listing Date; and

(b) **retail tranche**: this will comprise the offer of rights to subscribe for 8,225,509 Shares to the Company's existing Shareholders (other than the Major Shareholders), which hold in aggregate approximately 12.2% of the Shares as at the Latest Practicable Date. The retail tranche will be open for a period of 8 business days commencing from the business day after the Listing Date.

The Major Shareholders have agreed to renounce their rights to participate in the institutional tranche of the Australian Entitlement Offer in respect of an aggregate of 59,441,900 Shares, representing approximately 87.8% of the Shares to be offered pursuant to the Australian Entitlement Offer. Those Shares which are renounced by the Major Shareholders will comprise the Offer Shares which will be offered to investors in the Global Offering.

The remaining approximately 12.2% of the Shares to be offered pursuant to the Australian Entitlement Offer (i.e. 8,225,509 Shares) will not form part of the Global Offering and will be made available in the retail tranche of the Australian Entitlement Offer. Existing Shareholders of the Company (other than the Major Shareholders) may take up their rights or renounce them privately in the retail tranche of the Australian Entitlement Offer. The Shares relating to any unexercised rights at the close of the retail tranche of the Australian Entitlement Offer will be offered in an institutional bookbuild to be conducted in Australia during a business day that is within 4 business days after the close of the retail tranche of the Australian Entitlement Offer. Any proceeds received in excess of the offer price for the Australian Entitlement Offer (net of any expenses and withholdings as required by law) will be returned to the renouncing Shareholders. There is no guarantee that the renounced entitlements will be sold or that a premium will be achieved from any such sale.

The Australian Entitlement Offer is not underwritten (other than to the extent that the Shares of the Major Shareholders are included in the Global Offering in the manner described above). Therefore, the number of Shares to be issued by the Company upon completion of the Australian Entitlement Offer will depend on the extent of the rights being taken up by the existing Shareholders of the Company (or by their assignees) and may not necessarily result in all the Shares offered under the Australian Entitlement Offer being issued.

The Shares to be issued pursuant to any exercise of the Over-Allotment Option will be issued by the Company pursuant to its general power under the ASX Listing Rules to issue shares up to 15% of its issued share capital, and will constitute up to 0.71% of the Company's issued share capital at the date of this prospectus.

LISTING EXPENSES

Total expenses (including estimated underwriting commissions) expected to be incurred in relation to the Listing are A$37.4 million (HK$214.5 million), of which approximately A$29.7 million (HK$170.3 million) is expected to be charged to the consolidated statement of profit or loss of the Group and approximately A$7.7 million (HK$44.2 million) is expected to be capitalised.

Company	Yancoal Australia Ltd
Global Offering	Global offering of initially 59,441,900 Offer Shares (excluding the Shares to be offered pursuant to the exercise of the Over-allotment Option) comprising the following:
Hong Kong Public Offering	5,944,200 Shares (subject to reallocation).
International Offering	53,497,700 Shares (subject to reallocation and the over-allotment option).
Over-allotment Option	Up to 8,916,200 additional Offer Shares representing not more than approximately 15% of the number of Offer Shares initially being offered under the Global Offering, to be issued by the Company.
Offer Price Range	HK$23.48 to HK$25.84.
Price Determination	The Offer Price is expected to be determined on or about Thursday, 29 November 2018 and, in any event, not later than Wednesday, 5 December 2018.
Lock-up Undertakings	• The Company – six months from the Listing Date. • Each of the Controlling Shareholders – six months absolute lock-up and six months lock-up on disposal of Shares that would result in it ceasing to be a controlling shareholder of the Company.
Market Capitalisation at Listing	Expected to be between HK$30,888 million (based on the Minimum Offer Price) and HK$33,993 million (based on the Maximum Offer Price) (assuming the Over-allotment Option is not exercised).
Listing and Trading	Expected to commence on Thursday, 6 December 2018.
Board Lot	100 Shares

See "*Underwriting*" and "*Structure of the Global Offering*" for further details.

DIRECTORS' RESPONSIBILITY FOR THE CONTENTS OF THIS PROSPECTUS

This prospectus, for which the Directors collectively and individually accept full responsibility, includes particulars given in compliance with the Companies (Winding Up and Miscellaneous Provisions) Ordinance, the Securities and Futures (Stock Market Listing) Rules (Chapter 571V of the Laws of Hong Kong) and the Listing Rules for the purpose of giving information to the public with regard to the Group.

The Directors, having made all reasonable enquiries, confirm that to the best of their knowledge and belief the information contained in this prospectus is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement herein or this prospectus misleading.

INFORMATION AND REPRESENTATION

The Company has issued this prospectus solely in connection with the Hong Kong Public Offering and the Hong Kong Offer Shares. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities other than the Hong Kong Offer Shares offered by this prospectus pursuant to the Hong Kong Public Offering. This prospectus may not be used for the purpose of, and does not constitute, an offer or invitation in any other jurisdiction or in any other circumstances. No action has been taken to permit a public offering of the Offer Shares in any jurisdiction other than Hong Kong and no action has been taken to permit the distribution of this prospectus in any jurisdiction other than Hong Kong. The distribution of this prospectus and the offering and sale of the Offer Shares in other jurisdictions are subject to restrictions and may not be made except as permitted under the applicable securities laws of such jurisdictions pursuant to registration with or authorisation by the relevant securities regulatory authorities or an exemption therefrom.

You should only rely on the information contained in this prospectus and the Application Forms to make your investment decision. Neither the Company nor any of the Relevant Persons has authorised anyone to provide you with any information or to make any representation that is different from what is contained in this prospectus. No representation is made that there has been no change or development reasonably likely to involve a change in the Group's affairs since the date of this prospectus or that the information contained in this prospectus is correct as at any date subsequent to its date.

FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. All statements other than statements of historical fact contained in this prospectus, including, without limitation:

(a) the discussions of our business strategies, objectives and expectations regarding our future operations, margins, profitability, liquidity and capital resources;

(b) any statements concerning the future development of, and trends and conditions in, the coal market and the general economy of the countries in which we operate or plan to operate;

(c) any statements concerning our ability to control costs;

(d) any statements concerning the nature of, and potential for, the future development of our business; and

(e) any statements preceded by, followed by or that include words and expressions such as "expect", "believe", "plan", "intend", "estimate", "forecast", "project", "anticipate", "seek", "may", "will", "ought to", "would", "should" and "could" or similar words or statements,

as they relate to the Group or our management, are forward-looking statements.

These statements are based on assumptions regarding our present and future business, our business strategies and the environment in which we will operate. These forward-looking statements reflect our current views as to future events and are not a guarantee of our future performance. Forward-looking statements are subject to certain known and unknown risks, uncertainties and assumptions, including the risk factors described in "*Risk Factors*". Important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements include, among other things, the following:

- our operations and business prospects, including without limitation, our production volume or capacity;
- the ownership and consolidation status of our mines, whether owned and operated by us or through joint ventures;
- our future debt levels and capital needs;
- developments in our business strategies and business plans;
- future developments, demand and price trends and other conditions in the coal and coal-related products market in the Asia-Pacific region;
- regulatory changes affecting, among other things, the coal industry, accounting standards and taxes;
- general economic conditions;
- changes in relationships with our customers;
- our relationships with contractors and suppliers and ability to negotiate favourable agreement terms;
- effectiveness of our risk management and health, safety and environmental controls;
- developments of our competitors and other competitive pressures within the coal industry; and
- developments in alternative energy sources to coal.

Subject to the requirements of applicable laws, rules and regulations, we do not have any obligation, and undertake no obligation, to update or otherwise revise the forward-looking statements in this prospectus, whether as a result of new information, future events or developments or otherwise. As a result of these and other risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus might not occur in the way we expect or at all. Accordingly, you should not place undue reliance on any forward-looking information. All forward-looking statements contained in this prospectus are qualified by reference to the cautionary statements set out in this section as well as the risks and uncertainties discussed in "*Risk Factors*".

In this prospectus, statements of or references to our intentions or that of any of the Directors are made as at the date of this prospectus. Any of these intentions may change in light of future developments.

An investment in the Shares involves a high degree of risk. Prospective investors should carefully consider the following risk factors, together with all other information contained in the prospectus, before deciding whether to invest in the Shares. If any of the following events occur or if these risks or any additional risks not currently known to us or which we now deem immaterial materialise, our business, financial condition, results of operations and our ability to meet our financial obligations could be materially and adversely affected. The market price of the Shares could fall significantly due to any of these events or risks or such additional risks, and you may lose your investment. The order in which the following risks are presented does not necessarily reflect the likelihood of their occurrence or the relative magnitude of their potential material adverse effect on our business, financial condition, results of operations and prospects.

RISKS RELATING TO OUR BUSINESS AND INDUSTRY

Coal prices are cyclical and subject to fluctuations, and any significant decline in the prices we receive for our coal products would materially and adversely affect our business, financial condition and results of operations.

Substantially all of our revenue is derived from the sale of coal products, and therefore our results of operations are highly dependent upon the prices we receive for our coal. In developing our business plan and operating budgets, we make certain assumptions regarding future coal prices and demand for coal. Coal prices are cyclical and fluctuate depending on conditions in the global and regional coal markets. These markets are sensitive to changes in coal mining capacity and output levels, the outcome of future sale contract negotiations, patterns of demand and consumption of coal, environmental, coal import and other regulations, technological developments, the price and availability of competing coal and alternative fuel supplies, changes in international freight rates or other transportation infrastructure costs, changes in foreign exchange rates, labour disruptions, economic downturns, the status of global, regional and local credit markets, and other macroeconomic conditions. As a consequence of any of these factors, the underlying coal price assumptions relied on by us may change and actual coal prices and demand may differ from those expected.

Specifically, the prices for our coal products are affected by conditions in the Asia-Pacific region, particularly in the major coal supplying countries such as Australia and Indonesia, and the major coal consumption countries such as the PRC, India, Japan and South Korea, as well as the coal consumption patterns of the electricity generation and steel industries which are the principal end consumers of our coal products. Power generation from coal remains a cost-effective form of energy, and new thermal generation capacity continues to be installed, in many of our key Asian markets. However, the increasing focus on renewable energy generation and environmental regulations, and the consequential decline in electricity generation from fossil fuels, is expected to result in the share of coal powered electricity generation reducing from 41% of global electricity generation in 2017 to 39% by 2020. A decrease in thermal electricity generation may consequently result in reduced demand for thermal coal. Demand for metallurgical coal, which is widely used in steel production, may decline if adverse conditions in the infrastructure and property sectors in our key markets result in lower demand for steel. The PRC's rapid economic growth, its investment in major infrastructure projects and its shift from being a net exporter of coal to a net importer was a major contributor to the growth in coal demand in the past decade. The pace of economic growth in the PRC has slowed, and while there is optimism regarding demand

for metallurgical coal in markets such as India in the long term, this may not be sufficient to replicate the scale of the PRC's demand over the past decade. See "*Industry Overview*". Coal demand and prices may also be affected by the recent tariffs imposed by the U.S. government on steel and other products imported from various countries. In response, certain countries have imposed tariffs on U.S. exports, and others have sought recourse to the World Trade Organisation. While we are not able to predict the outcome of these trade disputes or their effect on our business, it is possible that they will affect demand and prices in our industry.

Local factors also affect coal prices. With the PRC government, which has had significant influence on coal supply and demand, relaxing its domestic production restrictions in December 2016, premium thermal coal spot prices have moved over a broad range from US$98.5 per tonne at the end of 2016 to a low of US$71 per tonne in May 2017 to a high of US$123 per tonne in July 2018. Hard coking coal prices were affected when Cyclone Debbie struck the Queensland coast in 2017, resulting in a substantial increase in the price of premium hard coking coal to an average of US$209 per tonne for the year, an increase of approximately US$100 per tonne compared to 2016. See "*Industry Overview*" and "*Financial Information of the Group – Significant Factors affecting our Results of Operations and Financial Condition – Price and Sales Volume of Coal – Sales Price*". Strong demand and limited supply due to these and other factors have resulted in high coal prices prevailing in the market since the middle of 2017. Both thermal coal and metallurgical coal prices are expected to decline in the next few years.

In November 2018 China imposed a quota on imports of coal, following which China has halted coal imports for the remainder of the year. We believe that this development will not have a material impact on us. However, if the Chinese government were to impose stricter import quotas for 2019 or future periods, our revenues and results of operations in future periods could be adversely affected, unless we are able to find alternative destinations for the coal we designate for export to China.

Our sales contracts provide for either fixed or indexed pricing arrangements. In 2015, 2016 and 2017 and the six months ended 30 June 2018, approximately 7.0%, 12.5%, 9.5% and 9.0% of our coal sales were made pursuant to fixed price arrangements with a term of more than 12 months and approximately 93.0%, 87.5%, 90.5% and 91.0% of our coal sales were made pursuant to indexed pricing arrangements referenced to various product categories, such as the globalCOAL NEWC index, API5 and Platts. However, spot pricing has become significantly prevalent in the market, particularly for metallurgical coal, which may contribute to price fluctuations as buyers and sellers on the spot market are more sensitive to market volatility. If we are required to renegotiate or adjust prices under our coal supply agreements in a manner that results in a sustained decline in the prices we receive for our coal products, our business, financial condition and results of operations would be materially and adversely affected.

Our coal production is subject to conditions and events beyond our control that could result in high expenses and decreased supply.

Our financial performance is dependent on our ability to sustain or increase coal production and maintain or decrease operating costs on a per tonne basis. Our coal production and production costs are subject to conditions and events beyond our control

which could disrupt our operations and have a significant impact on our financial results. Adverse operating conditions and events that we have experienced in the past or may experience in the future include:

- changes or variations in coal quality or geologic, hydrologic or other conditions, such as deterioration of seam quality, variations in the thickness of the coal seams, excessive groundwater or inability to safely or economically manage gas risks;

- critical mining, processing and loading equipment failures and unexpected maintenance problems, such as unforeseen delays or complexities in installing and operating longwall mining systems;

- difficulties associated with mining under or around surface obstacles;

- adverse weather and natural disasters, such as heavy rains and flooding, lightning strikes, hurricanes or earthquakes;

- accidental mine water discharges, coal slurry releases and failures of an impoundment or refuse area;

- ground or slope failures;

- excessive drought leading to a lack of efficiencies in the operation of site water;

- mine safety accidents, including fires and explosions from methane and other sources (see also "*– Our operations may be affected by uncertain mining conditions and we may suffer losses resulting from mining safety incidents, which may not be covered by our insurance*.");

- a shortage of skilled and unskilled labour;

- strikes and other labour-related interruptions;

- security breaches or terrorist acts;

- fatalities, personal injuries or property damage arising from unexpected hazards or incidents; and

- competition or conflicts with other natural resource extraction activities and production within our operating areas.

These conditions and events could also adversely affect the value of our coal inventories, which we state at the lower of cost, which is assigned on a weighted average basis and includes direct materials, direct labour and certain overheads, and net realisable value, which is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. We write down coal stocks from cost to net realisable value when we determine that such write down is appropriate in the course of assessing our stocks for obsolescence. Coal stock write downs amounted to A$12 million, A$1 million, A$1 million and A$1 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively.

Our coal supply agreements typically require the delivery of a fixed or minimum quantity of coal at a location, at a time and over a period stipulated in the agreement. To the extent that any contracted volumes cannot be delivered as agreed, we may be liable to pay compensation for the resulting losses, costs and charges (including demurrage) incurred by the buyer. Further, there may be changes in the costs of our mining and processing operations as well as capital costs, including due to unforeseen events such as international and local economic and political events, movements in exchange rates or unexpected geological or mining conditions. Any disruption of our operations or increase in costs due to any of the events or conditions described above or otherwise could have a material adverse effect on our business, financial condition and results of operations.

In addition, our mining operations are concentrated in a limited number of mines. Our three flagship mines, HVO (which is operated as an unincorporated joint venture with Glencore), MTW and Moolarben, together accounted for approximately 91.6% of the total coal sales (on an attributable basis) from our mines in the six months ended 30 June 2018 on a pro forma basis (as if the Moolarben Acquisition, the C&A Acquisition, the Warkworth Transaction and the Glencore Transaction had been completed on 1 January 2017), as well as 93.3% of the Coal Reserves and 93.6% of the Marketable Coal Reserves in mines we have ownership interests in and operate as at 30 June 2018 (on a 100% basis). As a result, the effects of any of these conditions or events may be exacerbated and may have a disproportionate impact on our business, financial condition and results of operations.

Coal markets are highly competitive and are affected by factors beyond our control.

We face competition in all aspects of our business, including sales and marketing, pricing of coal, production capacity, coal quality and specifications, transportation capacity, cost structure and brand recognition. Our coal business competes in the domestic and international markets with other large domestic and international coal producers. In addition, ongoing consolidation in the Australian coal industry has increased the level of competition we face. Our competitors in Australia include Peabody Energy, Whitehaven, Centennial Coal and New Hope among the pure-play coal producers, and Glencore, BHP and Anglo American among the diversified mining companies. Our principal competitors in the Asian seaborne market include major Indonesian coal companies such as PT Bumi Resources Tbk and PT Adaro Energy Tbk. We also face competition in our end markets such as the PRC and India, as well as from other coal exporting nations such as the United States, Canada, South Africa, Colombia and Russia.

Production costs are a key competitive differentiator in the coal mining business. Factors that directly influence coal producers' production costs include the geological characteristics of their coal deposits such as the depth of underground reserves (for underground mines) and the strip ratio of open cut reserves (for open cut mines), transportation costs, and labour availability and cost. Furthermore, our competitors may have higher production capacities, stronger brand names and better financial, marketing, distribution and other resources than we do. We may not be able to maintain our competitiveness if changes or developments in the market weaken our existing competitive advantages. Efforts by our competitors to improve the quality of their coal may render obsolete or irrelevant any competitive advantage we have over them. Over the past two decades, a growing world coal market and increased demand for coal worldwide have attracted new investors to the coal industry, encouraged the development of new mines and the expansion of existing mines in various countries,

including Australia and the PRC, and resulted in added production capacity throughout the industry. Subsequent overcapacity in the industry has contributed, and may in the future contribute, to lower coal prices. Our inability to maintain our competitive position as a result of these or other factors could have a material adverse effect on our business, financial condition and results of operations.

Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown.

In 2017, the Austar mine, which is owned by Watagan and managed by us, produced approximately 1.7 Mt of semi-hard coking product coal and as at 30 June 2018 had JORC ROM Coal Reserves totalling 41 Mt and Marketable Coal Reserves totalling 31 Mt. Multiple incidents have occurred at the mine due to coal bursts and other occurrences. A major incident in the maingate A9 development panel in the Stage 3 area of the Austar mine on 15 April 2014 led to the death of two workers. The Resources Regulator, which is now part of the Department of Planning and Environment of the New South Wales government, regarded the incident as serious and a possible contravention of health and safety laws, and conducted an investigation into the matter including the mine's safety managements systems and the level of compliance with health and safety laws by officers. The investigation identified that the incident was a result of a pressure burst of such magnitude and volume as to render the installed rib support ineffective. Following the investigation, the Resources Regulator notified Yancoal Australia Ltd and Austar Coal Mine Pty Ltd in April 2016 that it had decided not to institute prosecution proceedings.

On 19 August 2016, a coal burst occurred in longwall panel B2 in the Bellbird South working area of the Austar mine. A prohibition notice was issued by the Resources Regulator in relation to the incident. A prohibition notice is a direction to prohibit an activity issued when a mine inspector reasonably believes that there is a serious risk emanating from an immediate or imminent exposure to a hazard. The prohibition notice in relation to the Austar mine was cancelled on 14 September 2016. Additional safety controls were implemented at the mine, including the introduction of coal burst protection conveyor mats supported from the flippers of the longwall shields, the deployment of restricted face zones on the longwall face and the use of shield flippers to provide protection to workers, and these controls have been subsequently improved over time. No proceedings were commenced by the Resources Regulator in relation to this incident and the option of the Resources Regulator to commence such proceedings expired on 19 August 2018.

On 2 February 2018, an initial coal burst occurred in longwall panel B4 of the Bellbird South area of the Austar mine which resulted in minor injuries to a worker. A prohibition notice was issued as a result of that incident. This notice was varied by a replacement prohibition notice on 8 February 2018 which ceased to have effect on 21 February 2018. Subsequently, a series of coal bursts occurred in longwall panel B4 in the Bellbird South area of the Austar mine on 21 February 2018, 23 February 2018, 13 March 2018 and 15 March 2018, none of which resulted in any injuries to workers although the 23 February 2018 event caused damage to the longwall shearer. Another coal burst occurred on 16 March 2018, and while no injuries were caused a prohibition notice was issued by the Resources Regulator. This prohibition notice was subsequently replaced with a fresh prohibition notice on 9 April 2018, which was in turn replaced by another notice on 12 May 2018 that allowed limited mining activities. An additional coal

burst occurred on 17 May 2018 which did not result in any injuries, but caused damage to the longwall shearer and resulted in another prohibition notice being issued on 18 May 2018.

Between 19 February 2018 and 24 May 2018, we made a series of submissions to the Resources Regulator seeking to have the prohibition notices dated 12 May 2018 and 18 May 2018 cancelled. On 1 June 2018, we were notified by the Resources Regulator that its investigation unit had commenced an investigation into all coal bursts that have occurred at the Austar mine since 15 April 2014. As part of this investigation, four notices to obtain documents, information and evidence were issued, which were complied with on 22 June 2018, 27 June 2018, 31 July 2018 and 15 August 2018 respectively, as required. Inspectors from the investigation unit commenced interviews with longwall deputies in the last week of July 2018 and their investigation is ongoing and the results are pending. Four further notices to obtain documents, information and evidence were issued by a separate section of the Resources Regulator, which were complied with on 26 June 2018, 10 July 2018, 20 August 2018 and 24 August 2018 respectively, as required.

Following agreement as to the provision of limited information to the Resources Regulator, the two prohibition notices dated 12 May 2018 and 18 May 2018 were cancelled on 30 July 2018 and 3 August 2018, respectively. Operations at Austar recommenced on 14 August 2018 subject to certain restrictions and remediation measures set out in a notice issued by the Resources Regulator on 3 August 2018. This prohibition notice imposes certain conditions (e.g. with respect to stress measurement tests, amongst other things) relating to mining up to a particular location in the current B4 longwall panel where the longwall equipment will then be recovered and relocated to the next longwall panel for further mining. On 30 August 2018 operations were halted on account of technical issues related to de-stressing activity in certain areas of the long wall, and on 5 September 2018 a prohibition notice was received relating to this activity which was cancelled on 28 September 2018. As at the Latest Practicable Date, the prohibition notice issued on 3 August 2018 remained in force. The nature of the geological and technical challenges faced at the Austar mine exposes us to the risk of future prohibition notices and production delays at the mine.

For further details, see "*Business – Health, Safety and Environmental Matters – Safety Incidents*."

These incidents have resulted in production shutdowns, increased expenses and consequent loss of revenue from the Austar mine. Ongoing work is being undertaken by Watagan in respect of the very challenging geological and geotechnical conditions at the mine, including both the Bellbird South and Stage 3 areas. If similar incidents occur in the future or if it is determined by Watagan that normal operations cannot be recommenced or continued at Austar, or production needs to be stopped indefinitely or permanently, it is likely that the fair value of the mine will be reduced materially, which would adversely affect our financial condition and results of operations.

We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of operations.

Effective on and from 31 March 2016, the Company entered into certain financing arrangements with Watagan (a newly established subsidiary of the Company at the time), Industrial Bank Co., Ltd ("**IBC**"), BOCI Financial Products Limited ("**BOCIF**") and United NSW Energy Limited ("**UNE**" and together, the "**Bondholders**"). These

arrangements involved the issue of US$775 million nine-year secured bonds by Watagan to IBC, BOCIF and UNE (the "**Watagan Bonds**"), a loan facility agreement between Watagan and the Company, and certain other agreements or deeds ancillary to the issue of the bonds (together, the "**Watagan Agreements**").

In accordance with the terms of the Watagan Agreements, our interests in the Ashton, Austar and Donaldson mines were transferred to Watagan for consideration of A$1,363 million (equal to the book value of the three mines at the time). Watagan fully funded the purchase with an A$1,363 million loan from us bearing interest at the bank bill swap bid rate on the first day of each interest period plus 7.06% with a maturity date of 1 April 2025. The outstanding interest and principal of this loan is guaranteed by Yankuang, our ultimate controlling shareholder. Watagan can make prepayments of the outstanding loan balance at any time, and (subject to there being no default continuing and other customary conditions) any amounts prepaid may be redrawn by Watagan in the future for specified permitted purposes. As at 30 June 2018 the loan receivable from Watagan was A$730 million (re-drawable to A$1,363 million).

While we wholly-own Watagan, upon the issuance of the Watagan Bonds, the Bondholders were given the power to nominate two of its three directors, which together with other terms included in the Watagan Agreements resulted in the determination that we had lost accounting control of Watagan. The loss of accounting control resulted in us deconsolidating the financial results of Watagan as a subsidiary from our consolidated financial statements with effect from 31 March 2016. From that time, we began to account for our equity interest in Watagan as an associate rather than a subsidiary. We also designated the value of the Ashton, Austar and Donaldson mines as assets classified as held for sale as at 31 December 2015, pending completion of their transfer to Watagan in early 2016. While Watagan is deconsolidated from our consolidated financial statements for accounting purposes, Watagan remains within our tax consolidated group as a result of our ongoing 100% equity ownership of Watagan.

The determination of loss of accounting control of Watagan is a matter of accounting judgement, which could be subject to review and change. The International Financial Reporting Standards ("**IFRS**") under which we prepare our financial statements requires us to make certain judgements and estimates when preparing our financial statements, and are issued by the International Accounting Standards Board ("**IASB**"), along with other authoritative pronouncements and interpretations. The IASB or other agencies and authorities may not agree with the judgements or estimates applied by us. Moreover, the IASB may amend IFRS and the related pronouncements and interpretations or replace them with new standards, and such amendment or replacement is beyond our control. Any changes to IFRS or to the interpretation of those standards, such as a change which would require us to reconsolidate Watagan's results and financial position ahead of the scheduled date in 2025, may have an adverse effect on our reported financial performance or financial position.

Watagan is required to redeem all of the outstanding Watagan Bonds on the maturity date of 8 January 2025 (if the put option is exercised on or after 1 January 2025, the maturity date would be deferred to 1 April 2025), and may elect to redeem any or all of them commencing from 31 March 2019. Additionally, the Bondholders have a put option that allows them to transfer the issued Watagan Bonds at face value to Yankuang during specified put option exercise windows during the first week of January in each of 2019, 2021, 2023 and 2025. The Bondholders may also exercise the put option after 1 January 2019 while an event of default under the bond terms is subsisting in relation to Watagan or Yankuang. The put option must be exercised by a Bondholder in respect of all (but not some) of its respectively held bonds. If the put option is exercised (i) by UNE,

as the instructing Bondholder of the investor syndicate, or (ii) with respect to at least 50.1% of the face value of the Watagan Bonds, the put option will be deemed to have been exercised as to all of the bonds.

In accordance with the Watagan Agreements, if Yankuang becomes the sole bondholder of the Watagan Bonds following the purchase of the bonds by Yankuang consequent to the exercise of the put option, certain bondholder rights, including the right to nominate a majority of the board of directors, would terminate, and these rights would revert to the Company as the sole shareholder of Watagan. Watagan would thereafter owe an amount payable to Yankuang for the face value of the put bonds, minus any capitalised interest. Watagan would separately pay to the exercising Bondholders the accrued interest and any capitalised interest on the put bonds.

If (i) Bondholders holding a sufficient proportion of the principal amount of the Watagan Bonds exercise their put option to Yankuang, such that Yankuang acquires all of the bonds (ii) Watagan redeems all of the Watagan Bonds or (iii) certain other events occur (such as a change to the terms and conditions of the Watagan Bonds that gives us the power to nominate the majority of the board of Watagan) that would result in us regaining control of Watagan, we will be required to reconsolidate Watagan as a subsidiary into our consolidated financial statements from the time that control is determined to be regained. We do not currently have any plan or intention to effect the early redemption of the Watagan Bonds.

Upon reconsolidation, we will (i) cease to recognise interest income on the Watagan loan, which in the year ended 31 December 2017 and the six months ended 30 June 2018 was A$67 million and A$32 million, respectively, forego the margin recognised under the various service agreements, and de-recognise the Watagan loan receivable, which as at 30 June 2018 was drawn to A$730 million, as these amounts will become intercompany balances and will be eliminated on consolidation; (ii) recognise an interest expense on the Watagan Bonds (or the Yankuang loan if the put option has been fully exercised), which during the year ended 31 December 2017 and the six months ended 30 June 2018 was A$102 million and A$35 million, respectively, and recognise the fair value of the Watagan Bonds at that time, which as at 30 June 2018 had a book value of A$1,049 million; and (iii) recognise the operating results of Watagan, including the three Watagan Mines, in our statement of profit and loss and recognise the fair value of the assets and liabilities of Watagan (including the Watagan Bonds) on our balance sheet at that time. In 2016 and 2017 and the six months ended 30 June 2017 and 2018, Watagan had loss after tax of A$162 million, A$58 million, A$7 million and A$90 million, respectively. See note 23(a) to the Accountants' Report of the Group in Appendix IA to this prospectus for further stand-alone financial information of Watagan during the Track Record Period.

The loss after tax of A$162 million in 2016 was due in significant part to the Austar mine only commencing longwall mining activities in the Bellbird South area half way through the year following a fatal incident in the Stage 3 area in 2014. The improvement in performance to a loss after tax of A$58 million in 2017 was primarily due to an improvement in coal prices between the periods and a full year of production at Austar, partially offset by an increase in finance costs primarily due to an additional A$30 million of interest owing to the bondholders due to Watagan achieving an EBITDA related threshold. The loss of A$90 million in the six months ended 30 June 2018 was primarily due to a significant reduction in production at the Austar mine due to the occurrence of multiple coal bursts resulting in repeated shutdowns during the period. See "*Risk Factors – We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of*

operations" and "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown*".

Since Watagan has thus far been loss-making and has incurred ordinary course depreciation and amortisation, the book value of Watagan's net assets has declined since inception and at 30 June 2018 was negative A$311 million as noted in Appendix IA to this prospectus. The book value decline is not necessarily an indicator of Watagan's fair value. If the fair value of Watagan's net assets is negative (meaning that the value of its assets is lower than the value of its liabilities, including any outstanding loan balances) at the time of reconsolidation, goodwill will be recognised by the Company. This goodwill will be subject to impairment testing based on the cash generating units to which it is allocated. To the extent that any goodwill recognised cannot be supported by an impairment model, it will be written off by the Company as a loss on acquisition. Similarly, if, prior to reconsolidation and while we recognise a loan receivable from Watagan, there is a determination of a decline in the fair value of Watagan, an impairment assessment of the carrying value of the outstanding loan balance will be required. As at 30 June 2018, the total assets of the Company were A$11,914 million and the total liabilities of the Company were A$6,649 million, and the total assets of Watagan were A$1,783 million and the total liabilities of Watagan were A$2,094 million. The impact of reconsolidating Watagan as at 30 June 2018, without reflecting any fair value adjustments that may arise on reconsolidation (including the recognition of any potential goodwill as noted above), and after intercompany balance eliminations of A$827 million for both total assets and total liability, would be material. Our gearing ratio (which is calculated as gross debt divided by total equity at the end of the relevant period) would exhibit a material increase from our gearing ratio of 0.81x as at 30 June 2018, primarily due to Watagan's interest-bearing debt and negative equity position as at that date.

During the Track Record Period, Donaldson's remaining Abel underground mine was moved to a care and maintenance phase and feasibility studies were subsequently commenced to explore potential future mining operations. In addition, multiple incidents have recently occurred in the Austar mine's Bellbird South area due to coal bursts and other occurrences. These incidents have resulted in property and site damage and consequent loss of production and shutdowns, including as a result of the regulator issuing notices to stop production for periods of time, during the Track Record Period. Ongoing work is being undertaken by Watagan in respect of the very challenging geological and geotechnical conditions at the Austar mine, including both the Bellbird South and Stage 3 areas that may have a significant adverse impact on future commercial operations. See "*– Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown*" for further details.

The future prospects of the Donaldson and Austar mines are therefore uncertain, and will depend upon the work currently being conducted by Watagan and its advisers. If it is determined, by Watagan, that either or both mines are unable to return to previously forecast levels of production, there is a need to proceed to a permanent shutdown, or there are materially negative changes to other operating assumptions, including coal prices, exchange rates, operating costs or capital expenditure, it is likely that the fair value of those mines, and therefore of Watagan, would be reduced materially. In that event, a material impairment charge may be recognised on the

Watagan loan receivable, prior to reconsolidation, or any goodwill recognised on reconsolidation. In addition, the Bondholders may be more inclined to exercise the put option which, as described above, will result in the reconsolidation of Watagan. We do not control Watagan and as such are not able to control or predict the amount of any such impairment or the extent of the resulting effect on our financial condition and results of operations, which could be material and adverse. See also "*– Our assets may be subject to impairment risks which could adversely affect their value.*"

We derive a significant portion of our revenue from a limited number of customers, and the loss of, or a reduction in, sales to any of these customers could materially and adversely affect our business, financial condition and results of operations.

We generate a substantial portion of our total coal sales from a small number of customers. In 2015, 2016 and 2017 and the six months ended 30 June 2018, our top five customers accounted for 47.8%, 38.8%, 32.3% and 33.8% of our revenue, respectively, in the aggregate, and our top three customers accounted for 39.5%, 29.1%, 21.7% and 26.5% of our revenue, respectively, in the aggregate. The Noble Group Limited and its affiliated entities (the "**Noble Group**") was one of our largest customers by revenue in 2015, 2016 and 2017. We expect revenues from the Noble Group as a percentage of our total revenues to decline as a result of the ad hoc nature of contracts, price movements and spot volumes and spot volume variations. Our current coal sales contract with the Noble Group is due to expire in December 2018.

Through Yancoal Australia Sales Pty Ltd, a subsidiary of the Company, we also commenced arbitration proceedings against the Noble Group in May 2018 seeking relief, including damages, on account of the Noble Group failing to purchase coal under an existing contract. This contract provides for de facto liquidated damages payments from Noble Group in the event that the Noble Group fails to purchase coal from us, which represents the amount claimed by us in these proceedings. As at the Latest Practicable Date, this claim is in the early stages of arbitration proceedings. In a separate matter, on 3 August 2018, the Noble Group commenced proceedings in the Supreme Court of New South Wales (an Australian State court) purporting to terminate a marketing services contract, claiming an allegedly unpaid marketing fee for 2014, damages for losses said to arise from alleged breaches of the contract in 2015 to 2017, and damages for "loss of bargain" as a result of the alleged repudiation of the contract by Gloucester Coal, a subsidiary of the Company. The Noble Group also alleges that the Company caused or procured Gloucester Coal to breach the contract. The claim derives mainly from the Noble Group's allegation that Gloucester Coal failed to notify and pay marketing fees, and to provide certain information to the Noble Group so as to allow the Noble Group to verify the marketing fees payable (if any), which allegedly had the effect of Gloucester Coal repudiating the contract. As at the Latest Practicable Date, the parties continue to exchange pleadings in respect of the proceedings. See "*Business – Legal Proceedings and Non-Compliance*" for further details.

We expect that our revenues will continue to depend on sales to a limited number of major customers for the foreseeable future and the loss of one or more of these major customers, or a significant deterioration in our relationship with them, could materially and adversely affect our business, financial condition and results of operations.

Fluctuations in transportation costs and disruptions to our railway and port linkages could disrupt our coal deliveries and adversely affect our business, financial condition and results of operations.

We rely primarily on third party operated railway networks and ports to transport and deliver coal to our customers. Transportation costs are a significant expense and

accounted for 19.8%, 21.6%, 12.0% and 11.7% of our total revenue in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively. See also "*Business – Infrastructure, Transportation and Logistics*" and "*Financial Information of the Group – Significant Factors Affecting our Results of Operations and Financial Condition – Price and Sales Volume of Coal – Sales Volume.*"

A deterioration in the reliability of services provided by our transportation service providers or disruptions to any of the transportation services we rely on due to weather-related problems, key equipment or infrastructure failures, industrial action, rail or port capacity constraints, congestions, failure to obtain consents from third parties for access to rail or land, access being removed or not granted by regulatory authorities, failure or delay in the construction of new rail or port capacity, terrorist attacks or other events could impair our ability to supply coal to our customers, resulting in decreased shipments and revenue. In December 2017, the Queensland Competition Authority issued a draft ruling that would reduce the rate of return that can be charged by Aurizon, the only major coal rail network operator in Queensland, on its network routes. In response, Aurizon decided to modify its maintenance practices, as a result of which its customers will not be able to arrange for the transportation of coal in excess of the capacity guaranteed under the terms of their contracts with Aurizon. These events have not had any significant effects on the operations of Middlemount and Yarrabee, our Queensland mines, since our current production volumes from these mines are less than the transportation capacity agreed with Aurizon. However, if the production volumes from these mines increase significantly, we may not be able to transport all of the increased volume. Further, significant increases in transport costs due to factors such as the introduction of emissions control requirements and fluctuations in the price of diesel fuel and demurrage could make our coal less competitive when compared to coal produced from other regions. Disruptions in shipment or increase in costs over longer periods of time could cause our customers to look to other sources for their coal needs, negatively affecting our business, financial condition and results of operations.

We also enter into transportation agreements with national and privately operated railway networks, rail haulage operators and ports to secure transportation capacity, generally via long-term take-or-pay arrangements. As the transportation capacity secured by these agreements is based on assumed production volume, we may have excess transportation capacity (which, in the case of take-or-pay agreements, we will have to pay for even if unused) if our actual production volume is lower than our estimated production volume. Conversely, we may not have sufficient transportation capacity if our actual production volume exceeds our estimated production volume or if we are unable to transfer the full capacity due to contractual limitations such as requirements for the coal to emanate from specified source mines or be loaded onto trains at specified load points. We currently have excess port capacity commitments across our New South Wales operations, which represents a significant cost of operations. In 2017 we reduced our take-or-pay exposure for contracted but unutilised capacity to A$65 million in excess of planned sales (including take-or-pay contracts obtained under the C&A Acquisition) from A$74 million in 2016 (on a 100% basis including Middlemount). For 2018, the take-or-pay commitments are estimated to total approximately A$43 million in excess of our expected access requirements. Our logistics team continues to implement strategic measures to reduce our take or pay exposures, including the trading of our under-utilised contracted capacity between sites and with third parties on an ad hoc basis. However, we may not be able to materially reduce our take-or-pay commitments through such means, or at all.

Our sales contracts with customers allow them to terminate the contracts upon the occurrence of certain events.

Our sales contracts generally contain provisions that allow our customers to suspend or terminate the contracts if, depending on the contract:

- we commit a material breach of the terms of the contract;
- a change in law restricts or prohibits a party from carrying out its material obligations under the contract;
- we become insolvent, pass a resolution for winding up, institute or have instituted against us any proceedings for insolvency or are subject to similar occurrences;
- any document which secures, guarantees or otherwise supports the performance of our obligations under the contract is terminated or expires, or we materially breach the terms of or disaffirm or reject any such document; or
- a material adverse change occurs in our financial standing or creditworthiness such that in the reasonable opinion of our customer (exercising good faith), our ability of to perform our obligations under the contract becomes materially impaired.

See also "*Business – Marketing and Sales Arrangements*". If our customers were to terminate our sales contracts for these reasons or otherwise, our results of operations would be adversely affected.

Our existing and future indebtedness could restrict our financial and operational flexibility and adversely affect our financial condition.

As at 30 June 2018, we had A$4,300 million of indebtedness, of which A$17 million will mature within one year and A$2,414 million will mature within two to five years. Our existing and future indebtedness could have important consequences in relation to our business. For example, it could:

- make it more difficult for us to pay or refinance our debts as they become due during adverse economic and industry conditions because any related decrease in revenues could cause us to not have sufficient cash flows from operations to make our scheduled debt payments;
- subject us to operating restrictions that limit our flexibility in planning for changes to our business and limiting our ability to pursue our strategic growth plans;
- force us to seek additional capital, restructure or refinance our debts, or sell assets;
- cause us to be less able to take advantage of significant business opportunities such as acquisition opportunities and to react to changes in market or industry conditions;
- cause us to use a portion of our cash flow from operations for debt service, reducing the availability of working capital and delaying or preventing investments, capital expenditure, research and development and other business activities;

- cause us to be more vulnerable to general adverse economic and industry conditions;

- expose us to the risk of increased interest rates because certain of our borrowings are at variable rates of interest;

- expose us to the risk of foreclosure on substantially all of our assets and those of most of our subsidiaries, which secure certain of our indebtedness, if we default on payment or are unable to comply with covenants or restrictions in any of the agreements; and

- limit our ability to borrow, or increase the cost of borrowing, additional monies in the future to fund working capital, capital expenditure and other general corporate purposes.

Our ability to meet our debt service obligations will depend on our future cash flow from operations and our ability to restructure or refinance our debt, which will depend on the condition of the credit and capital markets and our financial condition.

Further, we are subject to various financial covenants under the terms of our banking facilities. These covenants may, for example, require the maintenance of a minimum net worth, net tangible assets or interest cover ratio or a maximum gearing or leverage ratio. Factors such as adverse movements in interest rates and coal prices, appreciation of the A$, deterioration of our financial performance or change in accounting standards could lead to a breach in financial covenants. If there is such a breach, the relevant lenders may require their loans to be repaid immediately or cancel the further availability of their facilities. Some covenant breaches may not be an immediate default but may restrict our ability to make distributions or otherwise limit expenditure.

As a shipper in the NCIG and WICET terminals, some of our source mines are required to maintain a specified minimum level of Marketable Coal Reserves. Non-compliance with this requirement may ultimately result in the termination of the individual contracts and require the payment of our share of any outstanding senior debt in those entities and terminals.

We may not be able to meet our capital expenditure requirements or secure additional financing on favourable terms, whether from external sources or our major shareholders, in the future.

Our business is capital intensive and will require substantial expenditure for, among other things, the construction of our key projects, machinery and equipment and operational capital expenditure. We had capital expenditure of A$333 million, A$383 million, A$345 million and A$84 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, which included, for example, projects such as the Moolarben expansion.

We intend to use cash on hand, funds from operations and additional debt and equity financing to finance our current and future capital expenditure. However, we may not be able to obtain sufficient amounts of capital in a timely manner, on terms acceptable to us, or at all, which could result in a material adverse effect on our business, financial condition and results of operations.

Our debt obligations of A$4,300 million as at 30 June 2018 could have significant consequences for our operations, including reducing the availability of our cash flow to fund working capital, capital expenditure, acquisitions and other general corporate purposes as a result of our debt servicing obligations, limiting our flexibility in planning for, or reacting to, and increasing our vulnerability to, changes in our business, our industry and the general economy and potentially limiting our ability to obtain, or increasing the cost of, any additional financing. Our business operations and cash flows are highly sensitive to any fluctuation in the US$ coal price, movements in the A$:US$ exchange rate and coal production from our operations. Accordingly, in developing our business plan and operating budget, we have made certain assumptions regarding coal prices, the A$:US$ exchange rate, future production levels and other factors which determine our financial performance. The actual amount of funding required in the future will depend on a number of factors, including the performance of our business at that time, and may differ from our estimates of capital expenditure required. In addition, our business plans may change from time to time due to changing circumstances, new opportunities or unforeseen contingencies. If our capital expenditure requirements differ from our estimates or we change our business plans, we may need to obtain additional external financing to meet our capital expenditure plans, which may include bank borrowings or issuances of debt securities.

We may not be able to raise sufficient financing to fund our future capital expenditure and service our debt obligations or at all. Further, there is no guarantee that we will be able to refinance our existing committed credit facilities on favourable terms as and when the existing facilities mature. More specifically, US$1.95 billion of our debt as at 30 June 2018 would have become due for repayment in between 2020 and 2022, and we may not be able to refinance this debt. A number of investment groups and financial institutions have announced either a change in, or intention to consider a change in, investment mandates so their groups can no longer invest in or lend to companies with coal exposure. This may impact our ability to refinance our existing debt and to attract new financing.

If a funding shortfall materialises, we may be required to rely on our shareholders, including Yanzhou, to fulfil our funding requirements. Yanzhou has provided us with a A$1.4 billion loan facility (of which A$1.1 billion had been drawn as at 30 June 2018) to support the ongoing operations and the expansion of the Group and enable it to pay debts as and when they fall due. In addition, Yanzhou had provided a letter of support pursuant to which, unless revoked by giving not less than 24 months' notice, for so long as it owns at least 51% of the Shares, it will ensure that the Company continues to operate so that it remains solvent. On 28 July 2017, Yanzhou reconfirmed to the Company that this undertaking remains in place on its current terms, and that Yanzhou has the financial capacity to perform its obligations under it. However, this undertaking may be revoked by Yanzhou by giving not less than 24 months' notice (or such shorter period as the Company may agree). In addition, depending on the form and terms of any funding to be provided by Yanzhou, minority Shareholder approval and other regulatory approvals may be required before that funding can be provided, and any such approvals may not be forthcoming. Yanzhou's support undertaking does not require Yanzhou to fund the Company in a manner which is non-dilutive to other Shareholders or to provide funding on non-commercial terms, and is also dependent on Yanzhou's financial capacity to perform its obligations under the Yanzhou support as and when called upon to do so. As a result, there is no guarantee that the Company can rely on Yanzhou's commitment to remain solvent.

Failure to obtain sufficient financing could cause delays or cause us to abandon our business development plans and have a material adverse effect on our business, financial condition and results of operations.

We had net cash outflows from operating activities for certain periods during the Track Record Period.

In 2015 and 2016, we recorded net cash outflows from operating activities of A$108 million and A$24 million, respectively, primarily attributable to our accounting losses we incurred in the respective periods. See "*Financial Information of the Group – Liquidity and Capital Resources – Cash Flows*" for further details. Given the cyclical nature of our industry, we cannot assure you that we will not record net cash outflows from operating activities in the future. In general, net cash outflows from operating activities may strain our liquidity and require us to meet the shortfall with cash on hand or cash generated from other activities. Any inability to do so could adversely affect our ability to meet our payment obligations as they become due or impede our ability to implement our business strategies as planned, which in turn could have a material adverse effect on our business, financial condition and results of operations.

We have had negative reserves and accumulated losses during the Track Record Period, and did not declare or pay any dividends for 2015, 2016 or 2017.

We had, on a consolidated basis, negative reserves and accumulated losses of A$880 million and A$535 million as at 31 December 2015; A$817 million and A$935 million as at 31 December 2016; A$413 million and A$764 million as at 31 December 2017; and A$554 million and A$403 million as at 30 June 2018. We did not declare or pay any dividends for 2015, 2016 or 2017. On 15 August 2018, we declared a dividend of approximately A$130 million on our ordinary shares, which was paid on 21 September 2018. The declaration and payment of this dividend is in compliance with the requirements of Section 254T of the Australia Corporations Act. Our profitability and our ability to pay dividends will vary from period to period and may not be predictable. For example, a significant contributor to our profitability in 2017 was other income, consisting of a gain on acquisition of A$177 million in connection with mine assets acquired from C&A and a reversal of impairment of mining tenements of A$100 million for the Moolarben mine, both of which are non-recurring items. We cannot provide any assurance that the Company's future results of operations will be sufficient to generate sufficient retained earnings to pay dividends to our shareholders. See "– *We may not declare dividends on our Shares in the future*".

Our operating results have been, and may in the future be, materially affected by acquisitions, disposals and other strategic transactions that we have undertaken and may undertake in the future.

Our historical financial results, including during the Track Record Period, have been materially influenced by our acquisitions, disposals and other strategic transactions. Specifically, on 1 September 2017, we completed the C&A Acquisition. The C&A Acquisition contributed to a substantial increase in our total assets from A$7,660 million as at 31 December 2016 to A$11,914 million as at 30 June 2018. In addition, we began consolidating the profit and loss accounts of C&A from 1 September 2017, the date of completion of the C&A Acquisition, and our results of operations for 2017 and the six months ended 30 June 2018 reflect the consolidation of C&A's results from 1 September 2017 to 30 June 2018. This contributed to the increase in our total revenue from A$1,238 million in 2016 to A$2,601 million in 2017, and our profit after income tax of A$246 million in 2017 compared to a loss after income tax of A$227 million in 2016. Similarly, our total revenue increased from A$832 million in the six months ended 30 June 2017 to A$2,347 million in the six months ended 30 June 2018, and we had a loss after income tax of A$14 million and a profit after income tax of A$361 million in the same periods. Prior to its acquisition by us, C&A itself had disposed of certain of

its mining operations in 2016, and undertook a restructuring of its interest in HVO. As a result, the financial information of C&A as disclosed in "*Financial Information of C&A*" is presented on a carve-out basis as if such interests were completed on 1 January 2015. However, the audited consolidated financial statements of C&A as disclosed in the Accountants' Report of C&A as set out in Appendix IB to this prospectus are presented without the carve-outs applied, save as indicated in note 36 therein. We also completed the Glencore Transaction and the Warkworth Transaction in 2018, both of which will influence our financial statements in 2018. See "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation.*" As a consequence, comparing our results of operations on a period-to-period basis is not meaningful.

We will incur significant expenses upon closure or discontinuance of operations at our mines, which would have an adverse impact on our financial condition and results of operations.

We may be required to close or discontinue operations at particular mines before the end of their mine life due to environmental, geological, geotechnical, commercial, health and safety or other issues. Such closure or discontinuance of operations could result in significant closure and rehabilitation expenses, employee redundancy costs and other costs or loss of revenues. If one or more of our mine sites are closed earlier than anticipated, we will be required to fund the closure costs on an expedited basis and potentially lose revenues, which would have an adverse impact on our financial condition and results of operations. In addition, there is a risk that claims may be made arising from environmental remediation upon closure of our sites. See also "*– Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents or outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown.*"

Many of these costs will also be incurred where mines are placed on care and maintenance before the end of their planned mine life. A move to care and maintenance has the potential to trigger significant employee redundancy costs and a subsequent loss of revenues since ongoing management and rehabilitation of the mine requires a minimal employee presence, which would also have an adverse impact on our financial condition and results of operations. During the Track Record Period, mining ceased at Donaldson's Abel underground mine, which is owned by Watagan and managed by us, in June 2016. As at 30 June 2018, the mine had Coal Reserves of 62 Mt and Marketable Coal Reserves of 32 Mt. The mine was moved to a care and maintenance phase which resulted in some redundancies and incurred costs, although most of the mine workers were re-allocated to other mines. We do not expect further redundancies or related costs as a result of moving to care and maintenance at the Abel mine and have subsequently commenced feasibility studies to explore potential future mining operations.

We operate through a number of joint venture and similar structures, and our operational and financial results will be affected by how these arrangements are managed.

A significant portion of our business is operated though joint venture structures and entities in which we hold equity interests. We have a joint venture partnership in respect of Middlemount Coal Pty Ltd (in which we have a 49.9997% equity interest) and hold equity interests in Newcastle Coal Infrastructure Group Pty Ltd (in which we have a 27.0% equity interest) and Port Waratah Coal Services Limited (in which we have a 36.0% legal interest and a 30.0% effective interest). We also have the following material

unincorporated joint ventures: the Moolarben JV (in which we hold a 81.0% interest and have reached an agreement in principle to increase our stake to 85.0%, subject to final approvals and documentation), the Mount Thorley joint venture (in which we hold a 80.0% interest) ("**Mount Thorley JV**") and the Warkworth joint venture (in which we hold a 84.5% interest) ("**Warkworth JV**"). See "*Business – Our Mining Operations*".

With effect from 4 May 2018, we established a 51%:49% unincorporated joint venture between us and Glencore in respect of HVO, in which we acquired a 67.6% interest from Rio Tinto as part of the C&A Acquisition. Glencore acquired its 49% interest in consideration for US$1,139 million in cash, consisting of (i) US$710 million in consideration to HVO Resources Pty Ltd, a wholly owned subsidiary of Mitsubishi Development Pty Ltd ("**MDP**"), for its 32.4% interest in HVO and (ii) US$429 million in consideration to us for a 16.6% interest in HVO, in each case subject to final post-closing adjustments, plus the acceptance of a 27.9% share of US$240 million of non-contingent royalties and 49% of HVO contingent royalties payable by the Company in respect of the C&A Acquisition. The joint venture is jointly controlled through the JVMC whose powers include the approval of budgets, life of mine and year-by-year five year plans governing the HVO JV's activities, supervision of the manager of the joint venture, and the approval of development and expansion proposals. The JVMC comprises three representatives nominated by us and three representatives nominated by Glencore. The general manager of the joint venture is nominated by Glencore while the financial controller is nominated by us. The operations and financial results of HVO, which is our largest asset with Coal Reserves of 796 Mt and Marketable Coal Reserves of 554 Mt (in each case as at 30 June 2018 on a 100% basis) and whose marketable coal production in 2017 was 14.8 Mt, will depend on how we and Glencore manage and operate our joint venture in the future.

The success of our joint ventures depends on a number of factors, including the financial resources of the other shareholders and joint venture partners, their willingness and ability to honour their commitments under the joint venture agreements, the manner in which they exercise control, veto or other governance rights in respect of the joint venture, and the extent to which they cooperate in operational and strategic decisions with respect to the relevant mine. If we become engaged in material disagreements with our joint venture partners, the operational and financial results of the underlying mines may be adversely affected.

Our investments in, and obligations with respect to, the Wiggins Island Coal Export Terminal may be adversely impacted by, among other things, the insolvency of its other shareholders.

In 2010, Felix Resources Limited, now known as Yancoal Resources Limited ("**Yancoal Resources**"), a wholly-owned subsidiary of the Company and the shareholder of Yarrabee Coal Company Pty Limited, entered into a shareholders' agreement with WICET Holdings Pty Limited ("**WICET Holdings**"), its wholly owned subsidiary Wiggins Island Coal Export Terminal Pty Limited ("**WICET Pty Limited**") and certain other parties, in relation to the management of WICET Holdings and WICET Pty Limited. WICET Pty Limited owns and operates the Wiggins Island Coal Export Terminal ("**WICET**"). As at 31 December 2017, Yancoal Resources held a Class A ordinary share entitling it to a 9.38% voting interest in WICET Holdings, Gladstone long-term securities ("**GILTs**") issued by WICET Holdings of A$32 million and E Class Wiggins Island Preference Securities ("**WIPs**") issued by WICET Holdings of A$29 million. Further, Yarrabee Coal Company Pty Limited and the Company entered into a take-or-pay agreement with WICET Pty Limited, pursuant to which Yarrabee Coal Company Pty Limited and the Company as shippers are required to utilise certain services at WICET

or procure that a substitute shipper utilises such services. As a result, we may be liable to pay certain specified terminal handling charges for the services provided by WICET even if we are unable to utilise such services or procure their utilisation by a substitute shipper. Our terminal handling charges can also be adjusted by WICET Pty Limited if our share of its operational and finance costs increases, including because of increased operational costs or because another shipper defaults and has its capacity reduced to nil. While our liability to pay the finance cost component of such charges is under most circumstances subject to a cap, such payments may result in an increase in our expenses, which may affect our results of operations.

Under the terms of the agreements, Yancoal Resources holds one Class A share in WICET Holdings, as does each other shipper. A Class A shareholder's voting entitlement in WICET Holdings is equal to its contracted share of the total contracted WICET capacity. Each such shareholder has an indirect exposure to any bank debt owed by WICET Pty Limited ("**WICET Debt**") equal to its voting entitlement. If a Class A shareholder in WICET Holdings becomes insolvent and exits WICET Holdings, the voting entitlement of the remaining Class A shareholders increases pro-rata, which results in their indirect exposure to WICET Debt also increasing. Prior to the Latest Practicable Date, several of the original Class A shareholders of WICET Holdings had entered into administration or insolvency proceedings and subsequently exited WICET Holdings, which resulted in Yancoal Resources' voting entitlement in WICET Holdings increasing to 9.38% and a corresponding increase in our indirect exposure to the WICET Debt. On 18 October 2018, a WICET Class A shareholder, Northern Energy Corporation Limited, and its related shipper Colton Coal Pty Ltd, entered into administration but as of the Latest Practicable Date Northern Energy Corporation Limited has not exited WICET Holdings. If Northern Energy Corporation Limited exits WICET Holdings, Yancoal Resources' voting entitlement and indirect exposure to WICET Debt will increase to 10.34%. While WICET Holdings and the remaining Class A shareholders as at the Latest Practicable Date were solvent, there is no guarantee that they will not enter into insolvency or administration proceedings in the future, which may result in our indirect exposure to the WICET Debt further increasing.

In addition, the senior debt facility, which matured in September 2018, was renegotiated (involving a scheme of arrangement approved by the Supreme Court of New South Wales on 11 September 2018) and resulted in amendments to the terms of such facility, which led to us recognising A$50 million in other operating expenses in the six months ended 30 June 2018, which arose from the partial impairment of our investment in GiLTs and the full impairment of our investment in WIPs. The renegotiation of the senior debt facility has involved the 'financing costs' component of the total terminal handling charge increasing by US$3.35 per tonne and the inclusion of a new review event where there is a reduction in the aggregate contracted tonnage of the shippers below either 12.5 Mtpa or (if WICET Pty Limited is also unable to meet certain solvency and debt service cover ratio requirements) 14 Mtpa (Northern Energy Corporation Limited, and its related shipper Colton Coal Pty Ltd, ceasing to perform their shipping commitments and exiting WICET Holdings would not trigger these tonnage thresholds, as their committed tonnage is only 0.5 Mtpa of total current throughput of 16 Mtpa). These arrangements came into effect on 1 October 2018. An increase in our indirect exposure to the WICET Debt could further adversely impact the recoverability of our investments in WICET Holdings and, in the case of failure in refinancing, or a review event or event of default, could result in the senior lenders or a receiver appointed by them taking steps to recover against the shippers, whether through increased charges or otherwise.

The pro forma financial information included in this prospectus is not indicative of our future financial condition or results of operations.

The pro forma financial information set out in "*Appendix IIB – Unaudited Pro Forma Financial Information of the Enlarged Group"* has been prepared for illustrative purposes only, and shows the impact of the Pro Forma Transactions, as if these acquisitions had been completed on 1 January 2017. Such pro forma information addresses a hypothetical situation and is not necessarily representative of our results of operations and changes in liquidity and capital resources as they would have appeared in our financial statements had the relevant transaction occurred during the year ended 31 December 2017, and is not intended to be indicative of our future financial condition and results of operations. The adjustments set forth in such pro forma information are based upon available information and assumptions that our management believes to be reasonable. If the assumptions underlying the preparation of such pro forma information do not occur, our actual financial results could be materially different from those indicated in such pro forma information. Further, the rules and regulations related to the preparation of pro forma financial information in other jurisdictions may vary significantly from the basis of preparation for our pro forma combined income statement. Therefore, such pro forma information should not be relied upon as if it has been prepared in accordance with those standards and practices.

Our assets may be subject to impairment risks which could adversely affect their value.

Our balance sheet includes a number of assets that are subject to impairment risk or are required to be carried at fair value, including mining tenements, exploration and evaluation assets, intangible assets (including goodwill), the loans to Middlemount and Watagan, the royalty receivable from Middlemount, investments accounted for using the equity method and deferred tax assets. The values of these assets are generally derived from the fundamental valuation of the underlying mining operations and as such are subject to many of the risks to which our operations are exposed, including coal price and demand fluctuations, foreign exchange risks, changes in coal production and estimates of reserves and resources, and operating risks. Adverse changes in these risk factors could lead to a reduction in the valuation of our assets and result in an impairment charge or fair value loss being recognised. See also "– *We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of operations*."

Our ability to collect payments from our customers could be impaired if their creditworthiness and financial health deteriorate.

Our ability to receive payment for coal sold and delivered depends on the continued creditworthiness and financial health of our customers. Competition with other coal suppliers could force us to extend credit to customers and on terms that could increase our risk of payment default. In recent years, downturns in the economy and disruptions in the global financial markets have, from time to time, affected the creditworthiness of our customers and limited their liquidity and access to credit. For example, changes in the financial circumstances of the Noble Group, which had been our second largest customer for 2017 in terms of revenue, has led to the downgrading of its overall credit rating by multiple rating agencies and several instances of late payment of accounts receivable owed to us since August 2017. We have taken a number of actions in response, including changing the required payment method from telegraphic transfer to irrevocable letters of credit, imposing interest on late payments and withholding delivery of products until certain contractual requirements are met. However, while we have been

provided with irrevocable letters of credit supporting the Noble Group's payment obligations, we cannot provide any assurance that further financial problems at the Noble Group will not have an adverse effect on us. Additionally, such arrangements do not address other types of contractual default. For example, we recently commenced arbitration proceedings against the Noble Group in May 2018 seeking relief, including damages, on account of the Noble Group failing to purchase coal under an existing contract.

There is no guarantee that another customer will not commit any payment defaults in the future. Customers in certain countries may be subject to other pressures and uncertainties that may affect their ability to pay, including trade barriers, exchange controls and local economic and political conditions.

Proved and probable coal reserves are expressions of judgement based on knowledge, experience and industry practice, and any adjustments to estimated proved and probable coal reserves could adversely affect our development and mining plans.

Estimates of proved and probable coal reserves are expressions of judgement based on knowledge, experience and industry practice. In determining the feasibility of developing and operating our mines, we use estimates of coal reserves and resources that are made by competent persons appointed by us in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Numerous uncertainties inherent in estimating quantities and the value of recoverable and marketable coal reserves exist, including many factors beyond our control. As a result, estimates of reserves are, by their nature, uncertain. When calculating reserves estimates, we make assumptions about:

- geological and hydrological conditions;
- production from the mining area;
- the effects of regulations, including environmental, health and safety regulations and taxes;
- future coal prices; and
- future operating costs.

Coal resource and reserve estimates are regularly revised based on actual production experience, and determinations of coal resources or reserves that appear valid when made may change significantly when new information becomes available. Should we encounter mineralisation or formations different from those predicted by past drilling, sampling and similar examinations, coal resource and reserve estimates may have to be adjusted and mining plans, coal processing methods and infrastructure may have to be altered in a way that might adversely affect our operations. Moreover, a decline in the price of coal, stabilisation at a price lower than recent levels, increases in production costs, decreases in recovery rates or changes in applicable laws and regulations, including environmental, permitting, title or tax regulations, may mean that the tonnage of coal that can be feasibly extracted may be significantly lower than our coal resource and reserve estimates. As a result, estimated coal reserves and resources may require revisions. If it is determined that mining of certain coal reserves is uneconomic or not possible due to safety issues, this may lead to a reduction in our aggregate coal reserve estimates.

Further, actual facts may vary considerably from the assumptions we use in estimating our reserves. Our reserve amounts have been determined based on assumed coal prices and historical and assumed operating costs. Coal price and operating cost assumptions are by their nature uncertain, and our assumptions can vary significantly from those of other market participants, external consultants and industry experts. Some of our reserves may become unprofitable or uneconomic to develop if the long-term market price for coal decreases or our operating costs and capital expenditure requirements increase. In addition, our exploration activities may not result in the discovery of additional coal deposits that can be mined profitably or of coal products that meet the required quality specifications. For these reasons, our actual recoverable and marketable reserves and our actual production, costs, revenues and expenditures relating to reserves may vary materially from our estimates. Our estimates may not accurately reflect our actual reserves or be indicative of future production, costs, revenues or expenditures.

Adjustments to proved and probable coal reserves could also affect our development and mining plans. Our recovery rates will vary from time to time, which will increase or decrease the volumes of coal that we can sell from period to period. Any significant reduction in the volumes and grades of the coal reserves we recover from what those estimated could have a materially adverse effect on our business, financial condition and results of operations. In addition, our volume of production from our mine properties will decline as our reserves are depleted.

Exploration of mineral properties and development of resources could involve significant uncertainties.

We have two exploration projects, Monash and Oaklands, both located in NSW. Both of these projects are long term greenfield development projects which require additional exploration, scoping studies and development strategies to realise a path to commercial development. We may have additional exploration projects in other regions in the future. Any discovery of a coal deposit does not guarantee that the mining of that deposit would be commercially viable. The success of any mining exploration program depends on various factors including, among other things, whether mineral bodies can be located and whether the locations of mineral bodies are economically viable to mine. The size of the deposit, development and operating costs, coal prices and recovery rates are all key factors in determining commercial viability. In addition, the development of these resources could face significant uncertainties, may take several years and require capital expenditure from the initial exploration phase until commencement of production, during which time market fundamentals, capital costs and economic feasibility may change. As a result, actual results may differ from those anticipated by third party independent technical studies.

Furthermore, there are a number of uncertainties inherent in the development and expansion of mining operations, including: (i) the availability and timing of necessary governmental permits, licences and approvals; (ii) the timing and cost necessary to construct mining and processing facilities; (iii) the availability and cost of labour, utilities, and supplies; (iv) the accessibility of transportation and other infrastructure; and (v) the availability of funds to finance construction and production activities. As a result, we cannot assure you that any of our exploration activities will result in the discovery of valuable resources or reserves, or that reported resources can be converted into reserves in the future.

Our business may be adversely affected if we are unable to acquire additional coal resources and convert them into economically recoverable coal reserves.

Our existing coal reserves will decline as mining continues. Therefore, our growth and long-term success will depend on our ability to acquire additional coal resources within our exploration areas and to convert such coal resources into economically recoverable coal reserves. New coal resources may not be found or may not be economically recoverable. If we are unable to discover new coal resources or are unable to acquire additional coal resources and reserves, this could have a material adverse effect on our business, financial condition, results of operations and prospects.

Even if we discover additional resources or acquire additional coal resources, it could take a number of years from the initial phases of drilling until exploitation is possible, during which time the economic viability of production may change depending on the price of coal, which is subject to significant volatility, and other factors, including fuel, labour, equipment and other operating costs, government regulations and exchange rate fluctuations. If a project proves not to be economically feasible by the time we are able to exploit it, we may incur substantial write-offs. As a result of any of the foregoing factors, we may not be able to discover any viable resources, may be unable to exploit any resources discovered or may not be able to recover all or any portion of our investment in those exploration activities.

Coal mining operations in Australia have inherent title risks associated with grant and renewal of tenements, native title rights and Aboriginal land claims.

Tenements and related approvals

Exploring or mining for coal in NSW and Queensland is unlawful without a tenement granted by the relevant state government. Interests in tenements in NSW and Queensland are governed by the respective state legislation and are evidenced by the granting of licences or leases. Each licence or lease is for a specific term and carries with it reporting commitments, as well as other conditions requiring compliance. Obtaining mining tenements and carrying out certain activities under mining tenements in NSW and Queensland often involves first obtaining consents from landholders and other third parties (some of whom may in certain circumstances have a right of veto), as well as various approvals including environmental approvals. There is a risk that the requisite consents and approvals may not be able to be obtained on time or on acceptable commercial terms, or may not be able to be obtained at all. Further, all of the granted tenements in which we have or may earn an interest will be subject to applications for renewal or grant (as the case may be). We have filed advance applications for renewal of certain tenements covering the MTW and HVO mines, and these applications were pending approval by the relevant authority as at the Latest Practicable Date. The grant or renewal of each tenement or licence in NSW and Queensland is usually at the discretion of the relevant government authority which will consider various factors, which may include our compliance with any conditions placed on an existing licence, when making its decisions. There is no certainty that an application for grant or renewal of a tenement will be granted at all or on satisfactory terms or within expected timeframes.

Moreover, the conditions attached to tenements may change. The permitting rules are complex and may change over time, making our responsibility to comply with the applicable requirements more onerous, more costly or impractical, and thereby precluding or impairing continuing or future mining operations. Consequently, we may not be able to acquire title to or interest in tenements, or we may not be able to retain our interest in tenements in the long run or renew the licences or leases, if the relevant

conditions are not met or if insufficient funds are available to meet expenditure commitments. If a tenement is not renewed, we may lose the opportunity to discover and/or develop any mineral resources on that tenement.

Native title

It is also possible that, in relation to tenements which we have an interest in or will in the future acquire, there may be areas over which legitimate native title rights of Aboriginal Australians exist. Where the grant or renewal of a tenement is in respect of land in relation to which native title may exist, the provisions of the Native Title Act 1993 (Cth) need to be complied with in order for the tenement to be validly granted. Compliance with the Native Title Act 1993 (Cth) and the relevant native title process to be followed for the grant of the tenement may be prolonged or delayed, and substantial compensation may be payable as part of any agreement reached, including for the impairment of the relevant native title rights and interests.

Although there is no determination of native title which overlaps with the areas over which we have interests under tenements, there are registered native title claims overlapping some or all of the areas in which HVO, MTW, Ashton, Austar and Moolarben mines are located. While it is unlikely that these claims, should they be successful, will affect the validity of the existing mining tenements, we may be required to enter into a compensation agreement with the native title holders in areas of overlap before a new mining lease or assessment lease is granted or an existing lease renewed.

Our interests in tenements, our ability to gain access to new tenements, or our ability to progress from the exploration phase to the development and mining phases of operations, may be adversely affected by areas that are subject to native title claims.

Aboriginal land claims

Under the Aboriginal Land Rights Act 1983 (NSW), Aboriginal Land Councils can claim crown land if certain requirements are met. If a claim is successful, freehold title over the relevant land is transferred to the claimant council. Further, councils are afforded certain statutory rights which can include an effective veto over the grant of future mining tenements over any area of such land. Some of our tenements are located in areas that are subject to outstanding Aboriginal land claims, and additional Aboriginal land claims may be made in the future over other areas in which our tenements are located. Any such claims may result in our ability to explore or mine for coal in these areas being subject to the decisions of the relevant Aboriginal Land Councils, which may adversely affect our ability to develop projects and, consequently, our operational and financial performance.

Certain conditions of the approvals granted for commencement of mining operations at one of our mines have not been fulfilled, and we are unable to commence development work at that site.

Pursuant to the New South Wales Environmental Planning & Assessment Act, the required environmental approvals for the Ashton South East Open Cut Project were granted by the New South Wales Land and Environment Court on 17 April 2015. Under the terms of such approval, we are precluded from undertaking any development work on the project site until we have purchased, leased or licensed a privately owned property which forms part of the mining area for that project. As at the Latest Practicable Date, no agreement had been concluded with the owner of the relevant property. While we have until April 2020 (or April 2022 if extended) to reach agreement with the property

owner (or their successors in title), or to seek a further extension to the environmental approval beyond 2022, there is no guarantee that such agreement will be reached or an application for extension of the approval will be successful. If we are unable to reach an agreement in respect of the relevant property, we may not be able to commence development work on the project site, which could render the project unviable.

Coal mining operations in Australia are subject to certain domestic risks.

Our coal mining operations in Australia are subject to certain domestic risks, which include the following.

- *Land access*. The granting of mining tenements does not remove the need to enter into land access arrangements with third party land holders (where the land underlying the mining tenement is owned by a third party). In some cases, the underlying land may be owned by a competitor, pastoralist or other third parties. There is no guarantee that we will be able to obtain all required land access rights required for the operation of our mines from the relevant land holders.

- *Coordination agreements*. Coal mining tenements in NSW and Queensland are frequently granted over land over which other tenements and other exploration interests have been or may be granted. Where tenements overlap in Queensland, depending on the type of tenements which are overlapping, it is necessary for the holders to enter into coordination agreements or joint development plans. Where tenements overlap in New South Wales, it may be a condition of the grant or renewal of certain tenements that the tenement holder enters into, or makes every reasonable attempt (and be able to demonstrate its attempts) to enter into, cooperation agreements with the holders of any overlapping authorisation. In some cases, the interests of the overlapping tenement holders may not be aligned and accordingly, mining operations may be delayed or adversely affected. One of our mines and its associated tenements adjoin or are overlapped by petroleum tenements, exploration licences and interests, mining leases and private land leases held by third parties, and there is no guarantee that the relevant third parties will adhere to any coordination agreements or similar arrangements we enter into with them. Further, we may not be able to reach an agreement with any overlapping tenement holders on terms satisfactory to us in the future. If agreement cannot be reached with overlapping tenement holders, the matter may be referred to the relevant governmental authority or court who may make a decision which adversely impacts upon or prevents the project proposed by us.

- *Environmental conditions and action groups*. Before any mining tenure is granted in Australia, the applicant must undertake a comprehensive public environmental assessment on the impact of the proposed mining operations. Such an assessment involves a public consultation process, which often involves encountering organised environmental or community groups that seek to restrict or block contemplated mining operations. The relevant authorities frequently impose conditions on environment approvals that may materially affect mining operations. Environmental lobby groups in both Queensland and New South Wales have recently made submissions to governmental authorities in an attempt to prevent or delay new mine developments or expansion of existing mines on the basis of environmental concerns. For example, it is possible that community groups, or their

representatives, may commence legal action relating to the closure of Wallaby Scrub Road which was gazetted by the New South Wales government in connection with the planned westward expansion of the Warkworth mine. Further, community groups such as those in Bulga, situated near the MTW mines, have voiced numerous grievances against mine operations, and noise and dust emissions in particular. Increased community concern and actions taken by community and environmental groups may delay or prevent the development of new mines or the expansion of existing mines, or may result in conditions being imposed on such mines or costs being incurred that adversely affect the profitability of those mines.

We purchase services from third-party service providers to carry out certain coal mining and other work and may enter into disputes with such service providers.

We engage third-party service providers and contractors to provide certain services in our exploration, mining and other processes. The services we procure from these service providers differ depending on our needs at any given mine, but generally include secondment of workers to assist us in extracting coal at our mines, renting certain production equipment to us, providing specialist services such as blasting, and advising us on mining technology and coal production. See "*Business – Employees – Third Party Contractors*." Our aggregate expenses in relation to contractors for 2015, 2016 and 2017 and the six months ended 30 June 2018 were A$155 million, A$78 million, A$134 million and A$96 million, respectively.

Production at our coal mines could be disrupted by any significant failure by our contractors to comply with their obligations under their operating agreements (whether as a result of financial or operational difficulties or otherwise) or any termination or significant breach of an operating agreement by a contractor. We might not be able to find suitable replacement contractors within a reasonable period of time or at all, if any of our contractors were to cease to perform their services or to terminate their operating agreements.

If a dispute arises between any such service provider and us in connection with the performance of either party's obligations and the parties cannot resolve the differences in a timely manner, the operation of the relevant coal mine may be materially and adversely effected. Further, our service providers may enter into insolvency or similar proceedings, which could impact their ability to perform their contracted services as well as our ability to recover amounts owed to us. There can be no assurance that we will be successful in attempting to enforce our contractual rights or recover all or any monies owed by our counterparty (including under any claim for damages) through legal action.

Any protracted dispute with our contractors or any material labour dispute between our contractors and their employees could materially and adversely affect our operations and production, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may become involved in litigation and other legal proceedings, which may have a material adverse effect on our reputation, business, financial condition and results of operations.

Like all companies in the resources sector, we are exposed to the risk of claims, litigation and other legal proceedings involving the Company, our subsidiaries and the Directors (either as the complainant or as the defendant). Such claims or proceedings may be made or instituted by persons alleging they are owed fees or other contractual entitlements, employees, regulators, competitors or other third parties. Such claims or proceedings could divert our management's time and attention and consume financial resources in their defence or prosecution. For example, we are involved in a dispute with one of our infrastructure services providers relating to fee payments, which we do not consider to be payable to the services provider or in the amount claimed. In addition, we have commenced arbitral proceedings against the Noble Group in relation to breaches of a contract by the Noble Group and, separately, the Noble Group has commenced proceedings in the Supreme Court of New South Wales (an Australian State court) in relation to alleged breaches and repudiation of a different contract by Gloucester Coal, a subsidiary of the Company. Given the early stage nature of these matters and ongoing fact-finding, we are not able to assess whether the potential impact on us will be material.

Further, Gloucester SPV Pty Ltd ("**Gloucester SPV**"), a subsidiary of the Company, is one of several respondents to proceedings commenced in 2015 by Oceltip Pty Ltd ("**Oceltip**"), an independent third party, against Noble Resources Pte Ltd ("**Noble Resources**"), a subsidiary of the Noble Group, in the Supreme Court of Queensland. The subject of the dispute involves the transfer of Noble Resources' right to receive certain royalty payments under a royalty deed to Gloucester SPV, who since the transfer now enjoys the right to those royalty payments. The consideration for the transfer was A$168 million and as at the Latest Practicable Date we estimate the potential value of the royalty streams to be approximately A$195 million. Oceltip's claim disputes the validity of the transfer and seeks to enforce its pre-emptive rights under the royalty deed against Noble Resources. On 14 November 2018, a related claim was served on Gloucester Coal and Gloucester SPV in which Oceltip has alleged that Gloucester SPV induced or procured Noble Resources' alleged breach of the royalty deed by reason of transferring the rights to receive those payments to Gloucester SPV, and has claimed unspecified damages. As at the Latest Practicable Date, the Oceltip matters remain at a preliminary stage and may be consolidated into a single proceeding, and we are unable to assess the Group's potential exposure (if any) on account of these matters.

Save as disclosed in "*Business – Health, Safety and Environmental Matters*", during the Track Record Period and up to the Latest Practicable Date, neither we nor any of the Directors was engaged in any litigation, claim or arbitration of material importance nor, to the best of the Directors' knowledge, is any litigation, claim or arbitration of material importance pending or threatened against us or the Directors in relation to the Group. See "*Business – Legal Proceedings and Non-Compliance.*" There is no guarantee that we will not be involved in any such matters in the future, or that no additional liability will arise out of any pending proceedings that we do not consider to be of material importance. Any unfavourable decision in connection with such proceedings, individually or in the aggregate, could adversely affect our reputation, business, financial condition and results of operations.

We may experience difficulty in integrating our acquisitions, which could result in a material adverse effect on our business, financial condition and results of operations.

Historically, we have grown through acquisitions. We acquired the Southland Mine (renamed Austar) in December 2004 and Felix Resources (assets of which included interests in the Moolarben, Yarrabee and Ashton mines) in December 2009. We listed on the ASX in June 2012, following our merger with Gloucester Coal, assets of which included interests in the Middlemount, Stratford Duralie and Donaldson mines and the Monash exploration project. In September 2017 we completed the acquisition of Coal & Allied Industries Limited from Rio Tinto, as a consequence of which we acquired interests in HVO and MTW in New South Wales, which are among the largest thermal coal operations in Australia, as well as related export infrastructure. In March 2018, we acquired an additional 28.9% interest in Warkworth from MDP.

We have devoted and continue to devote significant resources to the integration of our operations in order to achieve the anticipated synergies and benefits of our acquisitions.

Acquisitions and expansion involve uncertainties and a number of risks, including:

- difficulty in integrating the assets, operations and technologies of the acquired companies or assets, including their employees, corporate cultures, managerial systems, processes and procedures and management information systems and services;

- complying with the laws, regulations and policies applicable to the acquired businesses;

- failure to achieve the objectives or benefits, or to generate sufficient revenue to recover the costs and expenses, resulting from the acquisition and integration of such companies or assets;

- managing relationships with employees, customers and business partners during the course of integrating new businesses;

- managing ongoing relationships with joint venture partners where we acquire interests in joint ventures (see also "– *We operate through a number of joint venture and similar structures, and our operational and financial results will be affected by how these arrangements are managed.*");

- integrating other acquired employee groups with our employee groups and maintaining productive employee relations;

- attracting, training and motivating members of our management and workforce;

- accessing our capital resources and internally generated funds to fund acquisitions, which may divert financial resources otherwise available for other purposes;

- enhancing our operational, financial and management controls, particularly those of our newly acquired assets and subsidiaries, to maintain the reliability of our reporting processes;

- difficulty in exercising control and supervision over the newly acquired operations, including failure to implement and communicate our safety management procedures resulting in additional safety hazards and risks; and

- potential ongoing financial obligations and unforeseen or hidden liabilities of the acquired businesses and assets.

In the event that we are unable to efficiently and effectively integrate newly acquired companies, including C&A, we may be unable to achieve the objectives or anticipated benefits of such acquisitions, which may adversely impact our business, financial condition and results of operations. In addition, we may have to write down the carrying value of the intangible assets associated with any acquired companies, which could adversely affect our results of operations.

We are exposed to fluctuations in exchange rates and interest rates.

As a company with sales across the Asia-Pacific region but operating entirely in Australia, our financial results are exposed to foreign exchange rate movements, particularly those relating to the Australian dollar and U.S. dollar rate. In particular, our sales under coal supply contracts are generally priced and payable in U.S. dollars, while our day-to-day costs are primarily denominated in our functional currency, the Australian dollar. In addition, imported plant and equipment may be priced in U.S. dollars or another foreign currency. Our debt is primarily denominated in U.S. dollars, although we also incur debt, and have debt facilities available, in Australian dollars. Some of our foreign exchange risk is hedged through natural cash flow hedges. See also *"– We do not make use of hedging instruments to hedge foreign exchange risks in respect of U.S. dollar denominated loans, and the natural cash flow hedge created by hedging a portion of these loans against our U.S. dollar denominated sales may not be sufficient to offset our foreign exchange losses*" and "*Financial Information of the Group – Significant Factors affecting our Results of Operations and Financial Condition – Foreign Exchange Rate Fluctuations*". The impact of exchange rate movements will vary depending on factors such as the nature, magnitude and duration of the movements and the extent to which currency risk is hedged under hedging arrangements.

We are exposed to cash flow interest rate risk in relation to variable-rate bank balances, term deposits, restricted cash and variable rate borrowings. Our interest rate risk primarily arises from fluctuations in the LIBOR rate in relation to our U.S. dollar-denominated borrowings. A substantial majority of our borrowings denominated in U.S. dollars are linked to floating LIBOR rates, the fluctuation of which is beyond our control. See "*Financial Information of the Group – Significant Factors affecting our Results of Operations and Financial Condition – Financing Arrangements and Interest Rate Movements*". We do not currently have any interest rate hedging arrangements. Our lending rates may increase in the future as a result of reasons beyond our control, and may result in an adverse effect on our business, financial condition and results of operations.

We do not make use of hedging instruments to hedge foreign exchange risks in respect of U.S. dollar denominated loans, and the natural cash flow hedge created by hedging a portion of these loans against our U.S. dollar denominated sales may not be sufficient to offset our foreign exchange losses.

We do not currently use bank issued instruments to hedge foreign exchange risks in respect of U.S. dollar denominated loans. However, the scheduled repayment of the principal amounts on our U.S. dollar denominated loans are designated to hedge the

cash flow risks on the portion of forecast U.S. dollar denominated sales that are not hedged through bank issued instruments, resulting in a natural cash flow hedge. Specifically, U.S. dollar denominated loan repayments within a six-month period are designated to hedge the forecast U.S. dollar denominated sales during the same period after the designation of the hedge relationship based on a dollar for dollar basis until the hedge ratio reaches one.

Unrealised foreign exchange gains or losses arising on the translation of hedged U.S. dollar denominated loans are deferred on our balance sheet to a cash flow hedge reserve in equity. Such deferred gains or losses are recycled to the income statement during the six-month period in which the loan is scheduled to be repaid. There is no guarantee that this natural cash flow hedge will be sufficient to offset our foreign exchange losses, and material foreign exchange losses could negatively affect our financial condition. As at 30 June 2018, we had A$791 million of unrealised foreign exchange losses before tax and A$554 million of unrealised foreign exchange losses after tax deferred on our balance sheet in equity through our natural cash flow hedge.

Our Controlling Shareholders are state-owned enterprises in the PRC, and will be able to exercise significant influence over certain activities of the Group.

Yanzhou, which currently holds 65.45% of the Shares and will be interested in 62.5% of the Shares immediately following the completion of the Global Offering, and Yankuang, as the majority shareholder of Yanzhou, will be in a position to exercise significant influence over matters which require approval of the Shareholders. The interests of Yanzhou and Yankuang may not necessarily be aligned with the interests of other Shareholders. In particular, Yanzhou, Yankuang, and their respective subsidiaries conduct business in the coal mining industry. Actions of Yanzhou and Yankuang could favour their own respective interests over the interests of other Shareholders, which could materially affect our business, financial condition, results of operations and prospects.

Furthermore, Yanzhou and Yankuang are state-owned enterprises in the PRC. As a consequence, they are required in their capacity as our Controlling Shareholders to obtain regulatory approvals in the PRC in respect of a range of actions that we may engage in. These approvals may not be received in a timely manner or at all, which could delay or prevent actions that we may wish to undertake.

We have existing contractual arrangements, and may in the future continue to enter into contractual arrangements, with our Controlling Shareholders.

We have entered into loan, guarantee and coal sales agreements with the Yanzhou Group, a management and transitional services agreement with Yanzhou and Yankuang and certain other arrangements and transactions with Yanzhou and Yankuang, further details of which are set out in "*Connected Transactions*." These connected transactions were reviewed and approved according to the procedures under relevant regulations and policies. However, we may continue to enter into related party transactions with our Controlling Shareholders and, as such, any material financial or operational developments experienced by our Controlling Shareholders that lead to the disruption of their operations or impair their ability to perform their obligations under their agreements with us could materially affect our business, financial condition and results of operations and future prospects.

Our business, financial condition and results of operations are subject to government royalties on the production of coal.

In addition to corporate income tax, we are required to pay government royalties, direct and indirect taxes and other imposts in the jurisdictions in which we operate. The production of coal in Queensland and New South Wales is subject to the payment of royalties to the state governments. In both states, these royalties are calculated as a percentage of the value for which the coal is sold and payable on an *ad valorem* basis. The relevant State Governments may increase these royalties or change their method of calculation or the interpretation or application of the relevant policies, or impose new royalties or similar taxes. Any resulting increase in our tax cost could have a material adverse effect on our business, financial condition and results of operations.

The Company may lose the benefit of existing and carried forward tax losses, which may have an adverse effect on its profits.

As at 30 June 2018, our tax consolidated group had approximately A$2.4 billion of available carried forward tax losses which can be applied to reduce future liability for income tax on its taxable profits, so long as they remain available. The Company's ability to use carried forward losses in the future will depend, in part, on its continued satisfaction of the loss recoupment tests under Australian tax laws and be subject to the availability of sufficient future taxable profits. Further, the Company's ability to obtain the benefit of existing tax losses and claim other tax attributes will depend on future circumstances and may be affected by any changes in our ownership structure (including the ownership structure of Yanzhou). Such changes may be beyond our control, and there is no guarantee that the Company will be able to utilise the benefit of all (or any) of the carried forward tax losses.

If the Company's ability to utilise its tax losses is impacted, it will be required to pay higher levels of corporate income tax in future periods than may otherwise have been the case, which will reduce the available profit to be applied towards the payment of dividends or use for other purposes such as investment or the reduction of debt.

There is uncertainty about the applicability or recoverability of our deferred tax assets, which may affect our taxes payable for future periods.

Our deferred tax assets include unused tax losses and tax credits which we carry forward to the extent that our management believes it is probable that taxable profits will be available against which such unused tax losses and credits can be utilised. Our deferred tax assets amounted to A$1,166 million, A$1,339 million, A$1,219 million and A$1,086 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. There is no expiry date on our ability to utilise such tax losses, although they are subject to the continuous satisfaction of certain tax rules. See notes 4 and 30 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details on our accounting policy with respect to deferred tax assets and on the movements of our deferred tax assets during the Track Record Period. Such determination requires significant judgment from our management on the tax treatment of certain transactions as well as an assessment of the probability, timing and adequacy of future taxable profits for the deferred tax assets to be recovered. If such judgments turn out to be imprecise, we may need to adjust our tax provisions accordingly. In addition, when we utilise carried forward tax losses against our future taxable profit, our taxable profits are reduced, which in turn reduces the tax payable. We cannot predict any future movements in our deferred tax assets or the effect that such movements could have on our taxes payable for future periods.

Transactions with international related parties may be impacted by the application of Australia's transfer pricing rules, which may have an adverse effect on the Company's profits.

Australian transfer pricing rules adopt the arm's length principle. The application of the arm's length principle in relation to financing issues has evolved in recent years following the decision of the Full Federal Court in *Chevron Australia Holdings Pty Ltd v FCT* [2017] FCAFC 62. Following this decision, the Australian Taxation Office has published formal guidance setting out its approach to assessing risk in respect of related party cross-border financing arrangements, and has increased its review activities. It is expected that further guidance will also be released by the Australian Taxation Office in the near future to provide specific risk indicators for particular types of financing arrangements, such as financial guarantees and interest free loans.

The Company has undergone a significant transformation with its 2017 capital raising and the C&A Acquisition, which has resulted in a change in its operational and capital structure. These, together with recent increases in coal prices, have led to an improved financial position of the Company. In addition, the Global Offering and the Australian Entitlement Offer will result in a further change to the Company's capital structure.

The Company engages in several international related party transactions on an annual basis in relation to its operations in Australia that are subject to the arm's length principle, which include loan, guarantee, coal sale and administrative service arrangements. See "*Connected Transactions*" for further details. No specific formal review of our connected transactions has been undertaken by the Australian Taxation Office within the relevant review periods. However, changes in Australian law and guidance from the Australian Taxation Office may affect the interpretation of the arm's length principle in relation to our related party transactions. Such changes may adversely impact the taxation outcomes associated with our connected transactions, and consequently could have a material adverse effect on our business and financial condition.

Australia's thin capitalisation rules impose limits on the level of debt deductions that can be claimed for income tax purposes, which may have an adverse effect on the Company's profits.

Australia's thin capitalisation measures apply to the total debt of the Australian operations of the Company (including foreign and domestic related-party and third-party debt), and may result in a denial of certain debt related deductions after application of transfer pricing measures applicable to related party debt. The Company has at certain points in the past exceeded the safe harbour thin capitalisation limits (which prescribe a debt to asset ratio of 60%), and as a consequence has not claimed those debt deductions. The Company is currently operating outside the safe harbour thin capitalisation limits and, while the Global Offering and the Australian Entitlement Offer are expected to improve its thin capitalisation position, there is no guarantee that our position will improve.

Our coal operations are extensively regulated in Australia, and government regulations may limit our activities and adversely affect our business, financial condition and results of operations.

Our operations are subject to laws and regulations of general application governing the use and granting of mining rights, land tenements, access and use, exploration licences, mining operation time and recovery rates, environmental requirements including site-specific environmental licences, permits and statutory authorisations, workplace health and safety, trade and export, competition, access to infrastructure, pricing of transportation services, foreign investment and return on investments and taxation. These regulations may be implemented by various federal, state and local government departments and authorities including the Australian Department of Industry and the Department of Environment. The adoption of new legislation or regulations or the new interpretation of existing legislation or regulations or changes in conditions attaching to approvals may materially and adversely affect our operations, our tax costs and cost structure or product demand. The occurrence of any of the foregoing may cause us to substantially change our existing operations, incur significant compliance costs and increase the risk of our future investment or prevent us from carrying out mining operations, which could have a material adverse effect on the profitability of our operations and our overall business, financial condition and results of operations. See also "– *Our business, financial condition and results of operations may be adversely affected by present or future environmental regulations in Australia and other countries, and we may be exposed to legal claims and increased costs due to the environmental impacts of our operations*".

In particular, changes in laws and regulations in the following areas may substantially affect our business, financial condition and results of operations:

- *Environment and planning*: In recent years, the State governments of Queensland and New South Wales have introduced various policies in the interests of protecting high-value agricultural and urban land and environment areas from the effects of mining. These include the Queensland government's Regional Planning Interests Act and the New South Wales government's Strategic Regional Land Use Policy, Aquifer Interference Policy, and 2015 amendments to the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007. In 2013, the New South Wales State government introduced the fit and proper person consideration which allows it to consider a miner's conduct, financial capabilities and technical expertise in making decisions about mining rights, including the grant, transfer, renewal, cancellation and suspension of such rights. In the last five years, the maximum penalties for breaches of mining and environmental legislation have also been significantly increased. In the same time period, the Queensland State government has reviewed the method of calculating the financial assurance required to be provided by mining companies in respect of their rehabilitation liability, which has led to a significant increase in financial assurance amounts that are required to be covered by bank guarantees. Further, the Audit Office of New South Wales has carried out a review of rehabilitation liabilities in respect of mines and the Department of Planning and Environment is implementing a number of reforms to strengthen operational rehabilitation requirements for all mining projects in New South Wales. These reforms may lead to a material increase in the amount of security required in respect of rehabilitation liabilities.

- *Workplace health and safety*: In Australia, workplace safety is regulated by the States and Territories, and almost all States and Territories have introduced virtually identical general safety legislation. Many States have also prescribed specific mining legislation. The process of harmonising the mining legislation across the country has been undertaken, but as at the Latest Practicable Date, New South Wales has been the only major mining State to amend its mining legislation (Western Australia and Queensland are yet to adopt the national model). Since 2016, there has been a focus on the re-emergence of black lung disease (Coal Workers' Pneumoconiosis) in the mining sectors in Queensland and New South Wales, and in September 2016 the Queensland government established a parliamentary committee to inquire and report on the re-emergence of the disease. As a result, it is likely that workplace health and safety regulations may be amended in the near future. Western Australia is currently considering introducing a modernised Work Health and Safety Act, which is expected to include amended mine safety legislation and to mirror parts of the national model.

Our business, financial condition and results of operations may be adversely affected by present or future environmental regulations in Australia and other countries, and we may be exposed to legal claims and increased costs due to the environmental impacts of our operations.

Our coal mining operations require water and other materials, and produce waste water, gas emissions and solid waste materials. In addition, surface mining operations also result in noise and air quality impacts. As an Australian coal producer, we are subject to extensive and increasingly stringent environmental protection laws and regulations. These laws and regulations:

- restrict and impose conditions on usage of water and waste water management;
- impose fees and limits on the discharge of waste substances into the air, water and land, including carbon emissions;
- require provisions for land reclamation and rehabilitation;
- impose fines and other penalties for serious environmental offences; and
- establish the conditions (including environmental requirements) for domestic mining operations.

Extensive environmental regulations in Australia, and in other countries that could affect our business, may impose costs on our mining operations, and future regulations could increase those costs, limit our ability to produce and sell coal, or reduce demand for our coal products. In particular, the regulatory response to the risk of climate change, including unilateral and collective action by Australia and other countries, may affect demand for coal, coal prices and the competitiveness of our products in the world energy market. Our operations (including the operations of any assets or companies acquired by us) may not have met or may not in the future meet all environmental or related regulatory requirements.

Further, our operations may substantially impact the environment or cause exposure to hazardous materials. While we regularly assess the major environmental impacts of our operations, these assessments may not constitute a comprehensive evaluation of all possible environmental impacts. Historical or future contamination or other incidents could lead to opposition from community and action groups and may also subject us to legal claims or increased expenses. For example, a number of penalty notices were issued by the New South Wales Environment Protection Agency against our Hunter Valley operations over the last three years in relation to excessive blast pressure and water leakages and overflows, for which we paid fines amounting to A$15,000 each. We may also be subject to requirements in relation to the investigation and clean-up of soil, surface water, groundwater and other media.

Environmental legislation may change in a manner that requires compliance with additional standards and introduce a heightened degree of responsibility for companies and their directors and employees. In particular, there may be increased regulation on the usage and treatment of water at mining operations. There may also be unforeseen environmental liabilities resulting from coal related activities, which may be costly to remedy. In particular, the acceptable level of pollution and the potential mine closure and relinquishment costs and obligations for which we may become liable as a result of our activities may increase as a result of legislative and policy changes. In addition, our budgeted amount for environmental regulatory compliance may not be sufficient, and we may need to allocate additional funds for this purpose. If we breach applicable environmental or related regulatory requirements, we may incur fines or penalties, be required to curtail or cease operations or be subject to increased compliance costs or costs for rehabilitation or rectification works at one or more of our sites, any of which may have a material adverse effect on our business, financial condition and results of operations.

Our ability to generate the expected economic returns from our mining assets may be adversely affected by present or future environmental regulations in Australia and other countries.

Our mining operations are subject to extensive and increasingly stringent environmental regulations in Australia and in other countries. Changes in and future environmental regulations could increase the standards and costs of compliance, and adversely affect our ability to generate the expected economic returns from our mining assets over their useful lives. We may not always be able to comply with future laws and regulations in relation to environmental protection economically or at all. There can be no assurance that we will be able to fully and economically utilise the entire coal resources of the mines we operate currently or in the future or that some of our mining assets will not become “stranded assets” that are not able to generate the expected economic returns over their useful lives.

We may not be able to obtain all necessary approvals, permits and licences.

Pursuant to applicable laws and regulations in Australia, we are required to obtain and renew from to time a number of regulatory approvals, permits and licences with respect to our exploration activities, mining operations for our existing mines as well as our development-stage or exploration projects, including obtaining planning approvals, land access and land owner consents, and address any native title issues, impacts on the environment and objections from local communities. While the requirement to obtain such approvals and to address potential and actual issues for existing and future mining projects is applicable to all companies in the coal sector, there is no guarantee that we will be in a position to secure all of the required consents, approvals and rights

necessary to maintain our current production profile from our existing operations or to develop our growth projects in a manner which will result in profitable mining operations and the achievement of our long-term production targets. We are still in the process of obtaining or renewing some of the regulatory approvals, permits and licences required for our business operations, and may experience substantial delays in obtaining such regulatory approvals, permits and licences. As at 14 November 2018, we had the following material regulatory approvals, permits and licences with respect to our mines that are subject to pending renewals:

Regulatory Approval, Permit and Licences	**Expiry Date**
HVO	
Mining lease ("**ML**") 1324	19 August 2014
ML 1337	9 September 2014
ML 1359	1 November 2015
ML 1428	14 April 2019
ML 1482	14 April 2019
Exploration licence ("**EL**") 5291	28 April 2018
EL 5417	8 May 2018
EL 5418	8 May 2017
EL 8175	23 September 2018
Authorisation 72	24 March 2018
MTW	
ML 1412	10 January 2018
Moolarben	
EL 6288	22 August 2017
Stratford Duralie	
Authorisation 311	28 November 2017
Authorisation 315	28 November 2017
EL 6904	9 October 2017
ML1409	6 January 2018
ML1427	5 April 2019
Oaklands	
Assessment Lease 18	25 June 2018
Ashton	
EL4918	17 December 2015
Donaldson	
EL 6964	10 December 2015
Yarrabee	
ML 80050	31 October 2018
Austar	
Mining Purposes Lease 269	7 December 2018

As at 14 November 2018, we had the following material regulatory approvals, permits and licences with respect to our mines that have been applied for but were yet to be granted:

- HVO: Assessment lease application ("**ALA**") 52, ALA 58 and ALA 59; Mining Lease Application ("**MLA**") 489, MLA 495, MLA 496, MLA 520, MLA 534, MLA 535, MLA 542, MLA 543; Exploration Licence Application ("**ELA**") 5525, ELA 5526 and ELA 5527;

- MTW: ELA 5678 and MLA 548;

- Stratford Duralie: MLA 552;
- Middlemount: ML 700027;
- Ashton: MLA 500, MLA 351 and MLA 394; and
- Austar: MLA 521.

If any of these or our other mining licences, safety production licences, environmental or other certificates, approvals or permits are revoked, not renewed or not obtained, we could be required to cease operations of the affected tenement, mine or production facility, rehabilitate the disturbed area and be subject to regulatory or administrative penalties. Depending on the size of the ML and activities being conducted (or to be conducted) on that ML, the impact could be material. Moreover, if an EL is not renewed, it may preclude future potential expansion projects and earnings. As a result, the loss of some or all of our mining licences, coal production licences, safety production licences, environmental or other certificates, approvals or permits may have a material adverse effect on our business, financial condition and results of operations. See "*Business – Mining and Exploration Licences*".

In addition, some regulatory consents in New South Wales may contain conditions which grant the owners of prescribed properties affected by the operation of a mine a right to have their properties acquired by the mine operator. The exercise of this right by affected owners of prescribed properties (both individually and in the aggregate) may impact our operational and financial performance. Moreover, Australian environmental approval processes require a technical environmental assessment to be prepared prior to granting approval, as well as public consultation. Community groups may lobby for more restrictive conditions to be imposed on approvals granted or for the approval to be declined, either of which may result in a material adverse effect on our business and results of operations.

Our risk management and internal control systems may not fully protect us against the various risks inherent in our business.

While we manage regulatory compliance by monitoring and evaluating our internal controls and risk management systems to ensure that we are in compliance with all relevant statutory and regulatory requirements, there can be no assurance that deficiencies in our internal controls and compliances will not arise, or that we will be able to implement, and continue to maintain, adequate measures to rectify or mitigate any such deficiencies in our internal controls, in a timely manner or at all. As we continue to grow, there can be no assurance that there will be no instances of such inadvertent non-compliances with statutory requirements, which may subject us to regulatory action, including monetary penalties, which may adversely affect our business and reputation.

Any changes in accounting standards may have an adverse effect on our reported financial performance or financial position.

We prepare our financial statements in accordance with the International Financial Reporting Standards ("**IFRS**") and other authoritative pronouncements and interpretations issued by the International Accounting Standards Board ("**IASB**"). The IASB may amend IFRS and the related pronouncements and interpretations or replace them with new standards, and such amendment or replacement is beyond our control. Any changes to IFRS or to the interpretation of those standards, or any disagreements by authorities of the judgments or estimates applied by us as required by IFRS, may have an adverse effect on our reported financial performance or financial position.

The future adoption of IFRS 16 on the accounting treatment of our leases may impact our financial results.

Our business operations involve leases for certain items of property, plant and equipment, including operating leases for mining equipment, office space and small items of office equipment. As at 31 December 2015, 2016 and 2017 and 30 June 2018, we had total operating lease commitments of A$6 million, A$92 million, A$187 million and A$177 million, respectively.

We will adopt IFRS 16 on 1 January 2019. Under IFRS 16, which replaces certain other accounting standards for leases, at the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). The right-of-use asset is subsequently measured at cost less accumulated depreciation and any impairment losses unless the right-of-use asset meets the definition of investment property in IAS 40. The lease liability is subsequently increased to reflect the interest on the lease liability and reduced for the lease payments. Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset. Lessees will also be required to remeasure the lease liability upon the occurrence of certain events, such as change in the lease term and change in future lease payments resulting from a change in an index or rate used to determine those payments. Lessees will generally recognise the amount of the re-measurement of the lease liability as an adjustment to the right-of-use asset.

With respect to our future leases under IFRS 16, we expect that for our property, plant and equipment which have minimum lease payments over the lease term, the combination of straight-line depreciation of the right-of-use asset and the effective interest rate method applied to the lease liability will result in a higher total charge to the statement of profit or loss in the initial years of the lease, and decreasing expenses during the latter part of the lease term, but there would otherwise be no impact on the total amount of expenses recognised over the lease term. We expect that during the lease term, a certain portion of these lease commitments will be recognised in our consolidated statement of financial position as right-of-use assets and lease liabilities. As a result, if we were to simultaneously enter into a large number of leases with similar durations, under IFRS 16, we would expect to record higher expenses and liabilities attributable to such leases towards the beginning of the lease period, resulting in a lower net assets position. Towards the end of the lease period, we would to expect to record lower expenses and liabilities. As a result, while under this scenario, the total expenses attributable to each lease over the course of the respective lease period would not change, our financial results may be materially affected on a year-to-year basis. See note 3 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details on IFRS 16 and how we expect the adoption of IFRS 16 to affect our financial results.

We are dependent on key personnel as well as the availability of qualified technical personnel.

We are dependent on certain key senior management employees. If we lose the services of any of our key management employees, we may have difficulties in finding, relocating and integrating adequate replacement personnel, which could seriously hamper our operations. We are also dependent on attracting qualified technical employees to provide services in relation to certain of our coal and other mining operations.

Coal mining is a labour-intensive industry. Our future success will depend greatly on our and our mining contractors' continued ability to attract and retain skilled and qualified personnel. Even if we are able to attract, integrate and retain new qualified technical personnel, this may be achieved on uneconomic terms. Any failure by us to retain our current workforce or hire comparable personnel in the future could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our operations may be affected by uncertain mining conditions and we may suffer losses resulting from mining safety incidents, which may not be covered by our insurance.

Mining activities are inherently risky and hazardous. Our business is subject to a number of risks and hazards generally which may affect the safety of our workforce as well as our costs of producing coal. Specifically, our operations are subject to adverse environmental conditions, deterioration in the quality or variations in the thickness of coal seams, industrial accidents such as roof collapses, mine water discharge and flooding, explosions from methane gas or coal dust, ground falls and other mining hazards, labour disputes, power interruptions, critical equipment failure (including in particular any protracted breakdown of, or issues with, our coal handling and preparation plants or major excavators and longwalls), unusual or unexpected geological conditions, ground or slope failures, changes in the regulatory environment and natural phenomena such as inclement weather conditions, floods, earthquakes and fires. The occurrence of any of the foregoing events or conditions would have a material adverse impact on our business, financial condition and results of operations.

Although we conduct geological and geotechnical assessments on mining conditions and adapt our mining plans to the mining conditions at each mine, any such occurrences could result in damage to mineral properties or production facilities, personal injury or death, environmental damage to our properties or properties of others, reduction in the amount of coal produced, delays in development or mining, increased costs, monetary losses and possible legal liability. Although we have implemented safety measures at our mining sites which are subject to independent audits, trained our employees on occupational safety and maintain liability insurance for personal injuries as well as limited property damage for certain of our operations, safety incidents may occur.

Consistent with what we believe to be industry practice, we maintain insurance to protect against certain risks in amounts we consider to be reasonable. However, our insurance may not cover all the potential risks associated with our operations. We may also be unable to maintain insurance to cover these risks at economically feasible premiums and may not be able to pass on any increased costs relating to insurance to our customers. If such costs exceed the levels which we expect, there could be a material adverse effect on our business, financial condition and results of operations.

We may not always be able to detect or prevent fraud, bribery or other misconduct by our employees, customers or other third parties on a timely basis.

Any fraud, misrepresentation, money laundering or other misconduct by our employees, customers, service providers, business partners or other third parties could result in violations of relevant laws and regulations by us and subject us to corresponding regulatory sanctions. These unlawful activities and other misconduct may have occurred in the past and may occur in the future, and may result in civil and criminal liability under increasingly stringent laws or cause serious reputational or financial harm

to us. While we have in place and are implementing measures aimed at detecting and preventing employees' and external parties' fraud, misrepresentation, money laundering, commercial bribery and other misconduct, we may not be able to timely detect or prevent such activities, which could subject us to regulatory investigations and criminal and civil liability, harm our reputation and have a material adverse effect on our business, financial condition, results of operations and prospects.

We may not be able to protect our other intellectual property rights, which could have a material adverse effect on our business.

We own intellectual property such as trademarks and know-how. See "*Business – Intellectual Property*".

We believe that our intellectual property rights are important to our success. Besides applicable laws, we rely on a combination of confidentiality policies and agreements, nondisclosure and other contractual arrangements to protect our intellectual property rights. We cannot assure you that we will be able to detect any unauthorised use of, or take appropriate, adequate and timely actions to enforce, our intellectual property rights. Consequently, we may not be able to effectively prevent unauthorised use of our patents in other countries where such patents are not registered.

The measures we take to protect our intellectual property rights may not be adequate, and monitoring and preventing unauthorised use is difficult. The protection of our intellectual property may be compromised as a result of (i) expiration of the protection period of our registered intellectual property rights; (ii) infringement by others of our intellectual property rights; and (iii) refusal by relevant regulatory authorities to approve our pending patent applications. If we are unable to adequately protect our intellectual property rights, our reputation may be negatively impacted and our business may be materially and adversely affected.

Failure of our information technology systems could adversely affect our business.

Our business relies on the performance, reliability and availability of our information technology systems. The proper functioning of our significant information technology systems, including in particular enterprise software from SAP that we use to manage our business operations and customer relations, Citect SCADA used to manage our control systems, and Intelex, Damstra and Pegasus used for our environment, health and safety systems, is important for our business. These systems and our information technology infrastructure in general may be adversely affected by factors such as server damage, equipment faults, power failure, computer viruses, misuse by employees or contractors, telecommunications failures, external malicious intervention such as hacking, terrorism, fire, natural disasters, or weather interventions. Such events are largely beyond our control, and may affect our ability to carry on our operations efficiently, which could harm our business and results of operations.

Our business and industry may be affected by the price of natural gas as well as the development of alternative energy sources and climate change.

We supply coal as fuel to, among others, the thermal power generation industry and, as a result, are affected by the demand and growth of the thermal power industry. Thermal coal as a fuel source competes, among others, with natural gas, and the price of natural gas can therefore affect coal sales. The natural gas market has been volatile

historically and prices in this market are subject to wide fluctuations in response to relatively minor changes in supply and demand. Changes in supply and demand could be prompted by any number of factors, such as worldwide and regional economic and political conditions; the level of global exploration, production and inventories; natural gas prices; and transportation availability. If natural gas prices decline significantly, it could lead to reduced coal sales and have a material adverse effect on our financial condition, results of operations and cash flows.

The thermal power generation industry is also affected by the development of alternative energy sources, climate change and global environmental factors. While the majority of global energy consumption is from conventional energy sources such as coal, alternative energy industries are rapidly developing and are gradually gaining widespread acceptance. Coal combustion generates significant greenhouse gas and other pollutants, and the effects of climate change resulting from global warming and increased pollution levels may provide incentives for governments to promote or invest in "green" energy technologies such as wind, solar, nuclear and biomass power plants, or to reduce their consumption of conventional energy sources such as coal. On 4 November 2016, the Paris Agreement within the United Nation's Framework Convention on Climate Change came into force, which aims to control the increase in global temperatures, increase the ability of countries to adapt to the adverse impacts of climate change and provide channels to finance projects that lead to greenhouse gas reductions. As at the Latest Practicable Date, the Paris Agreement had been signed by 197 countries, including Australia and the PRC. In recent years, the PRC has also taken steps to address severe air pollution in many cities by adopting a range of policies to lower carbon emissions and reduce coal usage, and is targeting increasing the share of non-fossil fuels in primary energy consumption to 20% by 2030.

With the increased concern and development on low-carbon economy and environmental protection globally, coal consumption is expected to gradually decrease. If alternative energy technologies continue to develop and prove suitable for wide commercial application, demand for conventional energy sources such as coal could gradually be reduced. Further, efforts to increase energy efficiency, control greenhouse gas emissions and enhance environmental protection may also result in a decrease in coal consumption. In 2017, coal accounted for approximately 41% of global electricity generation. This proportion is expected to decline to 39% of global electricity generation by 2020, driven by growth in non-hydro renewable energy sources. While new thermal generation capacity is being installed in countries in Asia, there is no assurance that this will continue to be the case, particularly given the proliferation of renewable energy assets and other energy sources in our key markets. For further details, see "*Industry Overview*". A decrease in the demand and consumption of thermal coal, particularly in Asia and other developing countries, would have a material adverse effect on the coal mining industry and, consequently, our business, financial condition and results of operations. See "– *Our business, financial condition and results of operations may be adversely affected by present or future environmental regulations in Australia and other countries, and we may be exposed to legal claims and increased costs due to the environmental impacts of our operations*".

Decreases in demand for steel in our principal markets, and the consequent decline in demand for metallurgical coal, could adversely affect our business, financial condition and results of operations.

A significant proportion of demand growth for metallurgical coal is expected to come from increased steel production in developing nations in Asia. In the past decade, the PRC became a net importer of coal from being a net exporter, which was a major contributor to the growth in seaborne coal demand during this period. The pace of economic growth in the PRC has now slowed, and it is uncertain whether the "One Belt, One Road" initiative will result in a new surge in infrastructure building across Asia in a manner that will boost steel, and metallurgical coal, demand. Global metallurgical coal import demand growth between 2017 and 2020 is forecast to be around 2.8% CAGR, lower than the estimated 3.6% CAGR between 2012 and 2017. The demand outlook for export metallurgical coal in the near to medium term is expected to shift from a focus on demand growth in the PRC to growth in India and other emerging markets in Southeast Asia. Indian demand is expected to be assisted by the country's comparatively strong economic growth and is likely to receive an additional boost from the government's plans to increase spending on infrastructure development, including railways. Although India aims to reduce reliance on imported coals, high Indian demand and the relatively poor quality of most domestic coals is expected to result in increased metallurgical coal imports, including from Australia. There is, however, no assurance that increased steel demand in India and Southeast Asian countries will be able to offset reduced demand in the PRC, or that consequently, metallurgical coal demand and prices will remain stable or increase in the future.

Future governmental policy changes in the PRC may be detrimental to the global coal market and impact our business, financial condition or results of operations.

The PRC government has from time to time implemented regulations and promulgated new laws or restrictions, sometimes with little advance notice, which may impact worldwide coal demand, supply and prices. In early 2016, the PRC government announced a 276-work day limitation on the annual operating days for coal mines. As a result of these and other restrictions, the PRC's domestic thermal coal production in 2016 decreased by 10% to 2.7 Bt, while thermal coal imports in 2016 increased by 26%. The PRC's domestic coal production is expected to be further impacted by the government's plan to close 800 Mt of coal capacity by 2020. In addition, the PRC has recently introduced domestic supply restrictions focused on enforcing environmental and safety rules at existing operations as well as consolidating production around larger, more modern operations. For further details, see "*Industry Overview*". In 2018 China imposed a quota on imports of coal, which we understand was reached in mid-November, following which China has halted coal imports for the remainder of the year. We believe that this development will not have a material impact on us. If the Chinese government were to impose stricter import quotas for 2019 or future periods then, unless we are able to find alternative destinations for the coal we designate for export to China, our revenues and results of operations in future periods could be adversely affected. It is possible that further policy changes in the PRC may negatively impact the global coal market and, consequently, impact our business, financial condition or results of operations.

In addition, similar actions by government entities in countries that produce and/or consume large quantities of coal and other energy related commodities may have a material impact on the prices at which we sell our products.

RISKS RELATING TO THE GLOBAL OFFERING

The trading price of our Shares has been volatile and the Minimum Offer Price is higher than the recent trading price of the Shares, which may result in substantial losses for investors subscribing for or purchasing our Shares pursuant to the Global Offering.

There has been significant volatility in the trading price of our Shares on the ASX. In the 52 weeks preceding 18 November 2018, the Latest Practicable Date, the trading price of our Shares has ranged between A$2.60 and A$5.95. As at the Latest Practicable Date, our Share price was A$3.18, which is lower than the Minimum Offer Price. Although the trading price of our Shares on the ASX might not be indicative of the expected market price for our Shares on the Stock Exchange following the Global Offering, unless the trading price of our Shares increases between the date of this prospectus and the listing date, investors subscribing for Shares in the Global Offering will incur an immediate mark-to-market loss. Further, trading in the Shares on the ASX has historically been low, which has contributed to the substantial fluctuations in their trading price. The trading price of our Shares on the ASX might continue to be, and the trading price of our Shares on the Stock Exchange following Listing could be, subject to substantial fluctuations and high volatility as a result of various factors. Some of these factors are beyond our control, including:

- low levels of liquidity in trading in our Shares;
- actual or anticipated fluctuations in our results of operations (including variations arising from foreign exchange rate fluctuations or from variations in the price that we can realise for our coal sales);
- news regarding recruitment or loss of key personnel by us or our competitors;
- announcements of competitive developments, acquisitions or strategic alliances in our industry;
- changes in earnings estimates or recommendations by financial analysts;
- potential litigation, regulatory investigations and environmental interruptions;
- tariffs and other trade restrictions, other governmental actions, changes in general economic conditions or other developments affecting us or our industry;
- general investor perception and inflation and interest rates;
- price movements on international stock markets, the operating and stock price performance of other companies, other industries and other events or factors beyond our control; and
- release of lock-up or other transfer restrictions on our outstanding Shares or sales or perceived sales of additional Shares by us, our Controlling Shareholder or other Shareholders.

The liquidity of our Shares on the Stock Exchange could be limited.

Our Shares have not been traded on the Stock Exchange before the Global Offering and there could be limited liquidity in our Shares on the Stock Exchange. As at the Latest Practicable Date, approximately 11% of the Shares are held by public investors and trading in the Shares on the ASX has historically been low. This low liquidity may continue on the ASX and may also be experienced on the Stock Exchange following the Global Offering, including on account of, among other things, a substantial portion of the Global Offering being placed with the Cornerstone Investor who is restricted from disposing of its Shares for six months following the Listing Date. Although Shareholders will be able to transfer our Shares from the Australian register to the Hong Kong register, and vice versa, there is no certainty as to the number of Shares that Shareholders may elect to transfer to Hong Kong. This could adversely affect investors' ability to purchase or liquidate Shares on the Stock Exchange. There is also no assurance that an open market will in fact develop for our Shares on the Stock Exchange. There can also be no guarantee that the price at which our Shares are traded on the Stock Exchange will be substantially the same as or similar to the price at which our Shares are traded on the ASX or that any particular volume of our Shares will trade on the Stock Exchange.

The time lag of moving Shares between the Hong Kong and Australian markets could be longer than expected, and our Shareholders might not be able to settle or undertake any Share sale during this period.

There is no direct trading or settlement between the Stock Exchange and ASX. To enable the movement of Shares between the two stock exchanges, our Shareholders are required to comply with specific procedures and bear the necessary costs. Under normal circumstances and assuming that there are no deviations from the usual cross-border share movement procedures, our Shareholders can expect normal cross-border movement between the principal register of members in Australia and the branch register of members in Hong Kong, and vice versa, to complete within three to six Business Days depending on how their Shares are or will be registered (i.e. in certificated form or within CCASS in Hong Kong). However, we cannot assure you that the transfer of Shares will be completed in accordance with this timeline. There could be unforeseen market circumstances or other factors that could delay the movement, thereby preventing our Shareholders from settling or effecting the sale of their Shares.

There may be differences between the Australian and Hong Kong stock markets, and undue reliance should not be placed on prior ASX trading data.

Our Shares have been listed and traded on the ASX since 2012. Following the Global Offering, it is our current intention that our Shares will continue to be traded on the ASX. Our Shares traded on the Stock Exchange will be registered by our Hong Kong branch share registrar. As there is no direct trading or settlement between the stock markets of Australia and Hong Kong, the time required to move shares between the principal register of members in Australia and the branch register of members in Hong Kong could vary and there is no certainty when Shares being moved will be available for trading or settlement. The ASX and the Stock Exchange have different trading hours, trading characteristics (including trading volume and liquidity), trading and listing rules and investor bases (including different levels of retail and institutional participation). As a result, the trading price of our Shares on the ASX and the Stock Exchange might not be the same.

Further, fluctuations in the price of our Shares on the ASX could adversely affect the price of our Shares on the Stock Exchange and vice versa. Moreover, fluctuations in the exchange rate between Australian dollars and Hong Kong dollars can also adversely affect the trading prices of our Shares on the ASX and the Stock Exchange. Due to the different characteristics of the stock markets of Australia and Hong Kong, the historical prices of our Shares on the ASX might not be indicative of the performance of our Shares on the Stock Exchange after the Global Offering. You should therefore not place undue reliance on the prior ASX trading information.

We will be concurrently subject to Hong Kong and Australian listing and regulatory requirements.

As we are listed on the ASX and will be listed on the Stock Exchange, we will be required to comply with the listing rules (where applicable) and other regulatory regimes of both jurisdictions, unless otherwise agreed by the relevant regulators. Accordingly, we may incur additional costs and resources in complying with the requirements of both jurisdictions.

Australian taxes may differ from tax laws of other jurisdictions, including Hong Kong.

The Company is incorporated in Australia. Prospective investors should consult their tax advisers concerning the overall tax consequences of acquiring, owning, or selling the Shares. Australian tax law may differ from the tax laws of other jurisdictions, including Hong Kong. Please see "*Appendix IV – Taxation and Regulatory Overview*" for further information.

Investments in our Company may be subject to restrictions under Australian foreign investment laws.

The Foreign Investment Review Board ("**FIRB**") is a non-statutory body which provides advice to the Australian Treasurer ("**Treasurer**") in connection with foreign investment proposals pursuant to the Foreign Acquisitions and Takeovers Act 1975 (Cth) ("**Australia Foreign Acquisitions and Takeovers Act**"), the Foreign Acquisitions and Takeovers Fees Imposition Act 2015 and the Foreign Acquisitions and Takeovers Regulation 2015.

Whether FIRB approval is required for a foreign investor to acquire an interest in the Company is determined on a case by case basis. It is the responsibility of the investor to determine if it requires FIRB approval before acquiring Offer Shares under the Global Offering or Shares in the secondary market. Further, it is the responsibility of the investor to otherwise ensure that it complies with the Australia Foreign Acquisitions and Takeovers Act in relation to investments in Australian companies or businesses, including obtaining any governmental or other consents which may be required, and that it complies with other necessary approval and registration requirements and other formalities.

A "foreign person" (as defined in the Australia Foreign Acquisitions and Takeovers Act) ("**Foreign Person**") is required to obtain FIRB approval from the Treasurer to acquire Offer Shares as part of the Global Offering, or acquire Shares in the secondary market, if they are a Foreign Government Investor from the PRC. Due to the operation of association rules under the Australia Foreign Acquisitions and Takeovers Act and the current level of ownership of the Company by Foreign Government Investors from the PRC, any acquisition of Offer Shares by Foreign Government Investors from the PRC

will require prior approval by the Treasurer. In addition, a Foreign Person is required to obtain prior approval from the Treasurer to acquire Offer Shares as part of the Global Offering if they are a Foreign Government Investor from a country other than the PRC and they are acquiring 10% or more of the Shares as part of the Global Offering. These approvals are "notifiable actions", which means that failure to notify them is an offence under the law.

Investors should seek independent legal advice prior to making an acquisition of Offer Shares as part of the Global Offering or acquire Shares in the secondary market. For more information, please see "*Appendix IV – Taxation and Regulatory Overview – Regulations in Relation to Foreign Investment in Australia*" and "*Appendix V – Summary of the Constitution of the Company and the Australia Corporations Act*".

We may not declare dividends on our Shares in the future.

Our Constitution provides that, subject to applicable laws, the ongoing cash needs of the business, the statutory and common law duties of the Directors and shareholders' approval, the Directors may pay interim and/or final dividends, and must:

(i) subject to (ii) below pay as interim and/or final dividends not less than 40% of net profit after tax (prior to any abnormal items) in each financial year; and

(ii) if the Directors determine that it is necessary in order to prudently manage our financial position, pay as interim and/or final dividends not less than 25% of net profit after tax (prior to any abnormal items) in any given financial year.

As a result, the amount of any dividends to be declared or paid will depend on, among other things, our results of operations, cash flows, financial condition, operating and capital requirements and applicable laws and regulations and will be subject to the approval of our Shareholders. See "*Financial Information of the Group – Dividends and Dividend Policy*". There is no assurance that dividends of any amount will be declared or distributed in any year.

The Company has an obligation to withhold tax on distributions of dividends paid to non-residents to the extent the distributions are unfranked.

Australia follows an imputation system in relation to corporate tax whereby the concept of franking broadly represents the net Australian corporate tax paid. When a corporate tax entity makes a distribution to its members, it can impute tax credits to the distribution to alleviate withholding tax payable by non-resident shareholders.

Dividends paid by the Company may be franked with an imputation credit to the extent that Australian corporate income tax has been paid by the Company. Where the Company pays a dividend from untaxed profits, no franking credit would be available. Such distributions are referred to as unfranked dividends.

To the extent dividends paid by the Company to non-resident shareholders are unfranked, such dividends are subject to Australian dividend withholding tax of up to 30% (which may be reduced if dividends are paid to residents of treaty countries). In particular, unfranked dividends paid to Shareholders resident in Hong Kong will be subject to withholding tax at 30% while unfranked dividends paid to Shareholders resident in the PRC eligible for treaty relief will be subject to withholding tax at 15%. Due to the current tax profile of the Company, any dividends paid by the Company during FY2018 to FY2019 would be expected to be unfranked. Accordingly, dividend withholding tax would be expected to be deducted from such dividend payments made during this period.

Future sales or perceived sales or conversion of substantial amounts of our Shares in the public market, including any future offering of Shares or conversion of our unlisted Shares into listed Shares, could have a material adverse effect on the prevailing market price of our Shares and our ability to raise additional capital in the future, or may result in dilution of your shareholding.

The market price of our Shares could decline as a result of future sales or issuances of a substantial number of our Shares or other securities relating to our Shares in the public market, or the perception that such sales or issuances may occur. Moreover, such future sales or perceived sales may also adversely affect the prevailing market price of our Shares and our ability to raise capital in the future at a favourable time and price. The Shares held by our Controlling Shareholders are subject to certain lock-up undertakings after the Listing Date. See "*Underwriting – Underwriting Arrangements and Expenses*". We cannot assure you that our Controlling Shareholders will not dispose of the Shares they may own now or in the future. In addition, a substantial portion of the Offer Shares will be subscribed to by the Cornerstone Investor who is restricted from disposing of its Shares for six months following the Listing Date. For further details, see "*Cornerstone Investor*". We cannot assure you that upon the expiry of the six-month lock-up, there will not be a sale of a substantial number of Shares by the Cornerstone Investor.

Moreover, if additional funds are raised through our issuance of new equity or equity-linked securities other than on a pro-rata basis to existing Shareholders, the percentage ownership for such Shareholders may be reduced. Such new securities may also confer rights and privileges that take priority over those conferred by the Shares.

Purchasers of Shares in the Global Offering will incur dilution to the extent Shareholders participate in the Australian Entitlement Offer.

As required by the standard ASX timetable for pro rata entitlement offers, the Australian Entitlement Offer will be open for acceptance by eligible existing Shareholders of the Company (other than the Shareholders of the Company that renounce their entitlement to subscribe to Shares) for a period of eight business days, commencing on the business day after the date of settlement of the Global Offering (i.e. on the business day after the Listing Date). If any Shareholder subscribes to Shares under the Australian Entitlement Offer during this period, it will result in a dilution in the shareholding of purchasers of our Shares in the Global Offering. The Australian Entitlement Offer is not underwritten and therefore dilution will only occur to the extent that eligible existing Shareholders of the Company elect to take up their entitlements, which will involve the issue of up to 8,225,509 Shares (assuming that the level of take up of the retail tranche of the Australian Entitlement Offer is 100%), representing 0.63% of the Shares in issue immediately upon completion of the Global Offering, assuming the Over-allotment Option is not exercised. The full exercise of the Over-allotment Option will involve the issue of up to 8,916,200 Shares, representing 0.67% of the Shares in issue immediately upon completion of the Global Offering but before the full exercise of the Over-allotment Option, assuming that the level of take up of the retail tranche of the Australian Entitlement Offer is 100%.

The market price of our Shares when trading begins could be lower than the Offer Price.

The Offer Price will be determined on the Price Determination Date. However, the Offer Shares will not commence trading on the Stock Exchange until they are delivered, which is expected to be on the fifth Business Day after the Price Determination Date. As a result, investors may not be able to sell or otherwise deal in the Offer Shares during

that period. Accordingly, holders of the Offer Shares are subject to the risk that the price of the Offer Shares when trading begins could be lower than the Offer Price as a result of adverse market conditions or other adverse developments that may occur between the time of sale and the time trading begins.

We cannot assure you that the Shares will remain listed on the Stock Exchange.

Although it is currently intended that the Shares will remain listed on the Stock Exchange, there is no guarantee of the continued listing of the Shares. Among other factors, the Company may not continue to satisfy the listing requirements of the Stock Exchange. Holders of Shares would not be able to sell their Shares through trading on the Stock Exchange if the Shares were no longer listed on the Stock Exchange.

You may face difficulties in enforcing your shareholder rights since the laws of Australia for minority shareholders' protection could be different from those under the laws of Hong Kong and other jurisdictions.

We are a company incorporated in Australia with limited liability, and the laws of Australia differ in some respects from those of Hong Kong or other jurisdictions where investors might be located. Our corporate affairs are governed by our Constitution and related charters and policies, the Corporations Act 2001 (Cth) ("**Australia Corporations Act**") and the laws of Australia. The laws of Australia relating to the protection of the interests of minority shareholders differ in some respects from those established under statutes and judicial precedents in existence in Hong Kong and other jurisdictions. This could mean that the remedies available to our Company's minority Shareholders could be different from those they would have under the laws of Hong Kong and other jurisdictions.

Certain facts and other statistics with respect to the coal market and industry in this prospectus may not be fully reliable.

Certain facts and other statistics in this prospectus relating to the global and regional coal market and industry have been derived from various official government publications and other publicly available data. However, we cannot guarantee the quality or reliability of these sources. They have not been prepared or independently verified by us or any of our affiliates or advisors and, therefore, we make no representation as to the accuracy of such facts and statistics. Due to possibly flawed or ineffective collection methods or discrepancies between published information and market practice and other problems, the facts and statistics herein may be inaccurate or may not be comparable to facts and statistics produced for other economies. As a result, prospective investors should consider carefully how much weight or importance they should attach to or place on such facts or statistics. Investors should read the entire prospectus carefully and should not consider any particular statements in published media reports without carefully considering the risks and other information contained in this prospectus.

There may be coverage in the media regarding the Global Offering and our operations.

We do not accept any responsibility for the accuracy or completeness of the information and make no representation as to the appropriateness, accuracy, completeness or reliability of any information disseminated in the media. To the extent that any of the information in the media is inconsistent or conflicts with the information contained in this prospectus, we disclaim it. Accordingly, prospective investors should read the entire prospectus carefully and should not rely on any of the information in press articles or other media coverage. Prospective investors should only rely on the information contained in this prospectus and the Application Forms to make investment decisions about us.

The members of the Board are as follows:

Name	Address	Nationality
Executive Director		
Fucun WANG (王福存)	3711/101 Bathurst Street Sydney NSW 2000 Australia	Chinese
Non-executive Directors		
Baocai ZHANG (張寶才)	Room 104, Unit 2, Building 57 Chunqiuhuating Xiao Qu 77 Boxue Road Qufu, Shandong Province China	Chinese
Cunliang LAI (來存良)	Room 301, Unit 2, Building 16 XingLong Coal Mine East District 88 Xinglong Road Xing Long Zhuang County Yanzhou City Shandong Province China	Chinese
Xiangqian WU (吳向前)	Room 201, Unit 2, Building 9 1676 Kuangjian East Road Zoucheng City Shandong Province China	Chinese
Fuqi WANG (王富奇)	Room 401, Unit 1, Building 5 899 Kangfu Road Zoucheng City Shandong Province China	Chinese
Qingchun ZHAO (趙青春)	Room 501, Unit 1, Building 27 436 Jianshe Road, Zoucheng Shandong Province China	Chinese
Xing FENG (馮星)	19-9-301 Yilin Jiayuan Chaoyang District Beijing China	Chinese

Name	Address	Nationality
Independent Non-executive Directors		
Gregory James FLETCHER	296 Woolooware Road Burraneer NSW 2230 Australia	Australian
Geoffrey William RABY	Room 9D, Tower 4 GuangCai International Mansion No 18 Gongrentiyuchang West Road Chaoyang District Beijing China	Australian
David James MOULT	73 Fingal Avenue Glenhaven NSW 2156 Australia	Australian
Helen Jane GILLIES	105 Rowntree Street Birchgrove NSW 2041 Australia	Australian

See "*Directors and Senior Management*" for further details.

Joint Sponsors	Morgan Stanley Asia Limited 46/F, International Commerce Centre 1 Austin Road West, Kowloon Hong Kong CMB International Capital Limited 45/F, Champion Tower 3 Garden Road, Central Hong Kong BOCI Asia Limited 26/F, Bank of China Tower 1 Garden Road Hong Kong
Joint Global Coordinators	Morgan Stanley Asia Limited 46/F, International Commerce Centre 1 Austin Road West, Kowloon Hong Kong CMB International Capital Limited 45/F, Champion Tower 3 Garden Road, Central Hong Kong BOCI Asia Limited 26/F, Bank of China Tower 1 Garden Road Hong Kong Citigroup Global Markets Asia Limited 50/F, Champion Tower 3 Garden Road, Central Hong Kong
Joint Bookrunners	Morgan Stanley Asia Limited (in relation to the Hong Kong Public Offering only) 46/F, International Commerce Centre 1 Austin Road West, Kowloon Hong Kong Morgan Stanley & Co. International plc (in relation to the International Offering only) 25 Cabot Square, Canary Wharf London E14 4QA United Kingdom

CMB International Capital Limited
45/F, Champion Tower
3 Garden Road, Central
Hong Kong

BOCI Asia Limited
26/F, Bank of China Tower
1 Garden Road
Hong Kong

Citigroup Global Markets Asia Limited
(in relation to the Hong Kong Public Offering only)
50/F, Champion Tower
3 Garden Road, Central
Hong Kong

Citigroup Global Markets Limited
(in relation to the International Offering only)
33 Canada Square
Canary Wharf
London
E14 5LB
United Kingdom

CCB International Capital Limited
12/F, CCB Tower
3 Connaught Road Central, Central
Hong Kong

China Everbright Securities (HK) Limited
24/F, Lee Garden One
33 Hysan Avenue, Causeway Bay
Hong Kong

Cinda International Securities Limited
45/F, COSCO Tower
183 Queen's Road Central
Hong Kong

Haitong International Securities Company Limited
22/F Li Po Chun Chambers
189 Des Voeux Road Central
Hong Kong

Zhongtai International Securities Limited
19 Floor, Li Po Chun Chambers
189 Des Voeux Road Central
Hong Kong

Joint Lead Managers

Morgan Stanley Asia Limited
(in relation to the Hong Kong Public Offering only)
46/F, International Commerce Centre
1 Austin Road West, Kowloon
Hong Kong

Morgan Stanley & Co. International plc
(in relation to the International Offering only)
25 Cabot Square, Canary Wharf
London E14 4QA
United Kingdom

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45/F, Champion Tower
3 Garden Road, Central
Hong Kong

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26/F, Bank of China Tower
1 Garden Road
Hong Kong

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Hong Kong

	Cinda International Securities Limited 45/F, COSCO Tower 183 Queen's Road Central Hong Kong
	Haitong International Securities Company Limited 22/F Li Po Chun Chambers 189 Des Voeux Road Central Hong Kong
	Zhongtai International Securities Limited 19 Floor, Li Po Chun Chambers 189 Des Voeux Road Central Hong Kong
Financial Adviser	Morgan Stanley Asia Limited 46/F, International Commerce Centre 1 Austin Road West, Kowloon Hong Kong
Legal Advisers to the Company	*As to Hong Kong and U.S. laws:* Freshfields Bruckhaus Deringer 55th Floor, One Island East Taikoo Place, Quarry Bay Hong Kong
	As to Australian laws: Gilbert + Tobin Level 35, Tower Two, International Towers Sydney, 200 Barangaroo Avenue Barangaroo NSW 2000 Australia
	As to PRC laws: King & Wood Mallesons 40th Floor, Tower A, Beijing Fortune Plaza 7 Dongsanhuan Zhonglu, Chaoyang District Beijing, 100020, PRC
Legal Advisers to the Joint Sponsors and the Underwriters	*As to Hong Kong and U.S. laws:* Slaughter and May 47th Floor, Jardine House One Connaught Place Central Hong Kong

	As to Australian laws: Herbert Smith Freehills ANZ Tower 161 Castlereagh Street Sydney NSW 2000 Australia
Auditor	ShineWing Australia *Chartered Accountants, Australia* Level 8, 167 Macquarie Street Sydney, NSW 2000 Australia
Joint Reporting Accountants	SHINEWING (HK) CPA Limited *Certified Public Accountants, Hong Kong* 43/F, Lee Garden One 33 Hysan Avenue Causeway Bay Hong Kong ShineWing Australia *Chartered Accountants, Australia* Level 8, 167 Macquarie Street Sydney, NSW 2000 Australia
Competent Person	RPM Advisory Services Pty Ltd 13/F, 68 Yee Wo Street Causeway Bay Hong Kong
Industry Consultant	AME Consulting Pty Ltd 342 Kent St Sydney, NSW 2000 Australia
Taxation Adviser	KPMG Level 38, Tower Three, International Towers 300 Barangaroo Avenue, Sydney Barangaroo NSW 2000
Receiving Bank	Bank of China (Hong Kong) Limited 1 Garden Road Hong Kong

Registered Office	Level 18, Darling Park 2 201 Sussex Street Sydney, NSW 2000 Australia
Place of Business in Hong Kong Registered under Part 16 of the Companies Ordinance	Level 54, Hopewell Centre 183 Queen's Road East Hong Kong
Company Secretary	Laura Ling ZHANG (張凌) (*Member of the Hong Kong Institute of Chartered Secretaries*)
Authorised Representatives	Baocai ZHANG (張寶才) 298 Fushan South Road Zoucheng City Shandong Province China Laura Ling ZHANG (張凌) Level 18, Darling Park 2 201 Sussex Street Sydney, NSW 2000 Australia
Audit and Risk Management Committee	Gregory James FLETCHER (*Chair*) Qingchun ZHAO David James MOULT Helen Jane GILLIES
Nomination and Remuneration Committee	Helen Jane GILLIES (*Chair*) Baocai ZHANG Xiangqian WU Gregory James FLETCHER David James MOULT
Health, Safety and Environment Committee	David James MOULT (*Chair*) Fucun WANG Fuqi WANG Geoffrey William RABY
Strategy and Development Committee	Baocai ZHANG (*Chair*) Qingchun ZHAO Fuqi WANG Xing FENG Geoffrey William RABY
Compliance Adviser	Somerley Capital Limited 20th Floor, China Building 29 Queen's Road Central Hong Kong

Principal Bankers	Commonwealth Bank of Australia 240 Queen Street Brisbane QLD 4000 Australia Bank of China Ltd, Sydney Branch 39-41 York Street Sydney NSW 2000 Australia
Australian Share Registry	Computershare Investor Services Pty Limited Level 4, 60 Carrington Street Sydney, NSW 2000 Australia
Hong Kong Share Registrar	Computershare Hong Kong Investor Services Limited Shops 1712-1716, 17th Floor Hopewell Centre 183 Queen's Road East Wanchai Hong Kong
Company's Website	**www.yancoal.com.au** *(A copy of this prospectus is available on the Company's website. Except for the information contained in this prospectus, none of the other information contained on the Company's website forms part of this prospectus)*

HISTORY

The Company was established on 18 November 2004 as Yancoal Australia Pty Limited by Yanzhou when Yanzhou acquired the Austar underground mine in the Hunter Valley region of New South Wales in Australia. The Group has subsequently grown its business via strategic acquisitions to become the largest pure-play coal producer in Australia.

On 23 December 2009, the Group completed the successful takeover of Felix Resources, a coal producer then listed on the ASX, which included interests in the Moolarben, Yarrabee and Ashton mines. On 23 March 2010, the Company was converted to a public company named Yancoal Australia Ltd.

On 6 July 2012, the Group completed the strategic merger with Gloucester Coal, a coal producer then listed on the ASX, and became listed on the ASX. The Group acquired interests in the Middlemount joint venture, the Stratford Duralie and Donaldson mines and the Monash exploration project through the merger with Gloucester Coal.

On 31 December 2014, Yancoal SCN Limited ("**Yancoal SCN**"), a wholly-owned subsidiary of the Company, issued 18,005,102 subordinated capital notes ("**SCNs**") at US$100 each which were listed on ASX on 2 January 2015. As at 31 January 2018, all outstanding SCNs were redeemed by Yancoal SCN or converted into Shares of the Company, and Yancoal SCN was delisted from the ASX on 2 February 2018. See "*Financial Information of the Group – Indebtedness – Subordinated Capital Notes*" for further details on the SCNs.

On 31 March 2016, as a result of certain financing arrangements, the Group transferred its interests in the Ashton, Austar and Donaldson mines to Watagan, which is wholly-owned but not controlled from an accounting perspective by the Group. Further details of the Watagan Agreements are set out in "*Financial Information – Acquisitions, Disposals and Deconsolidation*".

On 1 September 2017, the Group completed the C&A Acquisition which included interests in HVO and MTW. On 7 March 2018, the Group increased its interest in the Warkworth joint venture pursuant to the Warkworth Transaction. On 4 May 2018, the Group completed the Glencore Transaction pursuant to which a joint venture with Glencore was established in relation to HVO and the Group's interest in HVO was reduced. Further details of each of these transactions are set out in "*– Major Acquisitions and Disposals – C&A Acquisition*".

KEY MILESTONES

The following table sets out the key milestones of the Group since its founding:

Year	Event
2004	Acquisition of 100% of Southland Mine (renamed Austar)
2009	Acquisition of 100% of Felix Resources (which included assets of an 80% interest in Moolarben, Yarrabee and a 60% interest in Ashton)
2011	Acquisition of a further 30% interest in Ashton

Year	Event
2012	Merger with Gloucester Coal (which included assets of a near 50% interest in Middlemount, Stratford Duralie, Donaldson and Monash) and listing on the ASX
2014	Acquisition of the remaining 10% interest in Ashton
2015	Acquisition of a further 1% interest in Moolarben
2016	Transfer of 100% of Ashton, Austar and Donaldson to Watagan
2017	Completion of the C&A Acquisition
2018	Acquisition of a further 28.9% in the Warkworth joint venture
2018	Completion of the Glencore Transaction

MAJOR ACQUISITIONS AND DISPOSALS

C&A Acquisition

On 1 September 2017, the Group completed the acquisition of the entire issued share capital of C&A from Rio Tinto for US$2.69 billion in value, comprising US$2.45 billion cash paid on completion and US$240 million in future non-contingent royalty payments over five years following completion, and a coal price linked contingent royalty.

C&A is a leading Australian producer of high quality thermal coal and semi-soft coking coal, indirectly owning, at the time of acquisition, participating interests in three coal mine operations, namely a 67.6% interest in HVO, a 80.0% interest in the Mount Thorley mine and a 55.6% interest in the Warkworth mine, and other associated assets (the "**C&A Acquisition**"). Further details of the assets of C&A are set out in "*Business – Our Mining Operations"*.

To support the funding of the C&A Acquisition, the Company conducted a pro-rata renounceable entitlement offer of 23,464,929,520 Shares to raise US$2.35 billion (the "**Entitlement Offer**"), and an associated placement of 1,000,000,000 Shares to Shandong Taizhong Energy Co., Ltd ("**Taizhong**") and 500,000,000 Shares to Evercharm International Investments Ltd ("**General Nice**") to raise a further US$150 million (the "**Placement**"). The Company completed the Entitlement Offer and the Placement on 31 August 2017 and the Shares issued under the Entitlement Offer and the Placement commenced trading on ASX on 1 September 2017.

Warkworth Transaction

On 7 March 2018, the Group completed its purchase of an additional 28.9% interest in the Warkworth joint venture from MDP for US$230 million (which is subject to finalisation of a working capital adjustment which includes cash), increasing its interests in the Warkworth joint venture from 55.6% to 84.5% and its share of coal production from the integrated Mount Thorley Warkworth operations from 64.1% to 82.9% .

Glencore Transaction

On 27 July 2017, the Company entered into a binding agreement to establish a 51:49 unincorporated joint venture with Glencore in relation to HVO. Glencore acquired a 32.4% interest from Mitsubishi Development Pty Ltd ("**MDP**") for cash consideration of US$710 million and a 16.6% interest from Group for cash consideration of US$429 million. Pursuant to the terms of the joint venture agreement, Glencore is also responsible for a 27.9% share of US$240 million of non-contingent royalties and 49% of HVO contingent royalties payable by the Company in respect of the C&A Acquisition. The cash consideration amount of US$429 million which was paid by Glencore for its interest in HVO is subject to post-completion finalisation of purchase price adjustments for HVO's net debt, working capital and cash flows. The Glencore Transaction including the establishment of the joint venture was completed on 4 May 2018, further details of which are set out in *"Business – Joint Venture Agreements – HVO"*. The Group's interest in HVO was reduced from 67.6% to 51.0% on completion of the Glencore Transaction.

Moolarben Acquisition

The Company has entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben for total consideration of A$84 million, which will be paid in four installments through to 31 December 2019, and adjusted for the economic benefit of the 4% interest from 15 April 2018, that will flow to the Company. The Moolarben Acquisition will raise our interest in the unincorporated Moolarben JV to 85%.

LISTINGS ON THE ASX

The Shares of the Company have been listed on the ASX since 28 June 2012. On 31 December 2014, Yancoal SCN issued 18,005,102 SCNs which were listed on ASX on 2 January 2015. On 2 February 2018, Yancoal SCN was delisted from the ASX following the redemption by Yancoal SCN or conversion into the Company's Shares of all outstanding SCNs. See "*Financial Information of the Group – Indebtedness – Subordinated Capital Notes"* for further details on the SCNs.

To the best of the Directors' knowledge and belief as at the date of this prospectus, the Company has complied with its financial reporting obligations (which are contained in Chapter 2M of the Australia Corporations Act) and its continuous disclosure obligations (which are contained in section 674 of the Australia Corporation Act) during the period that those obligations have applied since listing on the ASX.

The Company intends to maintain its primary listing on the ASX alongside its proposed primary listing of Shares on the Stock Exchange. Application has been made to the Listing Committee for the listing of, and permission to deal in, the Shares in issue and to be issued pursuant to the Global Offering and the Australian Entitlement Offer. The Directors consider that it would be desirable and beneficial to the Company to have the Shares listed on the Stock Exchange as the dual primary listing of the Company on the ASX and the Stock Exchange will allow the Company to increase diversity of its investor base and increase liquidity in the Shares, provide the Company better access to a wider range of private and institutional investors, increase its exposure to the Hong Kong and Mainland China markets, enhance the Company's profile in the Asia region and better position the Company for organic and inorganic growth in the future.

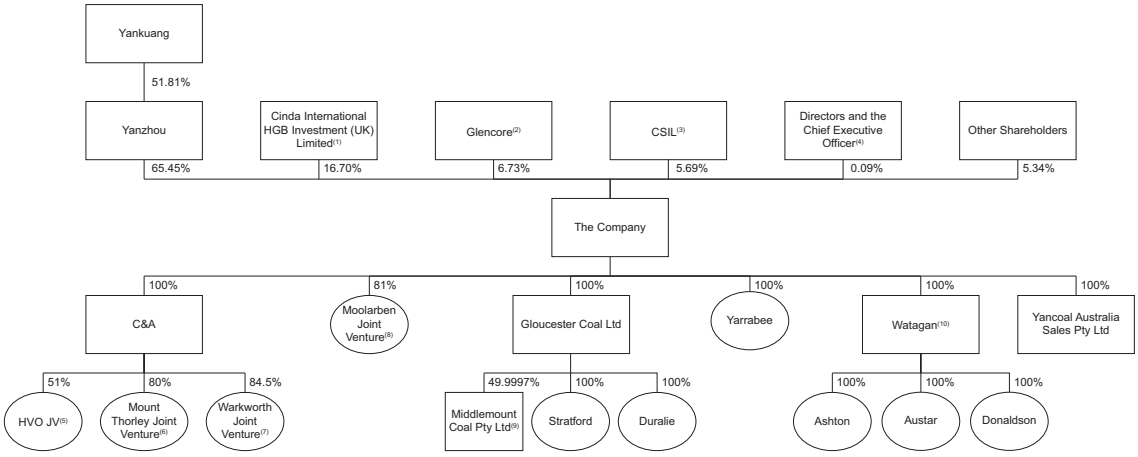
THE REORGANISATION

In preparation for the Listing, the Shareholders approved the Share Consolidation by ordinary resolution at the general meeting of the Company held on 26 September 2018 pursuant to section 254H of the Australia Corporations Act. The Share Consolidation took effect on 28 September 2018 which resulted in the issued capital of the Company being consolidated on the basis of one Share for every 35 Shares in issue on 1 October 2018, and fractional entitlements as a result of holdings not being evenly divisible by 35 were rounded up to the nearest whole number. The issued share capital of the Company immediately following the Share Consolidation was 1,256,071,756 Shares.

CORPORATE STRUCTURE

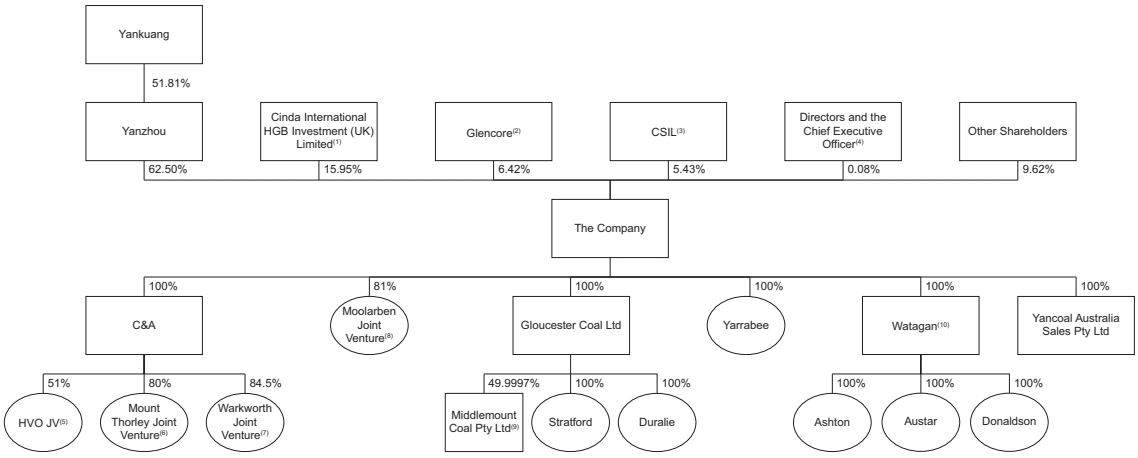
Corporate Structure as at the date of this prospectus

The simplified corporate structure of the Group as at the date of this prospectus is as follows:



Corporate Structure Immediately Following the Completion of the Global Offering

Immediately following the completion of the Global Offering and the Australian Entitlement Offer (assuming the Over-allotment Option is not exercised and other existing Shareholders do not take up their entitlements under the Australian Entitlement Offer), the simplified corporate structure of the Group will be as follows:



Notes:

(1) Cinda International HGB Investment (UK) Limited is a wholly owned subsidiary of China Cinda Asset Management Co., Ltd.. Its interests in the Shares are held by J P Morgan Nominees Australia Limited as nominee.

(2) Glencore is a wholly owned subsidiary of Glencore Holdings Pty Limited which is in turn wholly owned by Glencore plc.

(3) CSIL is a wholly owned subsidiary of Shandong Lucion Investment Holdings Group Co., Ltd.

(4) Mr. Baocai Zhang, the Chair of the Board and a Non-executive Director, is interested in Shares representing approximately 0.02% of the issued share capital of the Company. Mr. Gregory Fletcher, an Independent Non-executive Director, is interested in Shares representing approximately 0.00% of the issued share capital of the Company. Dr. Geoffrey Raby, an Independent Non-executive Director, is interested in Shares representing approximately 0.00% of the issued share capital of the Company. Mr. Reinhold Schmidt, the Chief Executive Officer, is interested in Shares representing approximately 0.02% of the issued share capital of the Company. The remaining Shares are held by directors of subsidiaries of the Company.

(5) The HVO JV is an unincorporated joint venture. Coal & Allied Operations Pty Ltd (a wholly owned subsidiary of the Company) is interested in 51.0% and Anotero Pty Ltd (a wholly owned subsidiary of Glencore) is interested in 49.0% of the HVO Joint Venture.

(6) The Mount Thorley joint venture is an unincorporated joint venture. Mount Thorley Operations Pty Limited (a wholly owned subsidiary of the Company) and POSCO Australia Pty Ltd (a wholly owned subsidiary of Pohang Iron & Steel Company Limited, an independent third party) are interested in 80% and 20% of the Mount Thorley joint venture, respectively.

(7) The Warkworth joint venture is an unincorporated joint venture. CNA Resources Limited and CNA Warkworth Australia Pty Limited (wholly owned subsidiaries of the Company) collectively hold 84.5%, and Mitsubishi Materials Corporation (an independent third party), and Nippon Steel & Sumitomo Metal Corporation (an independent third party) are interested in 6% and 9.5% of the Warkworth Joint Venture, respectively.

(8) The Moolarben JV is an unincorporated joint venture. Moolarben Coal Mines Pty Ltd (a wholly owned subsidiary of the Company), Sojitz Moolarben Resources Pty Limited (an independent third party), and a consortium of Korean companies (comprising Korea Resources Corporation, Korea Southern Power Co., Ltd, Korea Midland Power Co., Ltd, Korea Western Power Co., Ltd and Korea South-East Power Corporation, each an independent third party) are interested in 81%, 10% and collectively 9% of the Moolarben Joint Venture, respectively. Upon completion of the Moolarben Acquisition, the Group's interest in the Moolarben JV will increase to 85%.

(9) Middlemount Coal Pty Ltd is an incorporated joint venture. Gloucester (SPV) Pty Ltd (a wholly owned subsidiary of the Company) and Peabody Custom Mining Pty Ltd (a wholly owned subsidiary of Peabody Energy, an independent third party) are interested in 49.997% and 50.003% of Middlemount Coal Pty Ltd, respectively.

(10) Watagan is wholly owned but not controlled from an accounting perspective by the Company. See "*Business – Our Mining Operations – Watagan Mines – Watagan Agreements*" for further details.

*This section contains information relating to our markets. Certain facts, statistics and data presented in this section and elsewhere in this prospectus have been derived, in part, from various publicly available government and official sources, industry statistics and publications. We also commissioned an independent industry consultant, AME Consulting Pty Limited ("**AME**"), to prepare an industry research report ("**Industry Report**") upon which this Industry Overview section is based. Unless otherwise indicated, all historical and forecast statistical information, including trends, sales, market share and growth, is from the Industry Report. See "– Sources of Information". All price forecasts are presented in real 2018 terms while historical data is presented in nominal terms. For the purposes of forecasts, A$:US$ exchange rates have been assumed to remain constant at a rate of A$1:US$0.76. All cost curves are prepared on the basis of publicly available financial and technical information published by companies. Historical cost information is reconciled to company financial reports, where available.*

While we have taken all reasonable care to ensure that the relevant official facts and statistics are accurately reproduced from these sources, such facts and statistics have not been independently verified by us or the Relevant Persons. Although we have no reason to believe that such information is false or misleading in any material respect, or that any fact has been omitted that would render such information false or misleading in any material respect, we make no representation as to the accuracy or completeness of such information, which may not be consistent with other information available. Accordingly, you should not place undue reliance on such information or statistics.

SOURCES OF INFORMATION

In connection with the Global Offering, we have commissioned AME, an independent third party, to conduct research and analysis of, and to produce a report on, the global coal market. AME is a research and advisory firm headquartered in Sydney, Australia, with offices in Hong Kong, Toronto, London and Johannesburg. AME provides professional resource engineering and industry analysis services across the energy, metals and mining industries. AME's independent research was undertaken through both primary and secondary research through various resources. Primary research involved contacting market participants and industry experts, such as producers, steelmakers and industry consultants and associations. Secondary research involved desktop research of government departments and statistics, trade data, industry journals, company reports, information in the public domain and data from AME's proprietary research database. AME attempted to obtain information from multiple sources to cross-reference and ensure consistency. Information and data collected was analysed, assessed and reasonably validated using AME's in-house techniques.

The Industry Report has been prepared by AME independent of our influence. We have paid AME a fee of US$70,000 for the preparation of the report which we consider in line with market rates. Except as otherwise noted, all data and forecasts in this section are derived from the Industry Report. Our Directors confirm, after taking reasonable care, that there is no adverse change in the market information since the date of the Industry Report which may qualify, contradict or have an impact on the information disclosed in this section.

OVERVIEW

Coal Types and Uses

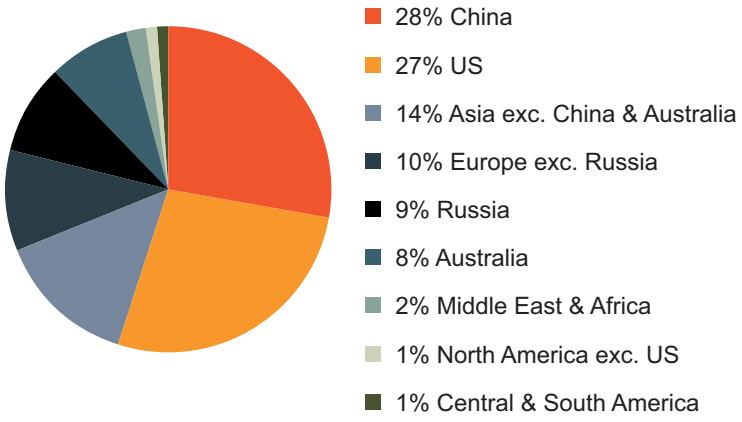
Coal falls broadly into two main types based on its end-use, namely thermal coal and metallurgical coal. Thermal coal, also referred to as steaming coal, is primarily used as an energy source in the generation of electricity. Other applications include direct heating, space and water heating, process heating and cement manufacturing. Metallurgical coals include premium and standard HCC, SHCC, SSCC and low-volatile or high volatile PCI coal. Premium HCC generally represents a substantial portion of the coal in major steel mill coking coal blends and merchant coke plant blends. Lower ranked coking coals, including SHCC and SSCC, are used as a coking blend component. PCI coal is generally a high calorific value coal which is injected directly into a blast furnace to provide the carbon and heat in the iron-making process.

Coal Quality

Generally, the most important factors that determine coal quality include energy content, mineral matter content (i.e. ash), volatile matter, fixed carbon, sulphur, nitrogen, trace elements and moisture levels. The major controllable determinants are mineral matter content and moisture, both of which are non-useful material and often have detrimental effects on the combustion process, present environmental problems in collection and disposal or, if not properly collected, in air quality, and result in added transportation cost. For metallurgical coal, specific physical and plastic properties are also important.

Global Hard Coal Reserves

At the end of 2016, total proved global coal reserves were estimated to be approximately 1,139 Bt, of which global hard coal reserves were estimated to be 816 Bt. In 2016, the PRC was estimated to hold the largest hard coal reserve base at 230 Bt followed by the U.S. with 221 Bt, while Russia and Australia were estimated to have 70 Bt and 68 Bt, respectively. The following chart shows the geographical breakdown of estimated global hard coal reserves as at the end of 2016.



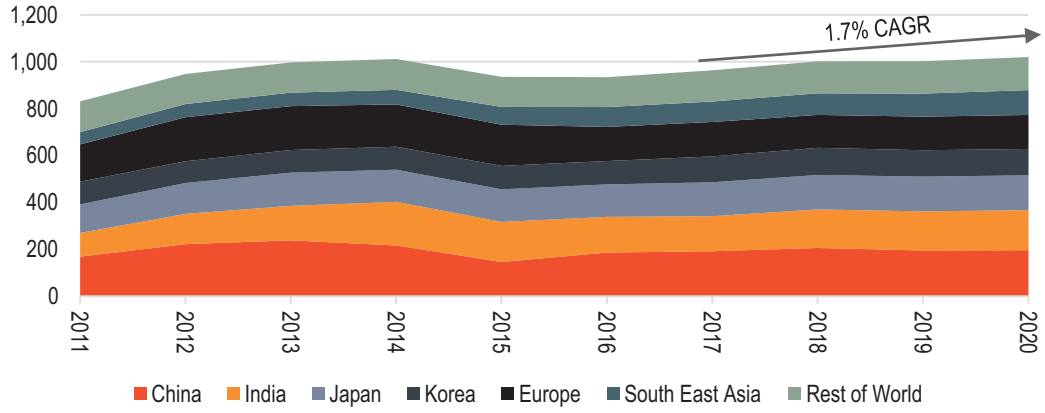
Source: Industry Report; British Petroleum Statistical Review 2017.

Despite significant coal consumption over the last 15 years, total reserves of hard coal as at the end of 2016 increased by over 50% from the prevailing reserve levels in 2002. The greatest increase in reserves came from the PRC and other major producing countries such as Australia and Russia.

SEABORNE THERMAL COAL

Demand Analysis

AME estimates that global seaborne thermal coal import demand in 2016 declined for the third straight year to 934 Mt. However, demand in 2017 grew by approximately 3% to 964 Mt and AME forecasts that demand will reach 1,020 Mt by 2020, representing a CAGR of 1.7% over that period. The following chart shows the estimated seaborne thermal coal demand for key countries and regions in Mt.



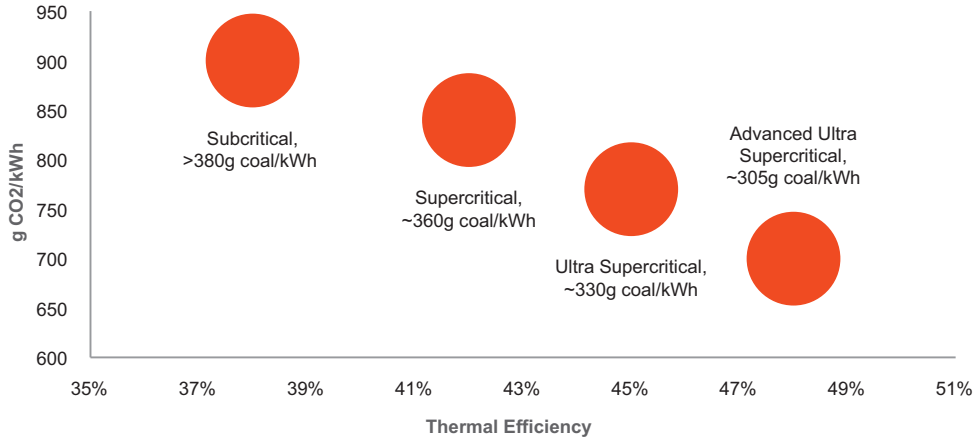
Source: Industry Report.

During the first half of 2016, the PRC imported 70 Mt of thermal coal, an increase of 4.3% year on year. As a result of the PRC government's restrictions on domestic coal supply, domestic thermal coal production in 2016 decreased by 10% to 2.7 Bt. Thermal coal imports in 2016 increased by 26% to 196 Mt, of which 187 Mt was seaborne coal, and grew further in 2017 to 201 Mt, of which 192 Mt was seaborne coal. A shortage of gas in the north of the PRC, which caused end users to switch to coal, saw imports of almost 23 Mt in January 2018, the highest monthly figure since January 2014. Domestic coal production in the PRC is expected to be further impacted by the government's plan to close 800 Mt of coal capacity by 2020, and seaborne coal, which is not subject to these policies, is expected to benefit as a result. In addition, the PRC has recently introduced domestic supply restrictions focused on enforcing environmental and safety rules at existing operations as well as consolidating production around larger, more modern operations.

Japanese thermal coal demand accounted for an estimated 14% of global seaborne thermal coal demand in 2017, and Japanese imports are expected to grow to approximately 148 Mt by 2020. With an estimated 70% of its thermal coal being imported from Australia in 2017, Japan is a key market for Australian thermal coal. Power utilities in Japan generally prefer purchasing high calorific value thermal coal and the Hunter Valley's coal is well suited for the Japanese market. South Korea imported a record 111 Mt of thermal coal in 2017, an increase of 11% over 2016, and South Korean imports are expected to grow to approximately 113 Mt by 2020. However, coal's market share is expected to decline over the long term as South Korea works towards achieving its policy objective of 20% non-hydro renewables by 2030.

Thermal coal's primary use is in electricity production, and thermal coal demand is therefore driven strongly by electricity generation. In 2017, coal accounted for approximately 41% of global electricity generation. This proportion is expected to decline to 39% by 2020, driven by the growth in non-hydro renewables. However, countries in Asia and developing countries continue to install new thermal generation capacity in addition to renewable energy capacity. Over the next few years, coal is expected to continue to be the dominant source of energy, particularly in large developing regions such as the PRC and India, and electricity generation from coal is expected to grow in absolute terms.

A key reason for the continuing role of coal in power generation is the increasing replacement of sub-critical boilers with super-critical and ultra super-critical boilers. This technology, generally referred to as high efficiency, low emissions ("**HELE**"), results in the increase of thermal efficiency in the burning of coal and reduction in the amount of coal burned per kWh, which reduces carbon emissions per kWh. Currently, 14 units of HELE plants are under construction in Japan, eight in South Korea and three in Taiwan, which are key markets in North Asia. Combined with the use of higher energy, lower ash coals, this can lead to further reductions in the emissions intensity of power generation as well as the levels of other pollutants. The following chart shows the increasing efficiency of new coal fired technologies.

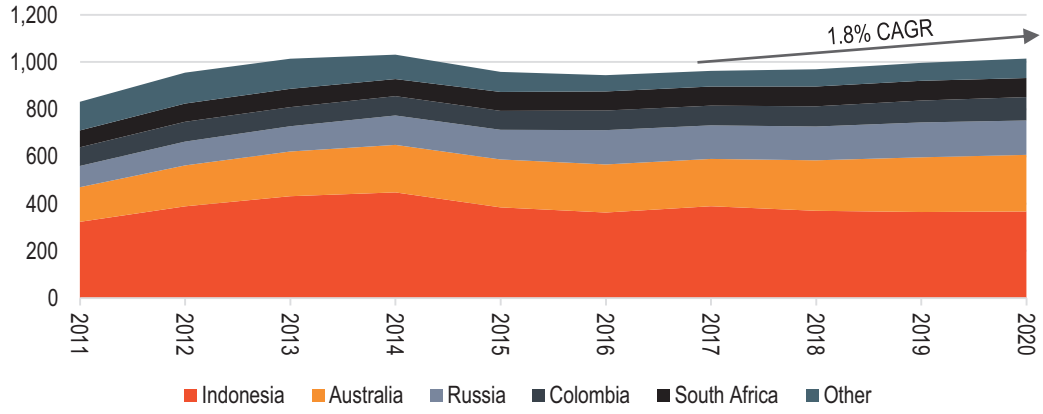


Source: Industry Report; International Energy Agency.

The installation of new thermal coal generation capacity in South and Southeast Asia is expected to result in seaborne thermal coal demand increasing at a CAGR of approximately 1.7% over 2017 to 2020. As markets for domestic coal decline in these regions, producers exposed to the export market will be able to take advantage of diversified marketing opportunities in other markets more reliant on imported coal. Further, producers of high quality coal will be better able to access the PRC market as the government restricts coal production and imports that do not meet their increasingly strict requirements on energy content and trace element levels.

Supply Analysis

AME estimates that global seaborne thermal coal exports fell by 1.5% in 2016. The declining pricing environment from 2014 to the first half of 2016 saw investment in uncommitted new capacity dry up. During this period, several financing institutions began implementing rules limiting their ability to invest in coal related projects, making the financing of new projects more difficult. Despite this, AME estimates that global seaborne thermal coal exports rose by approximately 1.9% in 2017 to 962 Mt and global thermal coal exports are expected to further increase by 0.5% in 2018. AME forecasts that thermal coal supply will grow at a CAGR of approximately 1.8% over the period between 2017 and 2020 to reach 1,014 Mt. The following chart shows the estimated seaborne thermal coal exports from key countries and regions in Mt.



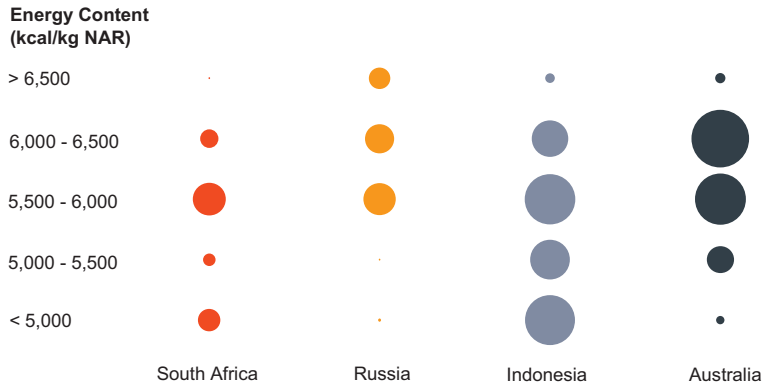
Source: Industry Report.

Australia is the second-largest seaborne thermal coal exporting country by volume, having exported approximately 205 Mt in 2017 which accounted for approximately 20% of the global thermal coal market. Australian seaborne thermal coal exports are estimated to grow by 12% in 2018 and continue to grow to reach 240 Mt in 2020. Australian seaborne thermal coal export products can largely be characterised as low-sulphur, high-energy coals, and are generally compared against either the Newcastle 5,500 kcal/kg net as received ("**NAR**") benchmark or the premium Newcastle 6,300 kcal/kg gross as received benchmark. Extensive historic investment in Australian coal assets by Japanese and South Korean companies has generally seen power plants in these countries designed to run on Australian benchmark coals. The following table sets out the estimated average energy content of seaborne thermal coal in 2017 by country.

	New South Wales	Australia	Indonesia	Colombia	Russia	South Africa
Ash (% adb)	15.7	15.6	4.8	6.9	12.6	17.2
Volatile matter (% adb)	31.6	30.2	40.1	35.1	31.8	25.4
Total sulphur (% adb)	0.6	0.6	0.6	0.6	0.3	0.7
Calorific value NAR (kcal/kg)	5,950	5,800	5,100	6,000	6,050	5,700

Source: Industry Report.

The following chart sets out the energy content of the estimated seaborne thermal coal exports in 2017 of the major coal producing countries.



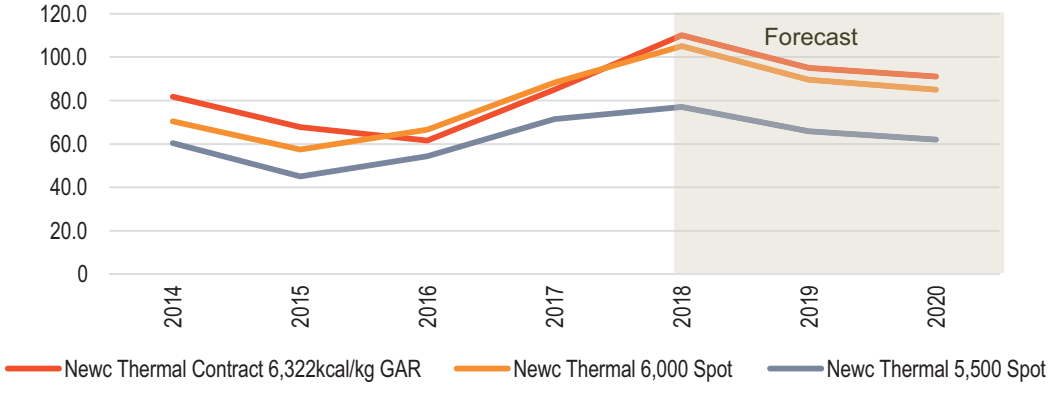
Source: Industry Report.

Note: Ball size represents relative market contribution.

Price Analysis

Historically, thermal coal was priced on the basis of annual supply contracts, with the main contract being the Japanese Financial Year negotiated between Japanese utilities and New South Wales producers for Newcastle benchmark coal. The first spot market developed in Northwest Europe. While the size of the spot market has grown, seaborne thermal coal is still primarily priced on contracts.

Strong demand and limited supply saw the Newcastle spot price in 2017 trade above the Newcastle Japanese Financial Year contract price for the second consecutive year, which is unusual. With the PRC temporarily relaxing its domestic production restrictions in December 2016, premium thermal coal spot prices fluctuated from US$98.5 per tonne at the end of 2016 to US$71 per tonne in May 2017 and US$123 per tonne in July 2018. The average spot price is expected to be approximately US$105 per tonne for the full year and thereafter steadily decline to US$85 per tonne in 2020. This decline is expected based on the assumption that certain projects will commence production over the next two years and ease the tight market conditions that have led to recent high prices. Any delay in the supply of additional coal would result in this tightness persisting longer than expected. As high coal prices have prevailed since the middle of 2017, the discount for high ash coal 5,500 kcal/kg NAR against 6,000 kcal/kg NAR has increased compared to 2011 and 2012. The following chart shows the historical and forecast annual average thermal coal prices in US$ per tonne.

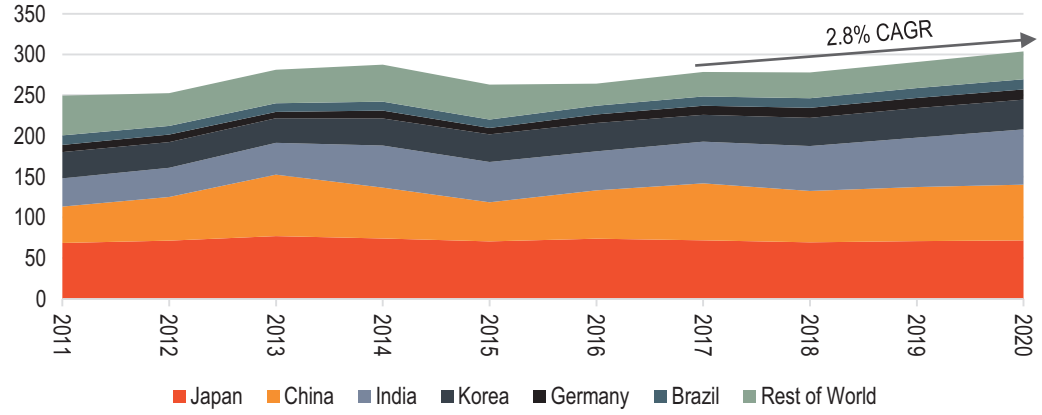


Source: Industry Report.

SEABORNE METALLURGICAL COAL

Demand Analysis

AME estimates that global seaborne metallurgical coal demand will grow from approximately 279 Mt in 2017 to 304 Mt in 2020. The following chart shows the estimated seaborne metallurgical coal demand for key countries and regions in Mt.



Source: Industry Report.

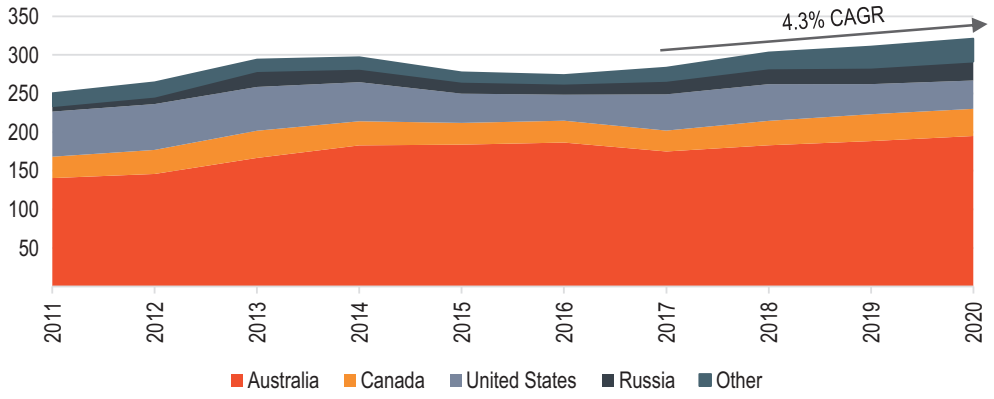
Demand for seaborne export metallurgical coal over the next ten years is expected to shift from a focus on the PRC to India and other emerging markets, particularly in Southeast Asia. The PRC's move from being a net exporter of coal to a net importer was a major contributor to the growth in coal demand in the past decade. The pace of economic growth in the PRC has slowed, and while there is optimism regarding demand in India over the long term the scale of the PRC's boost to demand between 2009 and 2013 is unlikely to be replicated.

Metallurgical coal's primary use is in the production of coke for blast furnace steelmaking, and demand for metallurgical coal is therefore heavily dependent upon crude steel production. Global steel demand growth is expected to increase in the medium term as the PRC's strong property sector and growing infrastructure investment result in higher steel demand. However, as steel demand moves toward more consumer-related sectors such as white goods, demand per capita consumption will begin to level out. The key upside potential to this assumption is the PRC's 'One Belt One Road' policy; the successful implementation of this global infrastructure pathway could see demand per capita continue to rise to the upper end of the demand per capita curve witnessed in developed economies.

In 2017, global crude steel production grew by approximately 4% to 1,688 Mt as steel output was supported by strong demand and prices. In the PRC, crude steel production rose by 3.3% to 832 Mt. Indian crude steel output increased by 6.4% to 102 Mt, benefitting from new projects and robust demand. Finished steel demand is estimated to have grown by 1.3% in 2016 and a further 4.3% in 2017 to reach 1,584 Mt, and is forecast to grow at a CAGR of 1.5% between 2017 and 2020.

Supply Analysis

AME estimates that the global supply of seaborne metallurgical coal will grow from 283 Mt in 2017 to 321 Mt in 2020, representing a CAGR of 4.3%. Over this period, Australia is forecast to continue to account for approximately 53% of seaborne export metallurgical coal supply. The following chart shows the estimated seaborne metallurgical coal exports from key countries and regions in Mt.

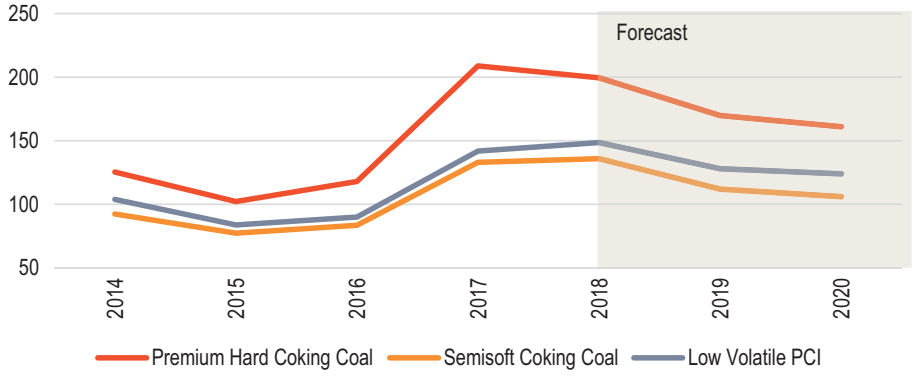


Source: Industry Report.

AME estimates that seaborne metallurgical coal supply was 274 Mt in 2016, and in 2017 increased by an estimated 3.5% year on year to 283 Mt. This strong growth is expected to continue in 2018 with supply increasing to approximately 303 Mt. It is estimated that seaborne metallurgical coal supply will hit 321 Mt by 2020, an increase of approximately 17% from 2016, and grow further in the long term to meet the demand growth from India and other industrialising countries.

Price Analysis

Historically, metallurgical coal prices were negotiated between key Japanese steel mills and large Australian producers on an annual basis. With the rise of spot pricing indices due to the emergence of the PRC and India as large import markets and the resulting pressure on Japanese end users to move to spot pricing, the markets have moved to a quarterly pricing basis. The following chart shows the historical and forecast annual average metallurgical coal prices in US$ per tonne.



Source: Industry Report.

With Cyclone Debbie impacting Queensland in the middle of quarterly benchmark negotiations, Japanese steel producers temporarily moved from the negotiated contract system for HCC to a price reflecting the average of the HCC indices. This led to agreement on quarterly premium benchmark prices approximately equal to the concurrent spot prices and representing an average of US$209 per tonne across 2017. AME expects this price to decline in 2018 to US$200 per tonne. The contract prices for low-volatile PCI coal and SSCC continue to be negotiated on a quarterly basis. Metallurgical coal prices are expected to decline further and bottom out in 2020 before increasing in the long term.

COMPETITIVE LANDSCAPE

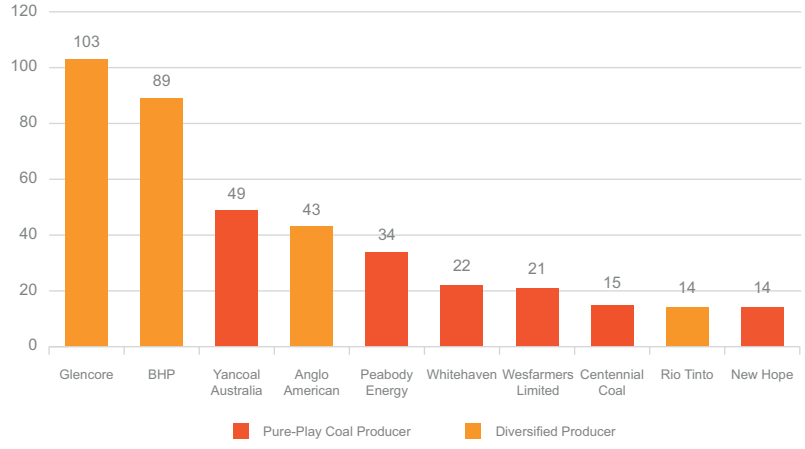
Market Share Analysis

According to AME, we operate in four distinct market segments: thermal coal, HCC, low-volatile PCI coal and SSCC. Thermal coal accounts for nearly 81% of our overall production (on an attributable basis). Our market share in the seaborne export markets for each of these segments as well as in the Hunter Valley thermal seaborne export coal market, on a pro forma basis (as if the C&A Acquisition had been completed on 1 January 2017) for production in 2017 on a 100% basis, are as follows:

Product	Seaborne market share
Hunter Valley thermal coal	21%
Global thermal coal	3%
HCC	1%
Low-volatile PCI coal	10%
SSCC	10%

Source: Industry Report.

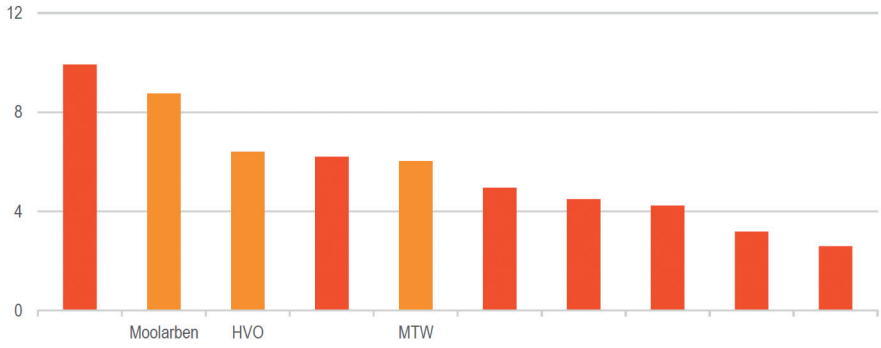
On a pro forma basis, we were the third largest coal producer and the largest pure-play coal producer in Australia in 2017 in terms of both coal production and reserves. The following chart shows the coal production in Mt of the largest coal producers in Australia by production in 2017, on a 100% basis.



Source: Industry Report.

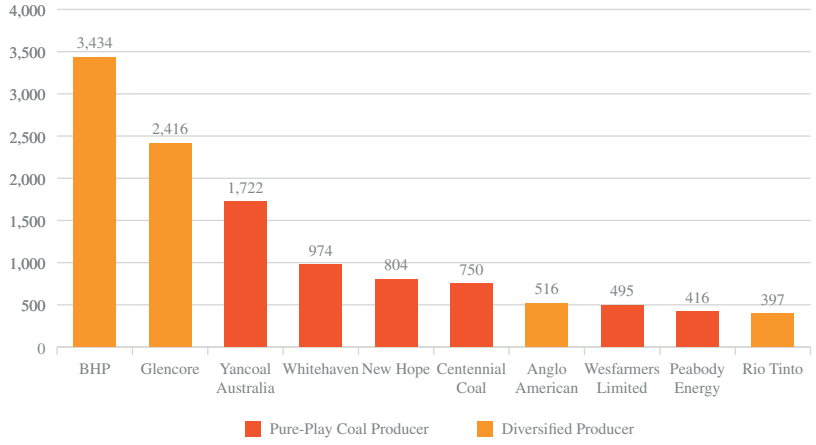
Note: On a pro forma basis assuming the C&A Acquisition completed on 1 January 2017.

Moreover, the Moolarben, HVO and MTW mines are three of the top five majority Australian-owned thermal coal mines (meaning mines for which thermal coal comprises at least 50% of saleable production) in terms of aggregate thermal and metallurgical coal production on a 100% basis in the first half of 2018, as shown in the chart below (in Mt).



Source: Industry Report.

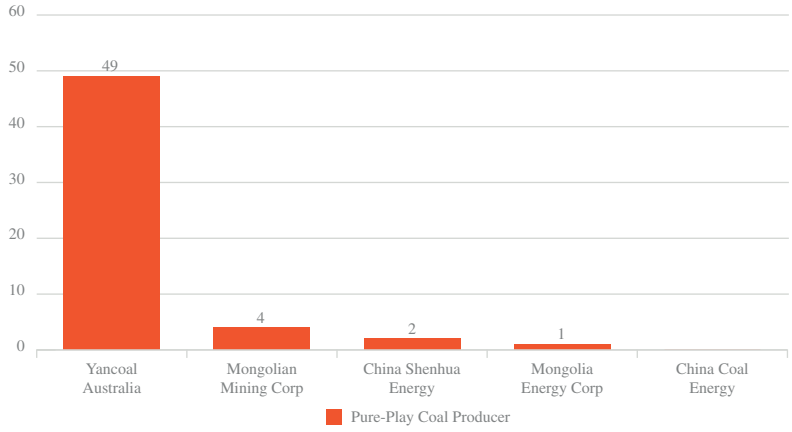
The following chart shows the coal reserves in Mt of the largest coal producers in Australia by reserves in 2017, on a 100% basis.



Source: Industry Report.

Note: On a pro forma basis for the Company assuming the C&A Acquisition completed on 1 January 2017.

When compared to pure-play coal producers listed on the Stock Exchange, we are the largest exporter of coal and the only coal producer whose coal is entirely sold for export overseas, whether directly, through overseas traders or through other Australian coal companies. Coal producers listed on the Stock Exchange largely operate in the PRC and Mongolia, and as a result are exposed to changes in PRC government policy regarding coal mining and coal imports, including policies such as the 276-working day restriction and closure of the border between the PRC and Mongolia. The following chart shows a comparison of our seaborne coal exports in Mt against that of the largest pure-play coal producers listed on the Stock Exchange by exports in 2017, on a 100% basis.

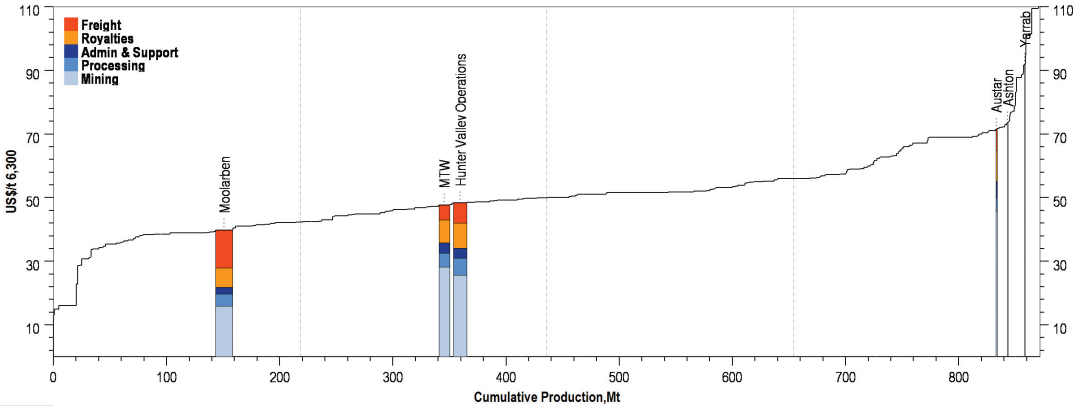


Source: Industry Report.

Note: On a pro forma basis for the Company assuming the C&A Acquisition completed on 1 January 2017.

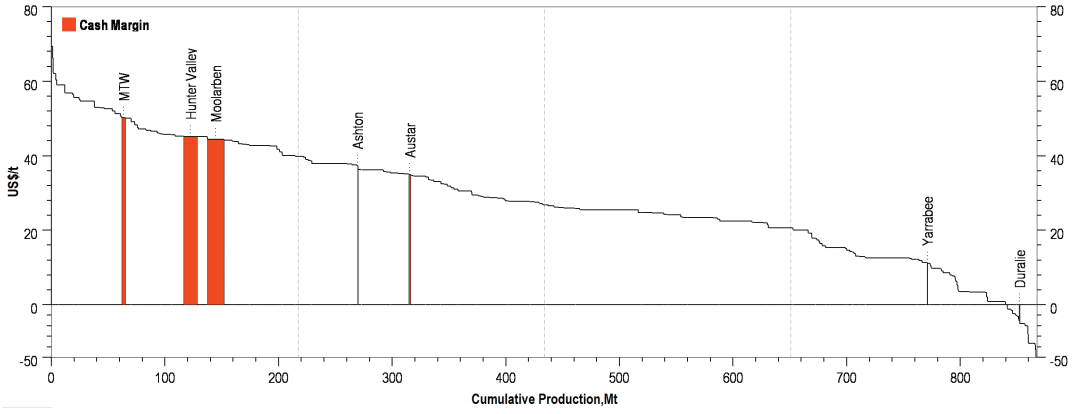
Cost Competitiveness Analysis

On a cash cost curve, the cash costs of Moolarben, HVO (which is operated as an unincorporated joint venture with Glencore) and MTW, our largest thermal coal production assets which together accounted for approximately 88.7% of the total coal sales (on an attributable basis) from our mines in 2017 on a pro forma basis (as if the Moolarben Acquisition, the C&A Acquisition, the Warkworth Transaction and the Glencore Transaction had been completed on 1 January 2017), are all located in the first and second quartiles. The following chart shows the estimated free on board ("**FOB**") cash cost curve for 2018 of our thermal coal producing assets in US$ per tonne on a calorific adjusted basis.



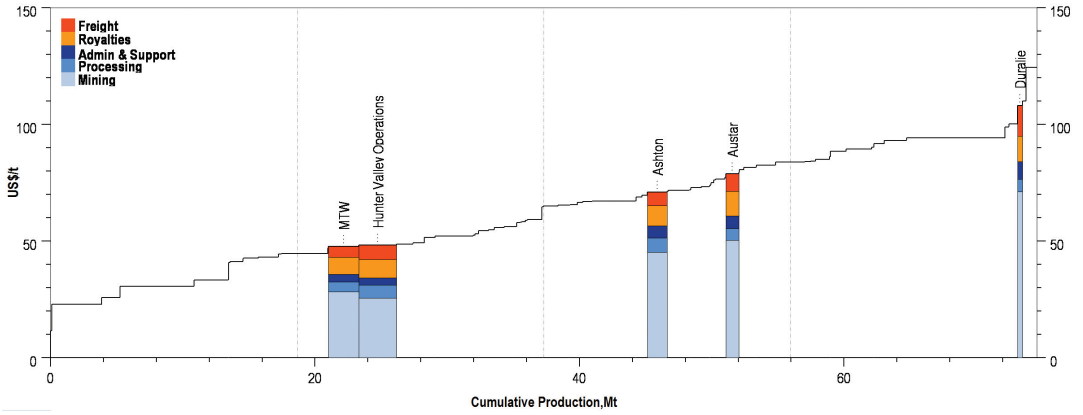
Source: Industry Report.

On a cash margin curve, the majority of our thermal coal production is located in the first and second quartiles, accounting for the higher pricing received for higher quality offsetting higher cost of production. The following chart shows the estimated FOB cash margin curve for 2018 of our thermal coal producing assets in US$ per tonne.



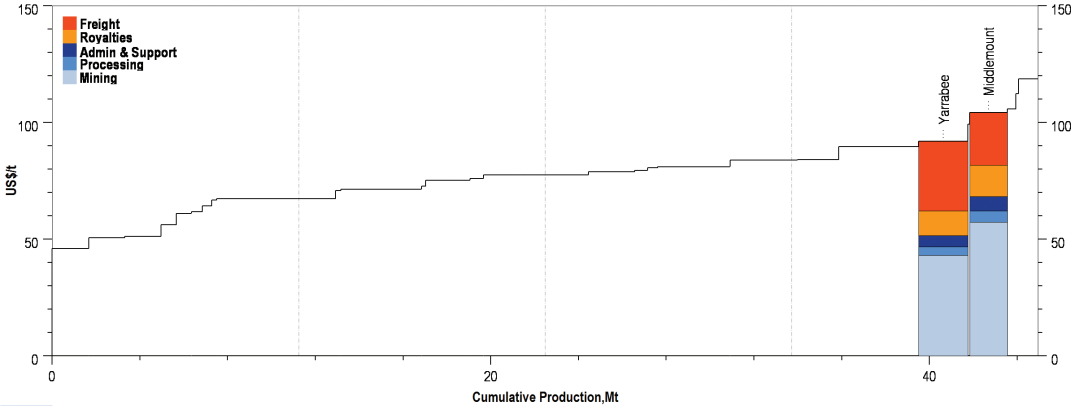
Source: Industry Report.

As most of our SSCC is produced at our large-scale thermal coal operations in the Hunter Valley, the cash costs for these are relatively low. The following chart shows the estimated FOB cash cost curve for 2018 of our SSCC producing assets in US$ per tonne.



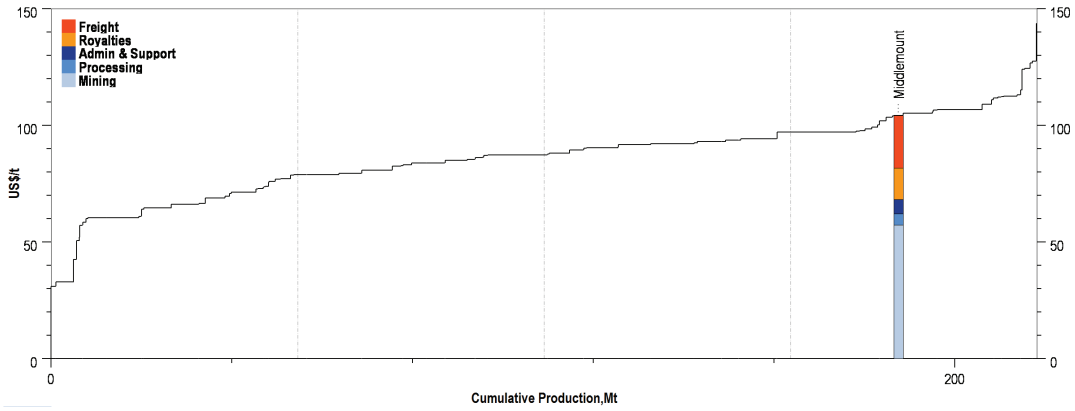
Source: Industry Report.

Our low-volatile PCI coal production is sourced from Middlemount and Yarrabee, where higher strip ratios and complex geology result in higher operational costs. The following chart shows the estimated FOB cash cost curve for 2018 of our low-volatile PCI coal producing assets in US$ per tonne.



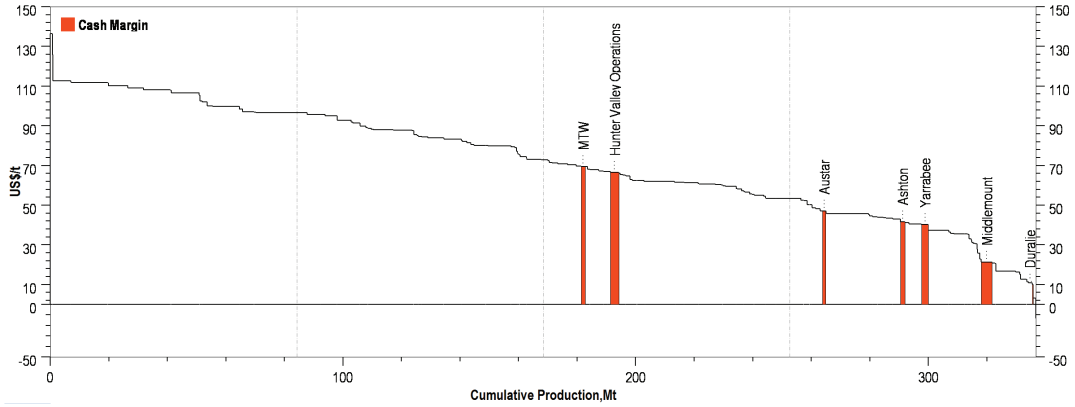
Source: Industry Report.

The following chart shows the estimated FOB cash cost curve for 2018 of our only HCC producing asset, Middlemount, in US$ per tonne.



Source: Industry Report.

As our metallurgical coal operations typically produce lower priced coal, these products have lower margins despite our operations having moderate costs. The following chart shows the estimated FOB cash margin curve for 2018 of our metallurgical coal producing assets in US$ per tonne.



Source: Industry Report.

OVERVIEW

Introduction

We are Australia's largest pure-play coal producer based on aggregate Coal Reserves and marketable coal production, and have been listed on the ASX since 2012. Of all Australian coal producers, we rank third on both these aforementioned metrics, behind only Glencore and BHP. Our principal business activity is the production of thermal and metallurgical coal for use in the power generation and steel industries in Asian markets. In contrast to coal companies that are currently listed on the Hong Kong Stock Exchange, all of the coal we produce is sold for export to customers located overseas, whether directly, through overseas traders or through other Australian coal companies. We believe that the export-oriented nature of our business is a key differentiator as it allows us to obtain global and market-determined indexed pricing for most of our coal sales.

We have ownership interests in, and operate, five coal mine complexes across New South Wales and Queensland, and manage five others across New South Wales, Queensland and Western Australia. Our mining interests in New South Wales include HVO, which is now operated as an unincorporated joint venture with Glencore, the integrated operations of the MTW open cut mines which are located adjacent to each other, the open cut and underground mines comprising Moolarben, and the integrated operations of Stratford Duralie. Our mining interests in Queensland are located in the Bowen basin and include Yarrabee, and a near-50% share in Middlemount through an incorporated joint venture with Peabody Energy. Our mining interests also include the Ashton, Austar and Donaldson mines in New South Wales, which we manage on behalf of Watagan, our unconsolidated, wholly-owned subsidiary. Additionally, we manage the Cameby Downs and Premier coal mines in Queensland and Western Australia, respectively, on behalf of our Shanghai and Hong Kong listed controlling shareholder, Yanzhou. We also have shareholding interests in three major coal export terminals in Australia.

As at 30 June 2018, the mines we have ownership interests in and operate, Middlemount and the Watagan Mines had, in the aggregate, Coal Reserves of 1,710 Mt, Marketable Coal Reserves of 1,218 Mt, and Measured and Indicated Coal Resources of 5,414 Mt (all on a 100% basis). On an attributable basis, we had Coal Reserves of 1,178 Mt, Marketable Coal Reserves of 837 Mt and Measured and Indicated Coal Resources of 3,964 Mt as at that date. In 2017 and the six months ended 30 June 2018, we sold 19.3 Mt and 16.2 Mt of coal products, respectively, and reported revenue from continuing operations of A$2,601 million and A$2,347 million, respectively.

Our mines and operations employ approximately 4,000 people in addition to the contractors and service providers who support our business, and we seek to continue contributing to the economic growth of the regional Australian areas in which we operate.

History

We have become the largest Australian pure-play coal producer through both organic growth and a series of corporate acquisitions since our incorporation in November 2004.

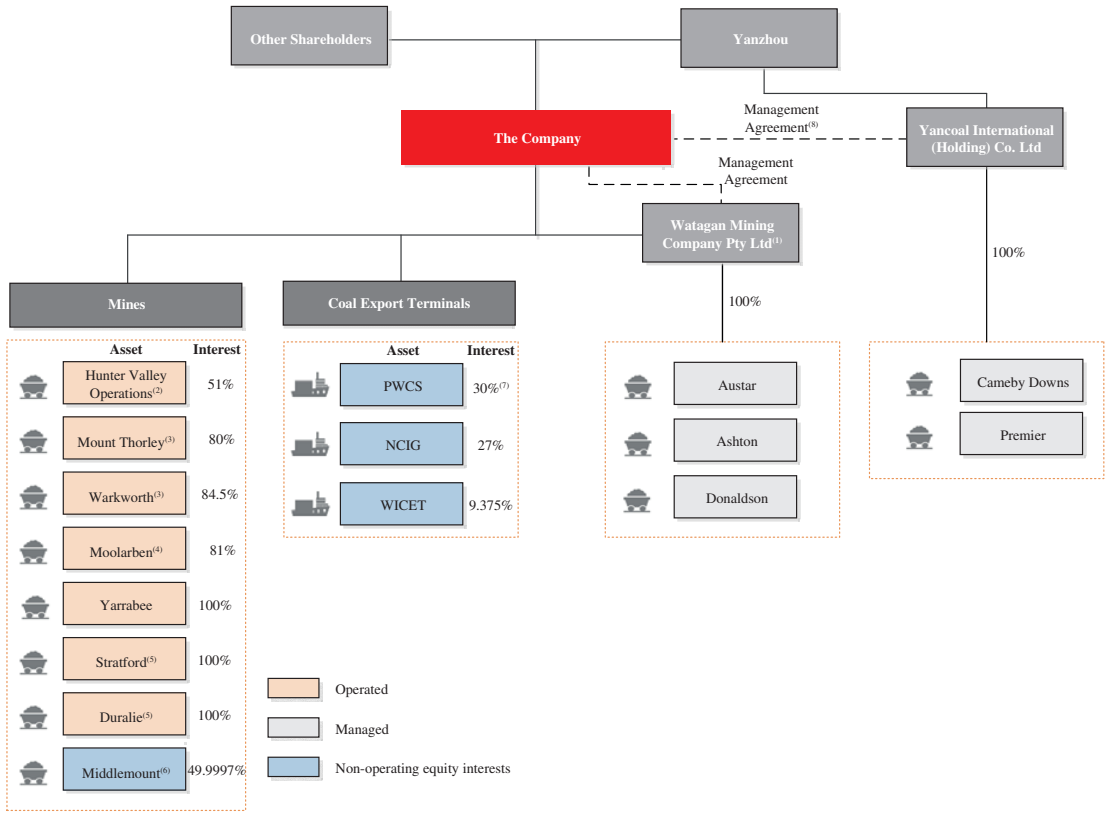
We acquired the Southland mine (renamed Austar) in 2004 and Felix Resources (assets of which included interests in the Moolarben, Yarrabee and Ashton mines) in December 2009. We acquired further interests in the Ashton mine in 2011. We listed on the ASX in June 2012, following our merger with Gloucester Coal, assets of which included interests in the Middlemount, Stratford Duralie and Donaldson mines and the Monash exploration project. Since our listing on the ASX, we have acquired the remaining interests in the Ashton mine and further interests in the Moolarben mine.

In 2014, during the global coal market downturn, we made a major strategic commitment to expand mining operations at Moolarben. Development approval for the Moolarben Stage Two expansion project was received in early 2015 and provided for an increase in ROM production capacity at the low cost Moolarben complex from 8 Mtpa of open cut production to 21 Mtpa across both open cut (13 Mtpa) and underground operations (8 Mtpa). With efficient project management and careful cost control, we were able to execute the Moolarben expansion ahead of schedule and within budget. With construction now complete at both the open cut and underground operations, Moolarben is one of the ten largest producers of thermal coal in Australia based on 2017 saleable production. We have entered into an agreement to increase our interest in Moolarben by 4%, subject to satisfaction of certain conditions precedent.

In March 2016, we transferred our interests in the Ashton, Austar and Donaldson mines to Watagan as part of a structured financing transaction, further details of which are set forth in "*Our Mining Operations – Watagan Mines – Watagan Agreements*". In September 2017 we completed the acquisition of C&A from Rio Tinto, as a consequence of which we acquired interests in HVO and MTW, which are among the ten largest thermal coal operations in Australia, as well as related export infrastructure. In May 2018, we established a 51:49 unincorporated joint venture with Glencore in relation to HVO, one of the mines we acquired as part of the C&A transaction.

Organisational Structure

The chart below sets forth our simplified organisational structure and provides an overview of our assets and operations:



Notes:

(1) Watagan is a wholly-owned subsidiary of the Company. However, Watagan is managed by a board of directors (which we do not control) and therefore under the applicable accounting standards we do not consolidate Watagan in our financial statements. However, we manage and operate the Watagan Mines and receive fees in respect of the management services we provide. See "*Financial Information – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation"* and "*– Our Mining Operations – Watagan Mines – Watagan Agreements*" for further details.

(2) The Hunter Valley Operations, or HVO, are an amalgamation of three previously independent mining operations. We acquired our interest in HVO as part of the C&A Acquisition, following which we managed HVO directly and owned 67.6% of HVO. Upon the completion of the Glencore Transaction on 4 May 2018, our ownership of HVO was reduced to 51.0%, and HVO is operated as a 51:49 unincorporated joint venture with Glencore. The HVO JV is jointly controlled by us and Glencore through the JVMC and is operated by a manager, HV Ops, which is appointed by us and Glencore and reports to the JVMC. See *"– Joint Venture Agreements"* for further details of the joint venture agreement with Glencore.

(3) Mount Thorley and Warkworth are separate mines; however, they are located adjacent to each other and are managed as an integrated operation (pursuant to an operations integration agreement) referred to as MTW. We acquired an 80% interest in Mount Thorley and a 55.6% interest in Warkworth on 1 September 2017 as part of the C&A Acquisition, following which we began managing MTW. On 7 March 2018, we purchased an additional 28.9% of Warkworth from Mitsubishi, which increased our ownership of Warkworth to 84.5% and increased our share of MTW's coal production from 64.1% to 82.9%.

(4) We hold an 81% interest in, and we are the manager of, Moolarben (through our joint venture with Sojitz, which holds 10%, and a consortium of South Korean companies which collectively hold 9%. The Company has entered into an agreement, subject to satisfaction of certain conditions precedent, with one of the Korean consortium members, to acquire an additional 4% interest in Moolarben for total consideration of A$84 million. The acquisition will raise our interest in Moolarben to 85%.

(5) Stratford and Duralie are separate mines; however they are located in proximity to each other and we consider them as an integrated operation which we refer to as Stratford Duralie.

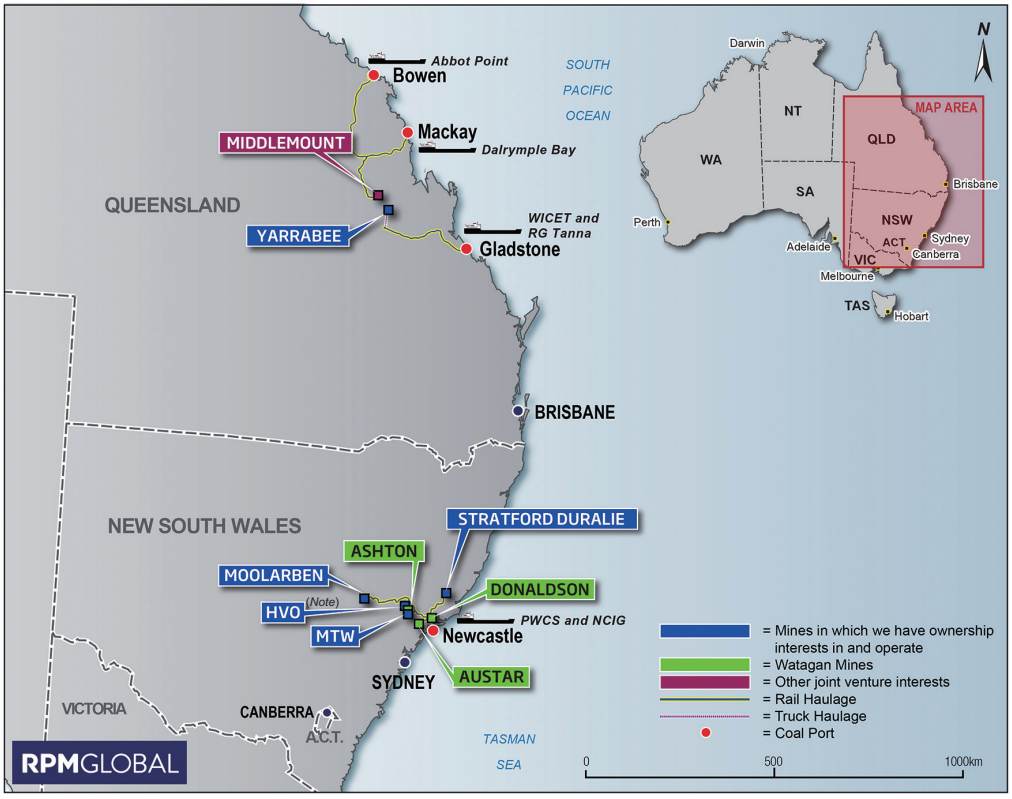
(6) Middlemount is operated by an incorporated joint venture between Peabody Energy and the Company, with the Company having a near-50% interest in the joint venture.

(7) On completion of the Glencore Transaction, the beneficial interest in C&A's shareholdings in Newcastle Coal Shippers, through which we indirectly hold 6.5% of PWCS, was transferred to Glencore Coal (NSW) Pty Limited, a subsidiary of Glencore. As a result, C&A's beneficial interest in PWCS was reduced to 30%. Legal title in Newcastle Coal Shippers remains with C&A until completion of a pre-emptive process, at which time C&A's legal interest in PWCS will transfer to Glencore Coal (NSW) Pty Limited.

(8) The Company provides services to Yancoal International (Holding) Co. Ltd's subsidiaries under the management agreement.

Locations

The following map shows the location of the coal mines we have ownership interests in and operate, the Middlemount joint venture, the Watagan Mines, and the ports and railway network serving these areas:



Note:

HVO is operated as a 51:49 unincorporated joint venture with Glencore. The HVO JV is jointly controlled by us and Glencore through the JVMC and is operated by a manager, HV Ops, which is appointed by us and Glencore and reports to the JVMC. See "– *Joint Venture Agreements*" for further details of the joint venture agreement with Glencore.

OUR COMPETITIVE STRENGTHS

We are Australia's largest pure-play coal producer with a seaborne business focused on major Asian export markets including the PRC.

Our business is focused exclusively on coal production and we are the largest pure-play coal producer in the Australian coal sector based on aggregate Coal Reserves and marketable coal production. As at 30 June 2018 the mines we have ownership interests in and operate, Middlemount and the Watagan Mines had, in the aggregate, Coal Reserves of 1,710 Mt (on a 100% basis) and in 2017 they produced, on a pro forma, 100% basis (assuming the completion of the C&A Acquisition as at 1 January 2017) 49 Mt of coal and coal products. In comparison, Whitehaven and New Hope, which are the second and third largest pure-play coal producers in Australia in terms of Coal Reserves, reported 974 Mt and 804 Mt, respectively, of Coal Reserves as at 31 December 2017 each on a 100% basis. In terms of production volume in 2017, Whitehaven and New Hope produced 22 Mt and 14 Mt, respectively, while Peabody Energy, the second largest

pure-play coal producer in Australia, produced 34 Mt, of coal and coal products. Only BHP and Glencore produce more coal in Australia than we do, though both are diversified miners who operate a number of other significant commodities businesses in Australia and globally.

Our business is substantially based on exporting the coal we produce to major Asian markets including the PRC. In 2017 we derived all of our revenue from sales of coal for export to customers located overseas, whether directly, through overseas traders or through other Australian coal companies. We believe that the export-oriented nature of our business is a key differentiator, because we are able to obtain global and market determined indexed pricing for most of our coal sales. Conversely, the Chinese coal companies that are currently listed on the Stock Exchange mainly produce and sell coal domestically in the PRC, and are more susceptible to locally regulated pricing, or local production restrictions. Production restrictions on the coal industry that are imposed by the government in China also favour the global seaborne coal market, in which we are a competitive player. Furthermore, the availability of proximate rail and port connectivity to our mines, and the relatively short voyage times from the east coast of Australia to our key export markets, enable us to price our coal competitively for those markets.

We have a diversified portfolio of world class assets that produce high value coal products for our major export markets.

We have ownership interests in, and operate, five mine complexes, namely HVO (which is operated as an unincorporated joint venture with Glencore), MTW, Moolarben, Stratford Duralie and Yarrabee, and also manage the Ashton, Austar and Donaldson mines on behalf of Watagan. We also have a near 50% share of the Middlemount joint venture. We believe that the geological characteristics of our coal deposits enables us to extract coal at a relatively lower cost, with many of our mines receiving some of the highest margins in the market for our coal, according to the Industry Report. Further, our mines are located in close proximity to rail and port facilities, which provides us with a competitive transportation cost advantage. We produce and export a variety of coal grades, which presents significant coal blending and marketing opportunities, and allows us to manage customers' coal quality specifications to maximise financial performance.

Thermal coal accounts for approximately 81% of our overall production (on an attributable basis), and Moolarben, HVO and MTW are the second, third and fifth largest producers majority Australian-owned thermal coal mines (meaning mines for which thermal coal comprises at least 50% of saleable production) in terms of aggregate thermal and metallurgical coal production on a 100% basis in the first half of 2018. All three mining operations have long mine life and produce coal at relatively low cost that is in the first and second quartiles of the FOB cash cost curve and the first quartile of the FOB cash margin curve (see *"Industry Overview – Cost Competitiveness Analysis"*). We believe that Australian thermal coal, with its high energy content and relatively low impurities, is highly valued in our key export markets such as Japan, South Korea and the PRC. Historically, a consequence of extensive investment in Australian coal assets by Japanese and South Korean companies has been that power plants in those countries are designed to efficiently utilise Australian benchmark coals such as those we produce, and as a result Japanese and South Korean power plants are significant end users of our thermal coal.

Furthermore, we anticipate that with the increasing emphasis on reducing greenhouse gas emissions globally and environmental policies that are encouraging a shift to cleaner fuels, the focus of new coal fired power generation in many of our key Asian markets will be on high efficiency, low emission (HELE) technology, in order to reduce the carbon emission intensity of each kWh of electricity produced. It is expected that the focus of coal demand for these HELE plants will be on higher energy, lower ash coals, such as those produced by our mines.

We have a sustainable platform for future growth.

We have a large high quality reserve and resource base that we believe provides us with a sustainable asset base to maintain current and anticipated production, as well as to exploit future brownfield and greenfield opportunities. As at 30 June 2018, the mines we have ownership interests in and operate, Middlemount and the Watagan mines had, in the aggregate, Coal Reserves of 1,710 Mt and Marketable Coal Reserves of 1,218 Mt, and Measured and Indicated Coal Resources of 5,414 Mt (all on a 100% basis). Based on current Marketable Coal Reserves, the average remaining mine life of our mines is 24 years, with HVO (which is operated as an unincorporated joint venture with Glencore), MTW and Moolarben, our flagship mines, having 43, 23 and 20, years of remaining mine life, respectively. These mine lives could increase if we are able to convert Coal Resources to Coal Reserves.

All of our assets are located in Australia, which is a developed economy characterised by a stable political system, well established mining laws and industrial policies, world class safety and environmental standards, as well as favourable investment conditions in the mining sector. We have been listed on the ASX since 2012 and have been subject to its strong corporate governance regime. We have also conducted our business to the required health and safety standards and in compliance with the high standards of environmental regulation in Australia.

We believe that the volume and quality of our coal reserves and resources, together with our operating environment in Australia, provide us with a sustainable platform to capitalise on market opportunities and deliver value to our shareholders.

Our experienced management team is well positioned to pursue growth opportunities and create further shareholder value.

Our management team consists of executives with deep experience in the coal sector and the financial sector. Given their diverse backgrounds, our executives are familiar with operating in a developed, Western-style environment and in pursuing revenue and growth opportunities in Eastern markets. With a strong focus on optimising execution and delivering growth, our current senior management team and board of directors have worked closely together to enable us to attain our current position as the largest Australian pure-play coal producer over the past few years. This has been achieved through a mix of organic strategies, such as the efficient project management and successful implementation of the Stage Two Moolarben expansion project ahead of schedule and below budget, which enabled us to increase ROM production capacity at the low cost Moolarben complex from 8 Mtpa of open cut production to 21 Mtpa across both open cut (13 Mtpa) and underground operations (8 Mtpa), and through inorganic transactions such as the successful acquisition of C&A and the HVO joint venture with Glencore. We believe that given their experience and recent track record, our management is well positioned to create shareholder value through revenue growth, the successful delivery of brownfield and greenfield projects, and opportunistic strategic transactions.

We have valuable and strategic operational and trade relationships as well as strong support from our key shareholders.

We have operational and trade partners who are highly experienced in our industry, as well as key shareholders in Yanzhou and Cinda, who have been instrumental in our development and strategy.

Glencore is one of our key operational partners and is also our shareholder. Our joint venture in relation to HVO combines the experience and efficiencies of two of Australia's largest coal producers, enabling us to benefit from operational synergies. We also expect to benefit from Glencore's economies of scale, through access to group-wide contracts for equipment replacement and parts, overheads and support services rationalisation and mining technology.

We have long-term relationships with end-users in key global markets. Our strong trade relationships with customers in Japan, South Korea, the PRC, Singapore and Taiwan underline our successful marketing efforts in our key export markets. We have also been able to establish long-term relationships with customers through a strategy of focusing on major end-users such as power utilities and steel mills. We are also focused on maximising new sales opportunities generated from the C&A Acquisition, including the marketing of semi-soft coal products into India and Europe and premium thermal coals across Asian markets.

Yanzhou and Cinda, our key shareholders, play an important role in the success of our business and have been supportive of our growth. Yanzhou is one of the leading underground coal producers in the PRC and is listed on the Hong Kong and Shanghai stock exchanges. As a highly regarded and competitive player in the market, Yanzhou has supported us with various aspects of our business, including by taking up US$1.0 billion of its entitlements during the C&A US$2.45 billion entitlement offer in 2017. Cinda, one of the leading coal investors in the PRC, made a strategic investment by underwriting US$734.3 million of the US$2.45 billion entitlement offer in 2017 to finance the acquisition of C&A and subsequently obtained representation on our board of directors.

OUR BUSINESS STRATEGIES

We are committed to continuing our strategic growth and to maximising new opportunities to build our business as a leading low cost coal producer in the global seaborne market with a focus on creating long term value for our shareholders. Our management team remains focused on investing in the Australian resources sector, implementing operational efficiencies, reducing costs, exploring new market opportunities and providing our customers with the certainty of product quality and delivery.

Evaluate and execute portfolio expansion and improvement through value accretive organic and inorganic opportunities.

We believe that we have demonstrated our ability to pursue successful organic and inorganic growth focused on improving our portfolio production mix, i.e., increasing the percentage of sales from our lowest cost operations. We have continued to deliver brownfield expansion projects on time and budget through efficient and robust project management such as our recent execution of the Moolarben Stage Two expansion project which provided for an increase in ROM production capacity at the low cost Moolarben complex from 8 Mtpa of open cut production to 21 Mtpa across both open cut

(13 Mtpa) and underground operations (8 Mtpa), and that our proven project identification and execution expertise positions us well to pursue organic growth opportunities within our existing asset portfolio. The recent successful completion of the acquisition of the low cost C&A operations and the related HVO joint venture with Glencore demonstrate our ability to pursue and complete major strategic transactions, and we will continue to be opportunistic in pursuing such inorganic growth opportunities, with a strong focus on transactions that will be value-accretive to our shareholders.

We believe that our portfolio offers further potential organic growth opportunities, particularly following our acquisition of the C&A assets. These include underground expansion opportunities at MTW, maximising the potential of the open cut operations at Moolarben, and evaluating, together with Glencore, exploitation of opportunities with respect to "barrier coal" deposits in and around HVO. We believe that we have demonstrated the ability to deliver projects on time and within budget.

Continued focus on operational efficiencies to increase mine productivity and reduce operating costs.

We continue to implement operational efficiency initiatives across all our mines, with a commitment to reducing costs and supporting future growth opportunities. We believe that the scale of our operations provides us with an opportunity to share our core operating principles across our business, driving efficiency, performance and productivity to achieve enhanced revenue and profitability.

As we complete the integration of the assets acquired as part of the C&A Acquisition, we aim to improve operational synergies among HVO, MTW and Moolarben in particular, by maximising the benefits of the mines' adjacent geographic locations. These benefits include the potential of increased marketable reserves, mine life and reduced strip ratio/costs as a result of mining coal from barriers between the mining leases (at HVO specifically), equipment optimisation across various sites, as well as coal blending and reduction in take-or-pay liabilities through the optimisation of logistics and port allocation. We continue to explore how varying mining methods may be implemented across these assets and our other operations to improve mine productivity and operational performance, and reduce costs. HVO, MTW and Moolarben are amongst the ten largest thermal coal mines in Australia and are situated in close proximity to a common railway network.

Specific recent synergy initiatives we have undertaken with regard to the C&A assets include a focus on utilisation requirements for heavy mobile machinery, review of loading fleet capacity, implementation of greater operational accountability and monitoring measures, as well as a dragline shutdown cost reduction project at MTW. We have also obtained benefits from our enhanced scale of operations resulting in cost reductions from vendors and other counterparties, including negotiated price reductions for rail haulage services at HVO and MTW.

We intend to continue increasing productivity across our fleet of excavators, bulldozers, graders and haul trucks, by optimising our maintenance practices to ensure improvements in equipment availability, and by providing best practice training to our personnel to enhance equipment utilisation. To optimise costs, we continue to seek more favourable terms across the procurement contracts that support our business. The combination of our strategic portfolio improvement and our productivity and cost optimisation initiatives across all operations in recent years have been effective, resulting in our FOB cash costs (excluding royalties) decreasing from A$78/saleable tonne in 2013 to A$63/saleable tonne in the six months ended 30 June 2018 (with respect to coal from the mines we operated in the respective years).

Grow our business in existing markets and new markets, aided by a dynamic product mix strategy.

We intend to continue growing our business in our key thermal and coking coal markets, which are Japan, South Korea, the PRC and Taiwan. During the Track Record Period, we also supplied coal to power plants and steel mills in other Asian countries such as Malaysia, Vietnam, Thailand, India and Indonesia, as well as customers in South America and Europe on an ad hoc basis. We plan to pursue market opportunities that can generate profitable medium to long term returns, particularly against a backdrop of policies intended to reduce long term carbon density. We believe that we have had success in the PRC, where our dedicated focus on key major end users such as Huaneng Power International, Baosteel Stainless Steel and Yuan Li Steel resulted in the PRC's share of our total revenue by end user increasing from 8.3% in 2015 to 24.9% in 2017. We plan to continue targeting a more diverse market portfolio across our focus markets. The Industry Report predicts growth in coal demand in major markets such as India, which continue to be dependent on thermal power and where there are widespread coal supply shortages. While India sources most of its coal from South Africa and Indonesia, Australia is expected to remain an alternative and competitive source of coal for this growing market, which may offer us growth opportunities there.

We believe that anticipating and responding to our customers' changing needs and requirements is an important aspect of our growth strategy and a competitive advantage. Our operating scale combined with the diversity of our assets enables us to deliver a range of coals to meet our customers' specifications. We collaborate with our customers to provide suitable blends, including the generation of new blends, across the product spectrum. The acquisition of C&A has provided us with access to a wider range of coal grades, which has enabled us to realise blending synergies on certain contracts. We also anticipate the further growth of HELE plants across our key Asian markets, which should provide additional opportunities to blend coal to meet the high energy, low emission requirements and specifications of those plants.

Sustain financial discipline and strengthen our balance sheet to support future growth.

We intend to maintain our focus on financial discipline and look for ways to further strengthen our balance sheet to support our future growth. We intend to use a portion of the proceeds of the Offering to refinance our existing indebtedness and reduce our overall weighted average cost of capital.

We also believe that our acquisition of the C&A assets has materially strengthened our balance sheet and created a pathway to a long term sustainable capital structure and future cash flow generation. We believe that following the acquisition our balance sheet is well capitalised, with a gearing ratio (which we define as gross debt divided by total equity at the end of the period) of 0.8 as at 30 June 2018 compared to 3.7 as at 31 December 2016. In addition, we repaid debt of US$450 million in May 2018 and US$50 million in June 2018, which we believe has further improved our financial position. We intend to explore further opportunities to reduce our finance costs, through voluntary prepayments or lower cost refinancings. For example, on 17 September 2018 and 17 October 2018, we further repaid US$150 million and US$100 million, respectively, of our bank and related party debt using excess cash flows generated from operations. Following the completion of the Global Offering and the Australian Entitlement Offer, we expect our leverage ratio to further improve, providing us with the balance sheet and cash flow strength to consider the possibility of meeting the dividend mandate set forth in our Constitution and to pursue strategic opportunities when they become available.

Maintain high standards of safety and responsible working practices.

We believe that we have a strong record of compliance with environmental, health and safety legislation in Australia's highly regulated environment. We aim to maintain high standards of safety across our business. We believe that sound safety practices are a cornerstone of our business and we strive to ensure the provision of a safe workplace for the approximately 4,000 people who work in our mines. To support this commitment, we continue to implement safety training and incident response practices across each of our operations; for example, we have introduced the Critical Controls initiative to identify and mitigate against significant onsite risks.

KEY DATA AND OPERATIONAL METRICS

The following tables set forth certain information relating to each of the coal mines in which we have ownership interests and operate, the Middlemount joint venture and the Watagan Mines:

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total[11]
Background data										
Location	NSW	NSW	NSW	NSW	QLD	QLD	NSW	NSW	NSW	–
Date of initial operation	1949	1981	2010	1995	1982	2011	2005	1916	2006	–
Interest at the Latest Practicable Date (%)	51.0	Mount Thorley: 80 Warkworth: 84.5 Share of coal production: 82.9	81	100	100	49.9997	100	100	100	–
Designed annual production capacity (Mt)[4]	20.0	18.5	21.0	4.6	3.5	5.4	5.5	5.0	5.1	88.6
Permitted annual production capacity (Mt)[4]	38.0	28.0	21.0	5.6	4.0	5.7	8.6	3.6	6.1	120.6
Tenement expiry dates[5]	14 Apr 2019 – 19 Apr 2038	23 Feb 2020 – 17 Mar 2038	12 Feb 2020 – 31 Aug 2036	5 Apr 2019 – 8 Apr 2037	13 Nov 2018 – 31 May 2044	30 Apr 2020 – 30 Sep 2031	21 May 2020 – 16 May 2035	7 Dec 2018 – 3 Feb 2039	21 Jul 2019 – 30 Jun 2038	–
Remaining mine life (years)	43	23	20	35	38	20	13	17	11	–

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total[11]
Coal Resources[4][12] (as at 30 June 2018)										
Measured (Mt) (100% basis)	704	MT:27 W:197	OC:438 UG: 287	OC:11 UG: –	94	73	OC:25 UG: 52	70	OC: 10 UG: 178	2,165
Indicated (Mt) (100% basis)	1,430	MT:75 W:713	OC:105 UG: 131	OC:196 UG: 1	80	47	OC:49 UG: 18	80	OC: – UG: 326	3,249
Measured and Indicated (100% basis)	2,134	MT:102 W:910	OC: 543 UG: 418	OC:207 UG: 1	174	120	OC:74 UG: 70	150	OC: 10 UG: 503	5,414
Inferred (Mt) (100% basis)	1,654	MT: 153 W: 527	OC: 69 UG: 129	OC:76 UG: 35	20	1	OC:70 UG: 15	69	OC: – UG: 95	2,913
Total (100% basis)	3,788	MT:255 W: 1,437	OC:612 UG: 547	OC:283 UG: 36	194	121	OC:144 UG: 85	219	OC: 10 UG: 598	8,327
Attributable to the Group[7]										5,916

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total[11]
Coal Reserves[6][12] (proved and probable, as at 30 June 2018)										
Coal Reserves (Mt)										
100% basis	796	MT:8 W:314	OC:189 UG: 67	44	55	87	OC:14 UG: 33	41	62	1,710
Attributable to the Group[7]										1,178
Marketable Coal Reserves (Mt)										
100% basis	554	MT:5 W:220	OC:148 UG: 67	26	42	67	OC:7.8 UG: 18	31	32	1,218
Attributable to the Group[7]										837
Product type	Met/ Thermal	Met/ Thermal	Thermal	Met/ Thermal	Met/ Thermal	Met/ Thermal	Met	Met/ Thermal	Thermal	–

	Mines we have ownership interests in and operate					Other joint venture interests	Watagan Mines			
	HVO (OC)[1][2][10]	MTW (OC)[1][10]	Moolarben (OC/UG)[1]	Stratford Duralie (OC)[1]	Yarrabee (OC)[1]	Middlemount (OC)[1]	Ashton[3] (OC/UG)[1]	Austar[3] (UG)[1]	Donaldson[3] (UG)[1]	Total
ROM coal production (Mt)[8]										
2015	–	–	9.0	1.9	3.4	5.5	3.0	0.8	1.8	25.4
2016	–	–	12.2	1.2	3.6	5.3	2.4	1.2	0.3	26.2
2017	19.5	17.7	14.7	0.9	3.4	5.3	2.8	2.0	–	66.3
1H2018	9.1	8.5	9.8	0.3	1.3	2.5	1.0	0.4	–	32.9
Marketable coal production (Mt)[8]										
2015	–	–	6.9	1.4	2.8	4.4	1.4	0.7	1.3	18.9
2016	–	–	9.3	0.9	3.1	4.1	1.1	1.1	0.2	19.8
2017	14.8	11.8	12.4	0.7	2.9	3.9	1.2	1.9	–	49.4
1H2018	6.4	6.0	8.8	0.2	1.1	2.1	0.4	0.4	–	25.4
Coal sales volume (Mt)[9]										
2015	–	–	5.6	1.5	3.0	–	1.3	0.6	1.4	13.4
2016	–	–	7.4	0.9	3.2	–	0.4	0.1	0.1	12.1
2017	3.1	2.5	10.2	0.7	2.8	–	–	–	–	19.3
1H2018	3.8	4.5	6.5	0.3	1.1	–	–	–	–	16.2

Notes:

(1) UG refers to underground mining operations and OC refers to open cut mining operations.

(2) HVO is operated as a 51%:49% unincorporated joint venture with Glencore. The HVO JV is jointly controlled by us and Glencore through the JVMC and is operated by a manager, HV Ops, which is appointed by us and Glencore and reports to the JVMC. See "*– Joint Venture Agreements – HVO*" for further details of the joint venture agreement with Glencore.

(3) Owned but not controlled by us under the applicable accounting standards. See "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation*", *"– Our Mining Operations – Watagan Mines – Watagan Agreements*" and "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents or outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown*" for further details.

(4) As defined in the JORC Code and as at 30 June 2018.

(5) See "*– Mining and Exploration Licences – Approvals, Permits and Licences to be Obtained*" and "*Appendix III – Competent Person's Report – Appendix F. Tenements*" for further details of the expiry dates of the tenements for each mine site.

(6) As defined in the JORC Code and as at 30 June 2018.

(7) Attributable data is based on our effective ownership interest as at the Latest Practicable Date and is provided on an aggregate, not per mine, basis.

(8) Reported on a 100% basis and subject to the limitations and qualifications set forth in *"Appendix III – Competent Person's Report"*.

(9) Represents ex-mine sales volume reported on an attributable basis and does not include the sales of Middlemount, which is an incorporated joint venture, and Watagan following its deconsolidation from the Group in March 2016.

(10) HVO and MTW were not part of the Group in 2015 and 2016.

(11) Data is subject to rounding, which may result in minor tabulation differences.

(12) The coal resources and reserves stated above must be read in conjunction with the Competent Person's Report in Appendix III to this prospectus which includes the disclosures required as per the JORC Code.

COAL PROPERTIES

Our principal coal products are thermal coal and metallurgical coal, which are widely used in the thermal power and steel production industries, respectively. All of the coal we produce is sold for export to customers located in various key markets across the Asia Pacific region, whether directly, through overseas traders or through other Australian coal companies. The end users for our coal products include major power utilities and steel mills in Japan, South Korea, the PRC, Singapore and Taiwan. During the Track Record Period, we have also supplied coal to power and steel mills in other Asian countries, such as Malaysia, Vietnam, Thailand and Indonesia, as well as customers in South America and Europe on an ad hoc basis.

Thermal coal

Thermal coal is primarily used as an energy source in the generation of electricity. Thermal coal is also used in cement manufacturing and other major energy intensive industries which use heat and/or steam in their production processes. As a result, thermal coal demand is strongly driven by electricity generation and is generally sold at prices which reflect demand and quality.

A wide range of thermal coals are available from Australian coal producers with coal characteristics varying from mine to mine. Australian export thermal coal typically has high energy content, moderate ash levels and is generally low in contaminants such as sulphur and other trace elements that reduce the value of the coal.

Historically, the Hunter Valley region, where two of our flagship mining assets, HVO (which is operated as an unincorporated joint venture with Glencore) and MTW, are located, has been the source of large volumes of high quality bituminous coal. As a result, for several decades these coals have been used as the basis for the design of power plants in the major developed economies of Japan, South Korea and Taiwan, and the developing economies in South-east Asia. Japanese power utilities and some customers in South Korea and Taiwan seek high energy, low ash coal to enhance boiler efficiency and/or reduce ash disposal costs. Our operations typically produce three thermal product coal types based on ash content: low ash, medium ash and high ash. These three product types attract different customers and prices with specifications varying between customers. The PRC remains a major market for imported coal, with demand over 200 Mt per annum. The thermal coal the PRC typically imports coal has a net calorific value ranging from 4,500 – 5,500 kcal/kg, although environmental concerns are likely to drive increased demand for higher quality, lower ash coals.

Metallurgical coal

Metallurgical coal is also known as coking coal. HCC is essential for the production of a strong coke which is used primarily in the steel making process. SHCC and SSCC are lower grades of coking coal that are often blended with HCC to reduce the overall cost of coal for steel production. SSCC can also be used as a substitute for thermal coal. PCI coal can be used as a cost effective replacement for coking coal to some extent.

Australian coking coals are known for their high quality coking characteristics and are generally low in contaminants such as sulphur and phosphorous.

Semi-hard coking coal

SHCC is produced at the Stratford, Austar and Middlemount mines. SHCC is highly regarded by steel mills throughout Asia for various reasons as a blend coal for steel making. For example, Austar SHCC has the highest fluidity levels of any coking coal in Australia and blends well with coking coals of low fluidity.

Semi-soft coking coal

SSCC can be produced in a limited number of seams in the lower Hunter Coalfield within which we have a large footprint. SSCC is highly regarded by steel mills throughout Asia for various reasons, most particularly the low impurities in the coal. Our SSCC is sought in significant and increasing proportions by North Asian steel mills for their coking coal blends.

Pulverised coal injection

PCI coal is generally a high calorific value coal, which is injected directly into a blast furnace to provide the carbon and heat in the iron-making process and can be used as a cost effective replacement for coking coal to some extent. The PCI process increases the economic efficiency of steel-making by using lower cost coals to reduce consumption of higher cost hard coking coals. PCI has become a standard practice in many of the world's major steelworks, particularly in Asia where substantially all of our customers are located.

Coal deposits in the Bowen Basin of central Queensland, where our owned Yarrabee mine and the near 50% owned Middlemount joint venture are located, include extensive resources of low and medium volatile coals that are well-suited to the PCI market.

The table below sets forth average coal characteristics of the coal sold by the mines we have ownership interests in and operate, and Middlemount:

Coal type	Region	Calorific value (Kcal/kg)	Ash (%)	Total moisture (%)	Fixed carbon (%)	Sulphur (%)	Phosphorous (%)	Volatile matter (%)	HGI	Free swelling index	Fluidity (ddpm)
Low Ash Thermal	Hunter Valley	6,322	⩽15%	10	53	0.55	0.008	31	50	NA	NA
High Ash Thermal	Hunter Valley	<6,322	>15%	10	53	0.55	0.008	31	50	NA	NA
SSCC	Hunter Valley	6,784	9.5	10	52	0.65	0.023	36	50	7	150
PCI	Queensland	6,767	11.5	9	77.8	0.68	0.096	9.2	72	NA	NA
Coking Coal	Queensland	NA	10	10	69.5	0.43	0.039	19	85	6	20

Note:

Coal qualities are at air dried basis with the exception of Calorific Value which is "gross as received". Total Moisture is as received.

OUR MINING OPERATIONS

Overview of coal mining operations

The table below sets forth the mines in which we have ownership interests and operate and from which we generate income primarily through the sale of coal to the export market. For a description of the ownership interests, see *"– Organisational Structure".*

New South Wales		Queensland	
Mine	**Ownership**	**Mine**	**Ownership**
HVO(*Note*)	51.0%	Yarrabee	100.0%
Mount Thorley	80.0%		
Warkworth	84.5%		
Moolarben	81.0%		
Stratford	100.0%		
Duralie	100.0%		

Note:

HVO is operated as a 51:49 unincorporated joint venture with Glencore. The HVO JV is jointly controlled by us and Glencore through the JVMC and is operated by a manager, HV Ops, which is appointed by us and Glencore and reports to the JVMC. See "*– Joint Venture Agreements – HVO*" for further details of the joint venture agreement with Glencore.

We have a 49.9997% shareholding interest in Middlemount Coal Pty Ltd, the incorporated joint venture which operates the Middlemount mine.

The table below sets forth our managed mines, from which we generate income through management fees:

New South Wales		Queensland		Western Australia	
Mine	**Owner**	**Mine**	**Owner**	**Mine**	**Owner**
Ashton	Watagan	Cameby Downs	Yanzhou	Premier	Yanzhou
Austar	Watagan				
Donaldson	Watagan				

The Ashton, Austar and Donaldson mines are owned by Watagan, which is wholly-owned but not controlled by us under applicable accounting standards, and therefore not consolidated, by us. We receive fees in respect of management services provided to the Watagan Group for the management of the Ashton, Austar and Donaldson mines. See "*Financial Information – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation"* and *"– Our Mining Operations – Managed Mines – Watagan Mines – Watagan Agreements*" for further details.

During the Track Record Period, mining ceased at Donaldson's Abel underground mine in June 2016. Donaldson's coal operation was moved to a "care and maintenance" phase and feasibility studies have been commenced to explore potential future mining options including the introduction of a longwall mining method. As at the Latest Practicable Date, Donaldson had not recommenced operations.

During the Track Record Period, Austar experienced geotechnical issues, safety issues and suspension of longwall production as a result of coal burst incidents, which resulted in investigations and discussions with the Resources Regulator and certain prohibition notices being issued against Austar. Operations at Austar recommenced on 14 August 2018 subject to certain restrictions and remediation measures set out in a notice issued by the Resources Regulator on 3 August 2018. This prohibition notice imposes certain conditions (e.g. with respect to stress measurement tests, amongst other things) relating to mining up to a particular location in the current B4 longwall panel where the longwall equipment will then be recovered and relocated to the next longwall panel for further mining. On 30 August 2018 operations were halted on account of technical issues related to de-stressing activity in certain areas of the long wall, and on 5 September 2018 a prohibition notice was received relating to this activity which was cancelled on 28 September 2018. As at the Latest Practicable Date, the prohibition notice issued on 3 August 2018 remained in force. Further details of geotechnical issues at Austar are set out in "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown*", "*Appendix III – JORC Coal Reserves – Reserves Comments*" and in "*Health, Safety and Environmental Matters – Safety Incidents*".

Mines we have ownership interests in and operate

Our flagship mines are Moolarben, HVO (which is operated as an unincorporated joint venture with Glencore) and MTW, which are respectively the second, third and fifth largest majority Australian-owned thermal coal mines (meaning mines for which thermal coal comprises at least 50% of saleable production) in terms of aggregate thermal and metallurgical coal production on a 100% basis in the first half of 2018. These mines in aggregate accounted for approximately 91.6% of the total coal sales (on an attributable basis) from our mines in the six months ended 30 June 2018 on a pro forma basis (as if the C&A Acquisition, the Warkworth Transaction, the Glencore Transaction and the Moolarben Acquisition had been completed on 1 January 2017). All three mining operations are large, with long mine life, and produce coal at relatively low cost that is in the first and second quartiles of the cost curve (see *"Industry Overview – Cost Competitiveness Analysis" for further details*).

(a) New South Wales mines

(i) HVO

Overview. HVO is a multi-pit open cut mine located 24 kilometres north-west of Singleton in the Hunter Valley Basin of NSW. HVO produces a mixture of thermal and semi-soft coking coal for export to international markets and produced approximately 14.8 Mt of thermal and semi-soft coking product coal in 2017. As at 30 June 2018, HVO had Coal Reserves of 796 Mt and Marketable Coal Reserves of 554 Mt.

History. HVO is an amalgamation of three previously independent mining operations, namely Howick, Hunter Valley No.1 and Lemington. The current West Pit, which was part of the Howick mine, began coal production in 1968. Lemington began coal production in 1971. Hunter Valley No. 1 began coal production in 1979. In 2000, C&A merged Howick and Hunter Valley No.1 to create HVO, and in 2001, Lemington was acquired and merged with these two mines.

Ownership. We acquired our interest in HVO on 1 September 2017 as part of the C&A Acquisition, following which we managed HVO directly and owned 67.6% of HVO. Upon the completion of the Glencore Transaction on 4 May 2018, our ownership of HVO was reduced to 51.0%, and HVO is currently operated as a 51:49 unincorporated joint venture with Glencore. See "*– Acquisitions and Disposals"* below for further details on the C&A Acquisition and the Glencore Transaction and *"– Joint Venture Agreements – HVO"* for further details of the joint venture agreement with Glencore.

Operations. HVO uses dragline and truck and shovel methods, and is operational 24 hours a day, seven days a week. ROM coal is processed through two on-site coal preparation plants to produce low, medium and high ash thermal coals and a semi-soft coking coal for the export market. Product coal is loaded onto trains for transportation 99 kilometres through the Hunter Valley rail network to the PWCS and NCIG loading terminals at Newcastle where it is shipped to international customers.

Expansion potential. The current coal reserves and life of mine plans of HVO exclude potentially significant coal within the boundary pillar of the tenement holding due to restrictions on mining across the tenement boundary on the neighbouring tenement. The establishment of the joint venture with Glencore presents potential for the barrier coal neighbouring Glencore tenements to be exploited together with Glencore. According to the Competent Person's Report, the majority of this coal is within the breakeven strip ratio which would become economic if mining were to occur across the tenement and as such presents upside to the current life of mine plan. We engaged a third party consultant to estimate the potential boundary coal at HVO which indicates that an additional coal tonnage of between 100 and 120 Mt could be exploited with extensions of the current mining pits. Further detailed integrated planning will need to be conducted to confirm the estimated tonnage. As at the Latest Practicable Date, we have no current plans to develop this potential expansion project.

(ii) MTW

Overview. MTW is an integrated operation of two open cut mines, Mount Thorley and Warkworth, located adjacent to each other 15 kilometres south-west of Singleton in the Hunter Valley of NSW. MTW produces a mixture of thermal coal and semi-soft coking coal for export to international markets and produced more than 11.8 Mt of thermal and semi-soft coking product coal in 2017. As at 30 June 2018, Mount Thorley had Coal Reserves of 8 Mt and Marketable Coal Reserves of 5 Mt, and Warkworth had Coal Reserves of 314 Mt and Marketable Coal Reserves of 220 Mt.

History. Both Mount Thorley and Warkworth have been in operation since 1981. C&A became the manager of Mount Thorley in 1989 and purchased an interest in Warkworth in 2001. Under an operational integration agreement entered into in January 2004, the two mines were integrated and managed together to realise operational and mine planning efficiencies.

Ownership. We acquired our interest in MTW on 1 September 2017 as part of the C&A Acquisition, following which we began managing MTW and owned 80% of Mount Thorley and 55.6% of Warkworth. On 7 March 2018, we purchased an additional 28.9% of Warkworth from Mitsubishi Development Pty Ltd which increased our ownership of Warkworth to 84.5% and increased our share of coal

production from the integrated MTW mine from 64.1% to 82.9%. See "– *Acquisitions and Disposals"* below for further details on the C&A Acquisition and the Warkworth Acquisition.

Operations. MTW uses a dragline and truck and shovel methods, and is operational 24 hours a day, seven days a week. ROM coal is processed through two on-site coal preparation plants to produce low, medium and high ash thermal coal and semi-soft coking coal for the export market. Product coal is loaded onto trains for transportation 80 kilometres through the Hunter Valley rail network to the PWCS loading terminal at Newcastle where it is shipped to international customers.

Expansion potential. Within the MTW lease areas there is a significant amount of coal identified as potential underground targets. Based on a conceptual level study, potential underground targets at MTW have been identified in the Mount Arthur, Vaux and Bayswater seams which have seam characteristics generally favourable for longwall mining that is currently utilised at our Moolarben, Ashton and Austar mining operations. The conceptual underground mine has an estimated 270 Mt of potential ROM coal mineable reserves over an approximate 40 year mine life. Further details and assumptions of the production estimates of the underground mining targets are set out in *"Appendix III – Competent Person's Report – HVO/MTW Underground Mining Potential – Production Estimate".*

To date, all underground mine planning that has been completed is at a conceptual level only and no capital estimate is available. Further drilling and mining studies are required to determine if any resource is economically viable and before any decision on whether to develop the potential expansion project and commit material resources on developing the project can be made.

(iii) Moolarben

Overview. The Moolarben Coal Complex is an open cut and underground coal asset located approximately 40 kilometres north of Mudgee in the Western Coalfields of NSW. Moolarben produces thermal coal for export to international markets and produced more than 12.4 Mt of product thermal coal in 2017. As at 30 June 2018, the Moolarben open pit operation had Coal Reserves of 189 Mt and Marketable Coal Reserves of 148 Mt and the Moolarben underground operation had Coal Reserves of 67 Mt and Marketable Coal Reserves of 67 Mt.

History. Moolarben open cut mining areas commenced operations in 2010 and underground mining areas commenced operation in 2016. We committed to developing the Moolarben Stage Two expansion project in 2014 during the global coal market downturn. Now fully developed, mining operations at the Moolarben Coal Complex comprise a multi-pit open cut mine, a longwall underground mine, and mining related infrastructure (including coal processing and transport facilities). The integrated Moolarben Coal Complex has approval to produce up to 13 Mt ROM coal from the open cut mine and 8 Mt from the underground mine for a total of 21Mt ROM coal per annum. Moolarben is now one of the top ten thermal coal mines in Australia by saleable production.

We have applied for modification approval to optimise the open cut mine and related infrastructure and increase the production limit of the open cut mine to 16 Mt ROM coal per annum. All necessary documentation has been lodged with the regulator, which is now finalising its assessment. While the timing of a decision will be determined by the Department of Planning and by the Independent Planning Commission, we expect that the application will be determined by the end of 2018.

Ownership. We acquired our interest in Moolarben in December 2009 as part of our acquisition of Felix Resources. We hold an 81% interest in, and we are the manager of, Moolarben (through our joint venture with Sojitz Moolarben Resources Pty Ltd, which holds 10%, and the Australian subsidiaries of a consortium of South Korean companies (comprising Korea Resources Corporation ("**KORES**"), Korea Southern Power Co., Ltd, Korea Midland Power Co., Ltd, Korea Western Power Co., Ltd and Korea South-East Power Corporation), which collectively hold 9%). We have entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben for total consideration of A$84 million, which will be paid in four installments through to 31 December 2019, and adjusted for the economic benefit of the 4% interest from 15 April 2018 that will flow to the Company (the "**Moolarben Acquisition**"). The Moolarben Acquisition will raise our interest in Moolarben to 85%. See note 45 to the Accountants' Report of the Group in Appendix IA to this prospectus for certain stand-alone financial information of Moolarben during the Track Record Period.

Operations. Moolarben utilises conventional truck and excavator methods in its open-cut mining areas, and longwall operations in its underground mining areas. Moolarben is operational 24 hours a day, seven days a week. ROM coal from the open cut operation is processed through an on-site coal preparation plant while ROM coal from the underground operation is bypassed, in each case to produce thermal coals for the export market. Product coal is loaded onto trains for transportation 270 kilometres through the Hunter Valley rail network to the NCIG and PWCS loading terminals at Newcastle where it is shipped to international customers.

Modification. We are seeking approval from the NSW Department of Planning & Environment and Federal Department of the Environment and Energy to modify the current approvals. The modification involves optimisations to approved Stage 1 and Stage 2 operations to increase ROM coal production, minor extensions or reductions to open cut pit limits, rehabilitation, water management and relocated/additional surface infrastructure.

(iv) Stratford Duralie

Overview. Stratford is an open-cut mine located approximately 100 km north of Newcastle in the Gloucester Basin in New South Wales. Duralie is an open-cut mine located in the Southern part of the Gloucester Basin, 20 km south of the Stratford mine. The Duralie operation is integrated with the Stratford Operation through its use of the Stratford infrastructure and processing facilities. Stratford Duralie produces high fluidity semi-hard coking and thermal coals for export to international markets and supplied approximately 0.7 Mt of thermal and semi-soft coking coal in 2017. As at 30 June 2018, Stratford Duralie had Coal Reserves of 44 Mt and Marketable Coal Reserves of 26 Mt.

Ownership. Stratford Duralie is 100% owned by us as a result of our merger with Gloucester Coal Ltd in June 2012 and has been managed by us since.

History. Stratford commenced operations in June 1995 and Duralie commenced mining operations in 2003. Stratford ceased coal production in July 2014 and recommenced operations in May 2018 under the Stratford Extension Project, which was approved in June 2015. This allows for the efficient extraction of additional coal resources within an existing mine and ensures the continuation of Stratford's strong association with the nearby Duralie mine.

Operations. Stratford Duralie uses conventional truck and excavator methods. ROM coal from the Duralie and Stratford coal mines is processed at the centralised Stratford Coal Handling and Preparation Plant. ROM coal from each of the Stratford and Duralie mining areas is washed and blended if required to produce the required export coking and thermal product coal specifications. Product coal is then transported 110 kilometres by rail to the Port of Newcastle for export to international markets. It may also be blended with coals from our other mines to realise premium coal prices for the blended product.

While the Duralie mine is reaching the end of its current mining operations, the Stratford extension project has commenced production, which we expect will contribute to sustained coal production at Stratford Duralie.

(b) Queensland mine

Yarrabee

Overview. Yarrabee is an open cut coal mine located approximately 40 kilometres north-east of Blackwater in central Queensland's Bowen Basin. Yarrabee produces low volatile PCI and thermal coal for export to international markets and produced approximately 2.9 Mt product coal in 2017. As at 30 June 2018, Yarrabee had Coal Reserves of 55 Mt and Marketable Coal Reserves of 42 Mt.

History. Yarrabee commenced production in 1982 as a small open-cut mine with a limited life. Since acquiring the mine, we have delineated further Coal Resources and Coal Reserves that have extended the mine life and increased production.

Ownership. We acquired 100% of Yarrabee in December 2009 as part of our acquisition of Felix Resources.

Operations. Yarrabee uses conventional truck and excavator methods. ROM coal is mined from a number of pits and is either processed at the site's coal handling preparation plant or bypassed for crushing only. About 40% of the ROM coal is bypassed due to its superior in situ quality. Product coal is road hauled to the Boonal load out facility on the Blackwater railway system and then railed 280 kilometres to the RG Tanna and Wiggins Island Coal Terminals at the Port of Gladstone for export to steelmakers in the Asian region.

Yarrabee produces a low volatile, low ash coal that can be blended to produce PCI or thermal coal. In 2017, Yarrabee prioritised PCI coal over thermal coal to maximise increased PCI market demand opportunities.

Middlemount joint venture

Overview. Middlemount is an open cut mine located 90 kilometres north-east of Emerald in Queensland's Bowen Basin. Middlemount produces low volatile PCI coal and hard coking coal used for export to international markets and produced 3.9 Mt of product coal in 2017. As at 30 June 2018, Middlemount had Coal Reserves of 87 Mt and Marketable Coal Reserves of 67 Mt.

History. Full-scale operations at the open cut mine commenced in late 2011.

Ownership. Middlemount is operated by Middlemount Coal Pty Ltd, an incorporated joint venture between Peabody Energy and the Company (with the Company having a near 50% interest in the joint venture). We acquired our interest in the joint venture as a result of our merger with Gloucester Coal Ltd in June 2012.

Operations. Middlemount uses conventional truck and excavator methods. ROM coal is washed at an onsite facility with a ROM capacity of about 5.4 Mtpa. Middlemount produces low volatile PCI coal and hard coking coal for export markets. Product coal is transported 306 kilometres by rail via the Goonyella System to the Port of Hay Point or 306 kilometres by rail via the Newlands network to the Port of Abbot Point. Middlemount has contracted rail and port capacity through Dalrymple Bay Coal Terminal at the Port of Hay Point and Abbot Point Coal Terminal at the Port of Abbot Point.

Watagan Mines

Our interests in Ashton, Austar and Donaldson are held under Watagan, which is one of our wholly-owned subsidiaries. On account of certain financing transactions, however, it was determined that from 31 March 2016 we lost accounting control of Watagan and its subsidiaries and ceased to consolidate it, further details of which are set forth in "*Financial Information – Acquisitions, Disposals and Deconsolidation*". We manage and operate the mines and receives fees in respect of management services provided by us, further details of which are set forth in "– *Watagan Agreements*" below.

(a) Ashton

Overview. Ashton is an operating underground mine and a potential open cut project located 14 kilometres north of Singleton in the Upper Hunter Valley region of NSW. Ashton produces semi-soft coking coal for export to international markets and produced approximately 1.2 Mt semi-soft coking product coal in 2017. As at 30 June 2018, the Ashton underground operation had Coal Reserves of 33 Mt and Marketable Coal Reserves of 18 Mt and the Ashton open cut project had Coal Reserves of 14 Mt and Marketable Coal Reserves of 7.8 Mt.

History. Ashton commenced underground operations in 2005. We acquired 60% of Ashton in December 2009 as part of our acquisition of Felix Resources. We acquired a further 30% interest and the remaining 10% interest in 2011 and 2014, respectively. In June 2016, the NSW Planning Assessment Commission granted approval for an integration modification of Ashton. The modification enables Ashton's underground and open cut project to be integrated with a combined production up to output of 8.6 Mtpa ROM with an underground output of 5.45 Mtpa.

The Ashton operation includes an approved open cut project (the "**South East Open Cut**") which has the potential to produce up to 3.6 Mtpa of ROM coal. While the NSW Land and Environment Court granted approval for the South East Open Cut project (subject to conditions) on 17 April 2015, the NSW Court of Appeal determined to uphold a condition attached to the South East Open Cut project approval, which provides that no development work associated with the project can occur until Ashton Coal Operations Pty Ltd has come to a commercial arrangement with respect to a privately owned property which forms part of the proposed mining area. We have until April 2020 (or April 2022 if extended) to secure such an arrangement. No such arrangement has been agreed to date. We may seek to extend the deadline beyond 2022 to reach agreement with the owner of such property. Given that the South East Open Cut is not included in the Ashton mine's current five-year plan forecasts and Ashton otherwise remains fully operational, we do not expect any material near-term impact on our operations.

Operations. The current Ashton operation consists of a underground multi-seam longwall operation, which will be supplemented by the approved open cut truck and excavator operation in 2025, coal handling and preparation plant and a rail siding. The underground Ashton mine is operational 24 hours a day, seven days a week.

ROM coal from the underground operation is processed through an on-site coal preparation plant to produce a semi-soft cooking coal product.

Ashton is located next to the main northern railway. Product coal is loaded onto trains at a dedicated rail siding and railed 94 kilometres where coal is exported via PWCS at the Port of Newcastle. Product coal is exported to international markets for sale to a number of Asian based steel mills.

(b) Austar

Overview. Austar is an underground mine located 8 kilometres southwest of Cessnock in the Newcastle Coalfields. Austar produces a premium semi-hard coking coal which has very high fluidity, low ash and low phosphorous which makes it a premium blending coal for our customers. Austar produces coal for export to international markets and produced approximately 1.9 Mt of semi-hard coking product coal in 2017. As at 30 June 2018, Austar had Coal Reserves of 41 Mt and Marketable Coal Reserves of 31 Mt.

ROM coal is processed at Austar's Coal Handling and Preparation Plant using a combination of dense medium cyclones and spiral techniques with capacity to process 5.0 Mtpa. Product coal is transported by rail 65 kilometres to the Port of Newcastle for shipping.

History. We purchased 100% of the Southland Coal Mine, which consisted of the former Ellalong Pelton and Southland Collieries with mining operations dating back to 1916, and renamed it Austar in December 2004. Austar commenced operation in April 2005.

Operations. Austar is an underground mine using conventional longwall methods or Longwall Top Coal Caving ("**LTCC**") methods depending on the seam thickness. ROM coal is processed through the on-site coal preparation plant to produce semi-hard coking coal for the export market. Product coal is transferred by conveyor to the rail line for transportation through the Hunter Valley rail network to the PWCS loading terminal at Newcastle where it is shipped to international customers.

Austar faces geotechnical issues relating to coal bursts, rib control and periodic weighting. Investigations are also being conducted into challenging geological structures in the Stage 3 area, which may lead to adverse impact on mine life or permanent shutdown. Longwall production at Austar was suspended for periods of time as a result of coal burst incidents during The Track Record Period, which resulted in investigations and discussions with the Resources Regulator and certain prohibition notices being issued against Austar. Operations at Austar recommenced on 14 August 2018 subject to certain restrictions and remediation measures set out in a notice issued by the Resources Regulator on 3 August 2018. This prohibition notice imposes certain conditions (e.g. with respect to stress measurement tests, amongst other things) relating to mining up to a particular location in the current B4 longwall panel where the longwall equipment will then be recovered and relocated to the next longwall panel for further mining. On 30 August 2018 operations were halted on account of technical issues related to de-stressing activity in certain areas of the long wall, and on 5 September 2018 a prohibition notice was received relating to this activity which was cancelled on 28

September 2018. As at the Latest Practicable Date, the prohibition notice issued on 3 August 2018 remained in force. Further details of geotechnical and safety issues at Austar are set out in "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents or outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown*", "*Appendix III – JORC Coal Reserves – Reserves Comments*" and in "*– Health, Safety and Environmental Matters – Safety Incidents*".

(c) Donaldson

Overview. Donaldson is located in the northeast corner of the Sydney Basin, 25 kilometres northwest of the Port of Newcastle. Donaldson includes an open cut mine which closed in April 2013, and the Abel underground mine which was placed on care and maintenance in June 2016. As at 30 June 2018, Donaldson had Coal Reserves of 62 Mt and Marketable Coal Reserves of 32 Mt.

History. Donaldson is 100% owned by us as a result of our merger with Gloucester Coal Ltd in June 2012 and has been managed by us since. Abel previously produced thermal and semi-soft coking coal for export. However the mine ceased operations in June 2016 and was placed on care and maintenance. Feasibility studies to consider potential future mining options, including possible longwall mining methods, have commenced and the majority of Abel's underground mining employees were successfully redeployed to the neighbouring Ashton and Austar mines.

Operations. Historically, the large majority of past mining at the Donaldson mine was extracted by bord and pillar method. Following extraction, ROM coal was hauled to the third party coal washing and loading facilities at Bloomfield Coal Handling and Preparation Plant. Product coal was transported by rail and exported through the Port of Newcastle.

We moved Donaldson to care and maintenance in 2016 in response to ongoing global market challenges as the operation considers the future development of new underground working areas. Care and maintenance includes the ongoing rehabilitation of the Donaldson site in accordance with existing approvals, as well as the management of the site both above and below ground as we works to consider all options for the potential further mining of the Abel underground. As Donaldson has all required permits and contains coal reserves, recommencement of production is at our discretion, and is dependent on optimal market conditions and the performance of our other operations to best fit our asset portfolio. As at the Latest Practicable Date, Donaldson had not recommenced operations.

(d) Watagan Agreements

Effective on and from 31 March 2016, the Company entered into certain financing arrangements with Watagan and the Bondholders. These arrangements involved the issue of the Watagan Bonds, a loan facility agreement between Watagan and us, and certain other agreements or deeds ancillary to the issue of the Watagan Bonds.

While we wholly own Watagan, upon the issuance of the Watagan Bonds, the Bondholders were given the power to nominate two of its three directors, which together with other terms included in the Watagan Agreements resulted in the determination that we had lost accounting control of Watagan. The loss of accounting control resulted in us

deconsolidating the financial results of Watagan as a subsidiary from our consolidated financial statements with effect from 31 March 2016. From that time, we began to account for our equity interest in Watagan as an associate rather than a subsidiary.

Watagan is required to redeem all of the outstanding Watagan Bonds on the maturity date of 8 January 2025 (if the put option is exercised on or after 1 January 2025, the maturity date would be deferred to 1 April 2025), and may elect to redeem any or all of them commencing from 31 March 2019. Additionally, the Bondholders have a put option that allows them to transfer the issued Watagan Bonds at face value to Yankuang during specified put option exercise windows during the first week of January in each of 2019, 2021, 2023 and 2025. The Bondholders may also exercise the put option after 1 January 2019 while an event of default under the bond terms is subsisting in relation to Watagan or Yankuang. The put option must be exercised by a Bondholder in respect of all (but not some) of its respectively held bonds. If the put option is exercised (i) by UNE, as the instructing Bondholder of the investor syndicate, or (ii) with respect to at least 50.1% of the face value of the Watagan Bonds, the put option will be deemed to have been exercised as to all of the bonds.

In accordance with the Watagan Agreements, if Yankuang becomes the sole bondholder of the Watagan Bonds following the purchase of the bonds by Yankuang consequent to the exercise of the put option, certain bondholder rights, including the right to nominate a majority of the board of directors, would terminate, and these rights would revert to the Company as the sole shareholder of Watagan. Watagan would thereafter owe an amount payable to Yankuang for the face value of the put bonds, minus any capitalised interest. Watagan would separately pay to the exercising Bondholders the accrued interest and any capitalised interest on the put bonds.

If (i) Bondholders holding a sufficient proportion of the principal amount of the Watagan Bonds exercise their put option to Yankuang such that Yankuang acquires all of the bonds, (ii) Watagan redeems all of the Watagan Bonds or (iii) certain other events occur (such as a change to the terms and conditions of the Watagan Bonds that gives us the power to nominate the majority of the board of Watagan) that would result in us regaining control of Watagan, we will be required to reconsolidate Watagan as a subsidiary into our consolidated financial statements from the time that control is determined to be regained. See *"Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation"* and "*Risk Factors – We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of operations*" for a discussion of the potential accounting consequences of reconsolidating Watagan. See note 23(a) to the Accountants' Report of the Group in Appendix IA to this prospectus for certain stand-alone financial information of Watagan during the Track Record Period. We do not currently have any plan or intention to effect an early redemption of the Watagan Bonds.

The material decisions of Watagan are made by the Watagan Board. Mine plans for each year and annual capital expenditure and operational expenditure budgets are approved by the Watagan Board. We, as the manager and operator of the mines, have day-to-day operational jurisdiction over the operations (save for any significant revision to the mine plan which must be reverted back to the Watagan Board for approval).

As part of the Watagan Agreements, the following agreements were entered into:

- a Management and Mining Services Agreement between the Company, Yancoal Mining Services Pty Ltd ("**Yancoal Mining Services**", a wholly-owned subsidiary of the Company) and Watagan dated 31 March 2016 for a term of ten years appointing Yancoal Mining Services as the mine operator of each of Ashton, Austar and Donaldson to provide mining services (at a fee of cost plus 5%) and the Company as the exclusive provider of management services (which are largely back office support functions) (for certain fees adjustable based on a consumer price index); and

- a Marketing and Logistics Representation and Infrastructure Agreement each for a term of ten years appointing the Company as (i) the sole and exclusive marketing and logistics representative of the Watagan Group for the promotion, marketing, sale, transportation and handling of all saleable coal produced from the three mines and the purchase of any coal for the Watagan Group from third parties; and (ii) the sole and exclusive provider of infrastructure services and representative of the Watagan Group in relation to management of the port and rail access and rail haulage contracts for the three mines.

These services are generally capable of termination by Watagan on six months' notice, subject to payment of an agreed termination fee.

Managed Mines

We manage the Cameby Downs and Premier Coal mines, located in Queensland and Western Australia, respectively, on behalf of Yanzhou, our majority shareholder. The management services provided by us include corporate support (comprising human resources, treasury, payroll, insurance, financial accounting, reporting, compliance, management support, technical support, marketing and logistics, corporate communications, government and industry relations, business development, IT services and corporate procurement services), operations management (comprising carrying out exploration programs, preparing business plans, using all reasonable endeavors to meet business KPIs, preparing plans of operations as may be required by laws, and other operational services) and other general services. For the provision of these services, we charge a fee on cost plus 5% margin basis, except for any third party charges attributable to the provision of the management services which will be charged (proportionately) at cost. Further details of the agreements are set out in *"Connected Transactions – Provision of Management Services by the Company"*. We will also purchase coal produced by the managed mines for back-to-back on-sale to end customers, with the purchase price being determined with reference to industry index prices and coal quality characteristics.

EXPLORATION PROJECTS

We have two exploration projects, Monash and Oaklands, both located in NSW. The Monash underground project is situated in the Hunter Valley and has reported Coal Resources of 96.8 Mt of thermal coal (16.8 Mt Indicated and 80 Mt Inferred as at 30 June 2018). The Oaklands project is a sub-bituminous thermal coal deposit located near the Victoria border. No Coal Resources have been reported for this project. Both of these projects are long term greenfield development opportunities which require additional exploration, scoping studies and development strategies to realise a path to commercial development. As at the Latest Practicable Date, we have no current plan to develop these projects.

JOINT VENTURE AGREEMENTS

HVO

Pursuant to the Glencore Transaction, Coal & Allied Operations Pty Ltd ("**CNAO**", a wholly owned subsidiary of the Company), Anotero Pty Ltd ("**Anotero**", a wholly owned subsidiary of Glencore) and HV Ops which is 51% owned by CNAO and 49% owned by Anotero) entered into a joint venture agreement dated 4 May 2018 to form an unincorporated joint venture. CNAO has a 51% interest in and Anotero has a 49.0% interest in the HVO JV. The HVO JV is jointly controlled through the JVMC whose powers include the approval of budgets, life of mine and year-by-year five year plans governing the HVO JV's activities, supervision of the manager of the HVO JV, and the approval of development and expansion proposals. The day to day management is delegated to HV Ops as manager of the HVO JV. The JVMC comprises three representatives nominated by CNAO and three representatives nominated by Anotero. The general manager of the HVO JV is nominated by Anotero while the financial controller is nominated by CNAO. Glencore provides corporate support services to the JV including human resources, treasury, payroll, insurance, compliance, technical support, logistics, corporate communications, government and industry relations, corporate procurement and IT services.

MTW

Pursuant to the Co-Venture Deed entered into between R.W. Miller & Company Pty. Limited ("**Millers**", a wholly owned subsidiary of the Company), Pohang Steel Australia Pty. Limited and Pohang Iron & Steel Company Limited dated 10 November 1981, an unincorporated joint venture was established between Millers and Pohang Steel for the Mount Thorley co-venture with Millers appointed as the manager of the Mount Thorley co-venture. Following the C&A Acquisition, we are, through Millers, interested in 80% and POSCO is interested in 20% of the Mount Thorley Co-Venture.

Pursuant to the joint venture agreement dated 15 March 1977 and the deed of assignment and assumption dated 6 March 2018 entered into among, *inter alios*, Warkworth Mining Limited, CNA Resources Limited (CNAR), CNA Warkworth Australasia Pty Ltd (CNAW), Mitsubishi Materials (Australia) Pty Ltd (MMA), Nippon Steel & Sumitomo Metal Australia Pty Ltd (NSSMA), the parties established an unincorporated joint venture for the Warkworth joint venture. The Operating Committee is responsible for the management and control of the Warkworth Joint Venture and representation on the Operating Committee is based on participating interests.

Pursuant to the Operational integration Agreement dated 4 March 2004, the parties to the Mount Thorley Co-Venture and the Warkworth Joint Venture were integrated at an operational level to share the costs and production of coal between the two joint ventures. Following the C&A Acquisition and the Warkworth Acquisition as described above, we have an economic interest in 82.9% of the integrated MTW operations.

Moolarben

Pursuant to a joint venture agreement entered into between Moolarben Coal Mines Pty Ltd ("**MCM**", a wholly owned subsidiary of the Company), Sojitz Moolarben Resources Pty Limited ("**Sojitz**") dated 21 September 2007, the deed of variation and assumption entered into among, *inter alia*, MCM, Sojitz, Moolarben Coal Operations Pty Ltd ("**MCO**"), a consortium of South Korean companies (comprising Korea Resources Corporation, Korea Southern Power Co., Ltd, Korea Midland Power Co., Ltd, Korea

Western Power Co., Ltd and Korea South-East Power Corporation (collectively, the "**Korean Consortium**") and Hanwha Resources (Australia) Pty Ltd ("**Hanwha**") dated 20 February 2008, and the sale and purchase deed entered into between MCM and Hanwha dated 30 April 2015, an unincorporated joint venture was established among MCM, Sojitz, the Korean Consortium ("**Moolarben JV**") with MCO as manager of the Moolarben JV. MCM is interested in 81%, Sojitz is interested in 10% and the Korean Consortium is interested in collectively 9% of the Moolarben JV. The Joint Venture Policy Committee (the "**JVPC**") is responsible for the management and control of the Moolarben JV. The JVPC's powers include the adoption or modification of mine development and annual programs and budgets and the supervision of MCO. The JVPC comprises representatives nominated by MCM and Sojitz. Each participant can appoint one representative for each 10% interest they hold.

Middlemount with Peabody Energy

Middlemount Coal Pty Ltd ("**Middlemount**") is 49.9997% owned by Gloucester (SPV) Pty Ltd ("**GSPV**", a wholly owned subsidiary of the Company) and 50.0003% owned by Peabody Custom Mining Pty Ltd ("**PCMP**", a wholly owned subsidiary of Peabody Energy), and is governed by an interim shareholders agreement dated 24 December 2010 and six subsequent deeds of amendment and agreement entered into among Middlemount, GSPV and PCMP.

MINING AND EXPLORATION LICENCES

The major mining and exploration licences and authorisations for our operations are set forth in *"Appendix III – Competent Person's Report – Appendix F. Tenements".*

New South Wales

Our mining operations are conducted in accordance with the conditions of Mining Leases and Coal Leases granted under the NSW Mining Act, 1992. Each mine in New South Wales is required to develop a Mining Operations Plan ("**MOP**") as part of the Mining Lease conditions. MOPs provide information about the specific mine operations over the following years, including mining, rehabilitation, decommissioning and closure. Each of our mines' MOPs requires approval of the Department of Industry Division of Resources and Energy.

Our exploration activities are undertaken in accordance with Exploration Licences, Authorisations and Assessment Leases (as applicable) issued by the NSW Department of Resources and Energy which approves exploration of resources, and applies conditions to ensure that exploration activities are undertaken to the satisfaction of the Department.

All tenements (including mining and exploration tenements) under the NSW Mining Act 1992 are subject to periodic renewal. We monitor the expiry dates of our tenements and renew our tenements periodically in the ordinary course of business. Whilst there can be no guarantee that a mining or exploration tenement will be renewed, or that the area of land over which the tenement renewed remains the same, the Directors are not aware of any issues that would compromise the likelihood of a Tenement being renewed in full.

All material environmental permits are in place for the current mining areas at our operations in NSW. These operations also hold ancillary permits, licences, leases and easements that allow the mining activates to operate under the relevant laws, such as water extraction licences. Our licences and permits are subject to regular review and renewal, and additional conditions and/or operational requirements can be imposed.

The material mining and planning and environmental approvals required to operate a coal mine in NSW are as follows:

- a planning approval (or development consent) granted under the *Environmental Planning and Assessment Act 1979 (*"**EP&A Act**");
- an Environment Protection Licence issued under the Protection of the *Environment Operations Act 1997* ("**POEO Act**");
- If required, an approval granted by the Commonwealth under the *Environment Protection and Biodiversity Conversation Act 1999 (Cth)* ("**EPBC Act**");
- a Mining Lease granted under the *Mining Act 1992* (NSW); and
- ancillary approvals for development and activities such water access licences under the *Water Act 1912* (NSW) or the *Water Management Act 2000* (NSW) to authorise the extraction of water, and the consent for road works under the *Roads Act 1993.*

(a) Planning approvals

The EP&A regulates the assessment and approval of coal mining development in NSW. Typically, a coal mining proponent will carry out exploration activities to determine whether an appropriate resource exists. If an appropriate resource is discovered, approval is then obtained under the EP&A Act to authorise production. After planning approval is granted under the EP&A Act, most major environmental approvals (including an Environment Protection Licence under the POEO Act and a Mining Lease under the *Mining Act 1992* (NSW)) are granted.

Our operations in NSW are currently authorised under the EP&A Act (including various modification currently under assessment) and are carried out subject to a suite of conditions issued under the planning approvals.

(b) Environmental approvals

Our mining operations are undertaken in accordance with Environment Protection Licences issued by the NSW Environment Protection Authority under the POEO Act. Environmental Protection Licences outline requirements and limits for activities such as mining coal and emissions. They also establish environmental monitoring and reporting requirements. Environmental Protection Licences for coal mines will most often contain conditions which authorise certain water, noise and air pollution and will typically have monitoring and reporting commitments, and may require a pollution reduction program.

(c) Commonwealth approvals for NSW mining operations

Our mining operations in NSW have an approval from the Commonwealth Minister for the Environment and Energy in accordance with the EPBC Act authorising it to carry out open cut mining operations at mines in NSW subject to specific conditions.

Queensland

Our mining operations are conducted in accordance with the conditions of Mining Leases granted under the *Mineral Resources Act 1989* (QLD). Our exploration activities are undertaken in accordance with Exploration Permits for Coal and Mineral Development Licences (as applicable) issued pursuant to the *Mineral Resources Act 1989* (QLD).

All tenements (including mining and exploration tenements) under the *Mineral Resources Act 1989* (QLD) are subject to periodic renewal. We monitor the expiry dates of our tenements and renew our tenements periodically in the ordinary course of business. Whilst there can be no guarantee that a mining or exploration tenement will be renewed, or that the area of land over which the tenement renewed remains the same, the Directors are not aware of any issues that would compromise the likelihood of a Tenement being renewed in full.

All material environmental permits are in place for the current mining areas at our operations in Queensland. These operations also hold ancillary permits, licences, leases and easements that allow the mining activates to operate under the relevant laws, such as water extraction licences. Our licences and permits are subject to regular review and renewal, and additional conditions and/or operational requirements can be imposed.

Depending on the nature and size of the mining project, the proponent may be required to obtain the following material approvals under Queensland law:

- a declaration that a mining project is a 'coordinated project' subject of an environmental impact assessment under the *State Development and Public Works Organisation Act 1971* (Qld) if the project is a large development which may trigger a State level planning approval pathway. An environmental impact assessment would require an approval by the Coordinator-General;

- a Regional Interest Development Approval under the *Regional Planning Interests Act 2014* (Qld); and

- a development permit for project infrastructure or for a material change of use of an environmentally relevant activity under the *Sustainable Planning Act 2009* or associated planning scheme.

The material mining and environmental approvals required to operate a coal mine in Queensland are as follows:

- an Environmental Authorisation issued by the Queensland Department of Environment and Sciences ("**Queensland DES**") under the *Environmental Protection Act 1994* (Qld) ("**Queensland EP Act**") which authorises and regulates the mining resource activity;

- If required, an approval granted by the Commonwealth under the EPBC Act;

- a Mining Lease granted under the *Mineral Resources Act 1989* (QLD); and

- a water licence under the *Water Act 2000 (*Qld) for the allocation and use of surface water and groundwater for mining activities.

(a) Planning approvals

Our mining projects and operations in Queensland are carried out in accordance with relevant planning approvals and applicable state, regional and local planning laws and controls.

(b) Environmental approvals

Our mining coal activities in Queensland are undertaken in accordance with Environmental Authorities issued by Queensland DES under the Queensland EP Act. Our Environmental Authorities are subject to conditions which regulate mining activities and emissions.

Typically, an Environmental Authority contains a condition requiring a plan of operations to be prepared on how rehabilitation obligations will be met. The Queensland DES then makes a decision about amount and form of financial assurance that needs to be provided to the Queensland Government to guarantee that there are funds available to the Government to carry out rehabilitation if required. Our operations are carried out in compliance with the conditions of the Environmental Authority including the provision of the plan of operation and financial security to the Queensland Government in respect of our mining activities in Queensland.

(c) Commonwealth approvals for Queensland mining operations

Our mining operations in Queensland have an approval from the Commonwealth Minister for the Environment and Energy in accordance with the EPBC Act authorising it to carry out mining operations at mines in Queensland.

Western Australia

The *Mining Act 1978* (WA) ("**WA Mining Act**") and the *Environmental Protection Act 1986* (WA) ("**WA EP Act**") are the principle pieces of legislation which regulate the environmental impacts of mining in Western Australia.

The key environmental related approvals that are typically required for a large scale mining operation are as follows:

- Mining Proposal, Mine Closure Plan, and Mining Lease approved by the WA Department of Mines and Petroleum ("**DMP**") under the WA Mining Act;

- Ministerial Statement Issued by the WA Minister for Environment under Part IV of the WA EP Act (also referred to as a Part IV Approval);

- Works Approval to construct prescribed polluting activities on premises and an Operating Licence to operate prescribed polluting activities on premises issued by the Department of Water and Environmental Regulation ("**DWER**") under the WA EP Act;

- If required, an approval granted by the Commonwealth under the EPBC Act; and

- ancillary environmental approvals including Groundwater Licence issued by the DWER under the *Rights in Water and Irrigation Act 1914* ("WA Water Act") to take groundwater.

Approvals, Permits and Licenses to be Obtained

As at 14 November 2018, we had the following material regulatory approvals, permits and licences with respect to our mines that are subject to pending renewals:

Regulatory Approval, Permit and Licences	Expiry Date
HVO	
Mining lease ("**ML**") 1324	19 August 2014
ML 1337	9 September 2014
ML 1359	1 November 2015
ML 1428	14 April 2019
ML 1482	14 April 2019
Exploration licence ("**EL**") 5291	28 April 2018
EL 5417	8 May 2018
EL 5418	8 May 2017
EL 8175	23 September 2018
Authorisation 72	24 March 2018
MTW	
ML 1412	10 January 2018
Moolarben	
EL 6288	22 August 2017
Stratford Duralie	
Authorisation 311	28 November 2017
Authorisation 315	28 November 2017
EL 6904	9 October 2017
ML1409	6 January 2018
ML1427	5 April 2019
Oaklands	
Assessment Lease 18	25 June 2018
Ashton	
EL4918	17 December 2015
Donaldson	
EL 6964	10 December 2015
Yarrabee	
ML 80050	31 October 2018
Austar	
Mining Purposes Lease 269	7 December 2018

As at 14 November 2018, we had the following material regulatory approvals, permits and licences with respect to our mines that have been applied for but were yet to be granted:

- HVO: ALA 52, ALA 58 and ALA 59; MLA 489, MLA 495, MLA 496, MLA 520, MLA 534, MLA 535, MLA 542, MLA 543; ELA 5525, ELA 5526 and ELA 5527;
- MTW: ELA 5678 and MLA 548;
- Stratford Duralie: MLA 552;
- Middlemount: ML 700027;
- Ashton: MLA 500, MLA 351 and MLA 394; and
- Austar: MLA 521.

The Company does not carry out any activities the subject of an Assessment Lease application or Exploration Licence application until the tenement that is the subject of the application is granted. Similarly, the Company does not carry out any activities the subject of a Mining Lease Application until the production tenement that is the subject of the application is granted.

NSW legislation and regulations passed in 2017 require mining leases to be held in respect of "ancillary mining activities", being processes and infrastructure that support a principal mining operation such as pipelines and roads. Under a NSW Government Gazette, a person will be exempt from the requirement to hold a mining lease in respect of ancillary mining activities carried out or under construction prior to 15 November 2010 ("**Exempt Mining Activities**"), provided those activities had not been abandoned for a continuous period exceeding 12 months (other than for repair or maintenance) and certain other conditions are satisfied, including lodgement of an application prior to 16 November 2017 for the variation of a mining lease or a separate mining lease in respect of Exempt Mining Activities. The Company will have the benefit of this exemption in respect of Exempt Mining Activities in NSW until the relevant applications are determined.

The loss of some or all of our mining licences, coal production licences, safety production licences, environmental or other certificates, approvals or permits may have a material adverse effect on our business, financial condition and results of operations. See "*Risk Factors – We may not be able to obtain all necessary approvals, permits and licences"*. Over the past five years, we have not had any tenement renewal application rejected, and given that there are no material non-compliances identified on any of the current tenements and that we believe that we have appropriate systems in place for managing the timely renewal of tenements, we have no reason to doubt that all production tenements will be successfully renewed in due course. Similarly, the Directors are not aware of any issues that would compromise the likelihood of a production tenement being renewed. On the basis of the above, we believe that there is no material legal impediment for us to obtain or renew the material regulatory approvals, permits and licenses needed for our mines, and no material risk of failing to do so.

INFRASTRUCTURE, TRANSPORTATION AND LOGISTICS

Product coal from our mines is transferred from loading points within the mines to coal wagons (save for Yarrabee in Queensland which is road hauled to the Boonal load out facility on the Blackwater railway system) for transport by rail to the PWCS or the NCIG coal export terminals in the Port of Newcastle (for HVO, MTW, Moolarben, Ashton, Austar and Donaldson in NSW) or Abbot Point Coal Terminal at the Port of Abbot Point or the Dalrymple Bay Coal Terminal at the Port of Hay Point (for Middlemount in Queensland) or RGTCT or WICET coal export terminals at the Port of Gladstone (for Yarrabee in Queensland). Our port and rail capacity is generally contracted via long-term take-or-pay arrangements. Further details of which are set forth in *"– Take-or-pay arrangements"* below.

New South Wales

The NSW network is a regulated network that is often referred to as the Hunter Valley Coal Chain ("**HVCC**") of which our supply chains form a sub-set. Both rail networks and port facilities are regulated and operated by third parties with which we have contracted capacities. According to the Competent Person's Report, the current HVCC and the contracts we have in place for rail and port capacities are sufficient to support our forecast production. Any expansion, including the potential expansion described in *"– Our Mining Operations"* above will require additional rail and port capacity to be secured, as we have done with previous expansion of operations.

NSW Rail Supply Chain

We have contracted "below rail" access to train tracks with the Australian Rail Track Corporation ("**ARTC**"), a federal government owned corporation which manages the interstate rail network in Australia and coordinates rail allocation on the HVCC for each coal producer, for below-rail access in the HVCC. ARTC is regulated by the Australian Competition and Consumer Commission. We have "above rail" contracts for locomotives and wagons with Pacific National, Aurizon Operations, and Genesee & Wyoming Australia. With the exception of Austar (contracted to Pacific National), all our NSW mines can use at least two of the three rail providers named above.

Our rail allocation is under take-or-pay contracts. During the Track Record Period, we have experienced under-utilisation of our contracted railway capacities.

NSW Port Facilities

Coal products from our NSW operations are transported by rail to the Port of Newcastle and exported via PWCS or NCIG, which are operated by third parties. PWCS and NCIG have a combined capacity of 211 Mtpa of which we had aggregate contracted capacity of 54.56 Mt in 2017. We currently have take-or-pay contracts with PWCS and NCIG. During the Track Record Period, we have experienced on-going under-utilisation of contracted port capacities.

(a) PWCS

We acquired a 36.5% interest in PWCS as part of the C&A Acquisition in September 2017. This interest comprises a direct shareholding of 30%, which is held by C&A (and its subsidiaries), and an indirect shareholding of 6.5%, which is held through direct and indirect shareholdings in Newcastle Coal Shippers (which holds a 36.9% shareholding in PWCS). On completion of the Glencore Transaction, the beneficial interest in C&A's shareholdings in Newcastle Coal Shippers was transferred to Glencore Coal (NSW) Pty Limited, a subsidiary of Glencore. As a result, C&A's beneficial interest in PWCS was reduced to 30%. Legal title in Newcastle Coal Shippers remains with C&A until completion of a pre-emptive process, at which time C&A's legal interest in PWCS will transfer to Glencore Coal (NSW) Pty Limited.

PWCS consists of two sub terminals, namely Carrington Terminal and Kooragang Terminal. Carrington Terminal has throughput capacity of 25 Mtpa. Coal is received mainly by rail and some quantities by road, to two offloading facilitates. Kooragang Terminal has throughput capacity of 120 Mtpa. All coal is received via rail into four offloading facilities. HVO, MTW, Moolarben, Stratford Duralie, Ashton, Austar and Donaldson have an aggregate allocation of approximately 35.1 Mtpa with PWCS.

(b) NCIG

We are one of five shareholders, and own 27%, of NCIG, which owns the Newcastle coal export terminal. The terminal has storage capacity of 5.7 Mt, which is allocated based on their respective capacity allocations. NCIG has a current throughput capacity of 66 Mtpa, and we have contracted port capacity allocation of approximately 19.6 Mtpa.

Queensland

The mines of Bowen Basin, including our Yarrabee and Middlemount operations, are connected to the ports by four separate rail networks: Moura, Blackwater, Goonyella and Newlands, which are collectively referred to as the Central Queensland Coal Network ("**CQCN**"). The CQCN have a total capacity of approximately 360 Mtpa.

QLD Rail Supply Chain

Coal from Yarrabee is transported by rail via the Blackwater rail system to the Port of Gladstone while coal from Middlemount is railed via the Goonyella and Newlands rail networks to the Port of Abbot Point.

The "below rail" infrastructure of train tracks of CQCN is owned and managed by Aurizon Network, which is governed by lease arrangements with the State of Queensland. Access to CQCN is regulated by the Queensland Competition Authority. The "above rail" infrastructure of locomotives and wagons is operated by Aurizon and Pacific National. Middlemount has rail contracts with Pacific National while Yarrabee has rail contracts with Aurizon.

QLD Port Facilities

Coal products from our Yarrabee mine is transported by rail to the Port of Gladstone and exported via Wiggins Island Coal Terminal ("**WICET**") or RG Tanna Coal Terminal ("**RGTCT**"). Coal products from Middlemount is transported by rail to the Port of Abbot Point and exported via Abbot Point Coal Terminal or to Port of Hay Point and exported via Dalrymple Bay Coal Terminal.

(a) Abbot Point Coal Terminal

Abbot Point Coal Terminal has coal handling and stockpile areas, a rail unloading facility, a single trestle jetty and a conveyer connected to a berth and shiploader. The terminal has capacity of 50 Mtpa and Middlemount has contracted port capacity entitlements of 3 Mtpa.

(b) Dalrymple Bay Coal Terminal

Dalrymple Bay Coal Terminal has four berths, three shiploaders, a train loading facility and coal stockyards. The terminal has capacity of 85 Mtpa.

(c) Wiggins Island Coal Export Terminal

We are one of five shareholders of, and hold a 9.38% voting interest in, WICET. WICET has offshore wharf and loading facilities, rail unloading facilities, train unloader and stockyard. WICET has a current design capacity of 27 Mtpa and a current contracted capacity of 16 Mtpa.

Details in relation to the insolvency of other shareholders of WICET are set forth in *"Risk Factors – Our investments in, and obligations with respect to, the Wiggins Island Coal Export Terminal may be adversely impacted by, among other things, the insolvency of its other shareholders"*.

(d) RG Tanna Coal Terminal

RGTCT is operated by Gladstone Ports Corporation which is owned by the Queensland government. RGTCT has four berths, three ship loaders, three train unloading stations and coal stockyards with live capacity of 5.8 Mt in up to 22 separate stockpiles. RGTCT has a current capacity of 74 Mtpa.

Take-or-pay arrangements

Port and rail (consisting of above rail infrastructure of locomotives and wagons and below rail infrastructure of train tracks) capacity in New South Wales and Queensland is generally contracted via long-term take-or-pay contracts. We will generally be required to pay for our contracted rail or port tonnage irrespective of whether it is utilised. Unused port or rail capacity can arise as a result of circumstances including insufficient production from a given mine, a mismatch between port and rail capacity for a mine, including timing of new capacity, or an inability to transfer the used capacity due to contractual limitations such as required consent of the provider of the port or rail services, or because the coal must emanate from specified source mines or be loaded onto trains at specified load points. See also *"Risk Factors – Fluctuations in transportation costs and disruptions to our railway and port linkages could disrupt our coal deliveries and adversely affect our business, financial condition and results of operations".*

In 2017, we significantly reduced our take-or-pay exposure for contracted but unutilised capacity from A$74 million to A$65 million in rail and port commitments in excess of planned sales (A$4.7 million of which is attributable to the assets acquired in the C&A Acquisition). Our logistics team continues to implement strategic measures to reduce our take or pay exposures, including the trading of our under-utilised contracted capacity between sites and with third parties on an ad hoc basis.

The table below sets forth the allocated capacity and utilisation of our port and rail allocations in 2017:

Infrastructure[(Note)]	Service provider	Capacity allocated to	Contracted capacity in 2017 (Mt)	Utilisation percentage	Excess (Mt)
New South Wales					
Port	PWCS, NCIG	Austar, Ashton, Donaldson, Hunter Valley Operations, Moolarben, Mt Thorley Warkworth, Stratford	54.56	77%	12.63
Above Rail	Pacific National, Aurizon		42.40	96%	1.50
Below Rail	ARTC		46.13	95%	2.44
Queensland					
Port	RGTanna, WICET, APCT		6.20	92%	0.47
Above Rail	Aurizon, Pacific National	Yarrabee, Middlemount	6.20	94%	0.37
Below Rail	Aurizon Network		6.20	94%	0.37

Note:

The above rail infrastructure consists of locomotives and wagons and the below rail infrastructure consists of train tracks.

New South Wales

We currently have port and rail capacity commitments across our NSW operations in excess of our production volumes, which represents a cost to our NSW operations. While NSW infrastructure capacity is contracted per mine-site, total contracted capacity can be considered available to all mine-sites as a group as industry mechanisms exist to trade capacity amongst contracted parties. We utilise trading opportunities between our mining operations and with third party mines as a key part of the strategy to reduce overall take-or-pay exposure in NSW in the long term, capture savings as a result of economies of scale; as well as respond to short and mid-term sales or production peaks and troughs without increasing overall cost for the Group.

Upon completion of the C&A Acquisition in September 2017, we became liable for infrastructure capacity under a number of Mount Pleasant related infrastructure agreements, which are currently held by C&A and its subsidiaries or MACH Energy and subject to an infrastructure utilisation deed between the parties. The infrastructure agreements included take-or-pay rail and port commitments with an aggregate annualised A$37 million potential order of magnitude take-or-pay exposure which expired on 31 March 2018 (the "**RT Payment Date**") and our commitment for this period was A$22 million.

Among the infrastructure agreements, a contract for NCIG capacity is in the name of the C&A subsidiary, which is subject to a novation deed transferring that capacity to MACH Energy on first commercial production from Mount Pleasant. MACH Energy must indemnify C&A for all take-or-pay liability in relation to the NCIG capacity following the RT Payment Date, until such time that MACH Energy becomes the holder of that NCIG capacity.

Queensland

Our Queensland mine sites are members of separate coal chains, therefore the opportunity to offset excess take-or-pay capacity is not easily achievable. We have identified synergies between the Middlemount and Yarrabee mine-sites where the opportunity may exist to mitigate the impact of major events or incidents affecting a whole coal chain.

Site Infrastructure

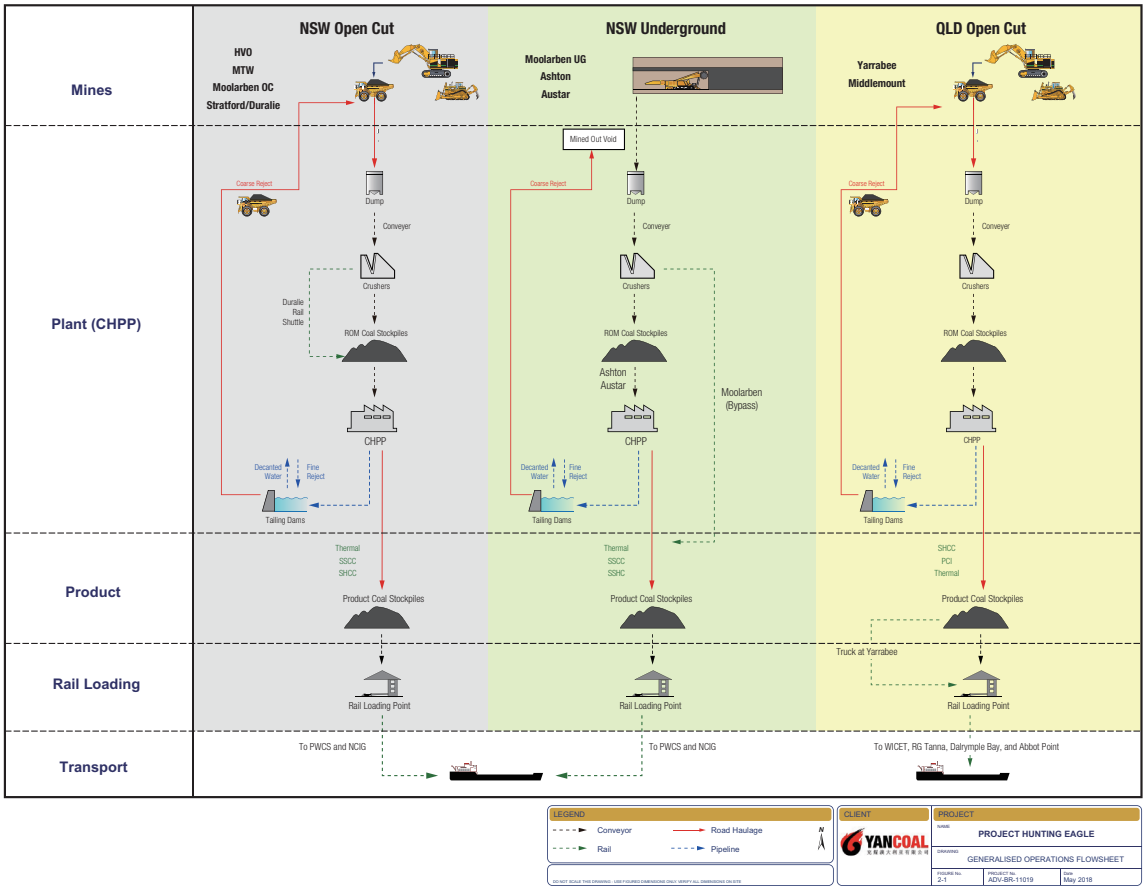
We believe that the supporting regional and local infrastructure for our mines are well established and have capacity to continue supporting our life of mine operation. Our mines are located in close proximity to regional townships and are serviced by national highways and good quality tarred roads. Each of our mining sites has infrastructure that we believe is fit for purpose and in suitable condition to support the estimated project life.

All of our operating mines have installed transport infrastructure such as rail loading facilities, and site access roads conveyers which are generally in good working condition. Our open cut mining projects require periodic construction of haul roads and site access roads which is standard market practice for operating open cut mines.

Our operations are also equipped with facilities such as warehouses, storage yards and emergency-service facilities to support mining activities.

PRODUCTION PROCESS

The following diagram sets forth the key processes in mining operations:



Extraction and conveyance

We utilise large scale open cut mining methods in our open cut mining operations, which include the removal and storage of topsoil material via truck and FEL methods, drilling of a blast pattern, blasting of fragment rock, excavation of waste material with truck and shovel or excavator in the upper benches and by draglines in lower benches, and digging, loading and hauling of coal via truck and excavator or FEL methods. We utilise additional equipment in some of our operations that are typically lower in unit operating costs if the geological structure permits, such as draglines in HVO and MTW and dozer push in Moolarben and Middlemount for additional waste removal.

We utilise longwall mining in our underground mining operations. Longwall mining roadways are cut by continuous miners around the perimeter of a rectangular block or panel of coal to form ventilation and access passageways. A longwall shearer is set up at one end of the panel and travels back and forth across the width of the panel, cutting a slice of coal with each pass. Coal is then transferred to the surface by conveyers. The area at the coal face is supported by a series of large hydraulic roof supports which provide a protective cocoon for workers to operate safely. Longwall mining is generally considered to be the safest underground extraction method for coal.

Longwall top coal caving ("**LTCC**") is a type of longwall mining applicable to very thick seams (greater than 4.5 metres) where coal is being left because "conventional" longwall equipment typically cannot mine beyond a mining height of around five metres. As a result it generally enables an increased recovery for only an incremental additional cost. LTCC is utilised at Austar when the coal seam is of sufficient thickness.

Coal handling preparation plants ("CHPPs")

CHPPs are typically separated into four functional areas: (1) ROM coal receival, (2) beneficiation or washing, (3) reject disposal, and (4) product coal stockpiling and train loading.

ROM coal receival

ROM coal from the open cut or underground coal faces is trucked or conveyed to the ROM coal receival area where it is crushed to a maximum size (typical <50mm) that enables it to be efficiently washed. ROM coal can also be stockpiled in this area prior to crushing to assist with wash scheduling, blending or when the CHPP is down for maintenance. After crushing, coal is then either stockpiled, and later reclaimed, or fed directly into the plant for washing.

Beneficiation or washing

Washing or beneficiation is the separating of the coal from the waste products. Once fed into the plant, the coal is separated into up to three washing streams being coarse, mid-size and fine-size which are each washed using different types of separating equipment. Coarse coal is washed in a mixture of water and magnetite to create a dense medium in which coal will float and waste will sink. Fine coal uses gravity separation or froth flotation. The washed coal from the streams is conveyed to product stockpiles which may or may not be combined dependent on product types. The sunk waste or reject goes to disposal areas.

Reject disposal

The coarse and fine waste, or reject, can be disposed of together or more commonly disposed separately with coarse reject being trucked to the waste dumps (to be disposed of with the overburden from the mine) and fine reject, or tailings, being pumped to a tailing storage facility.

Product coal stockpiling and train loadout

Washed coal (commonly called product coal, saleable coal or marketable coal) is stockpiled into separate stockpiles depending on its quality. It is then loaded onto trains for railing to the port. Blending can occur on the product stockpiles when two or more separate coal products are combined to meet a particular market specification.

Bypass coal is ROM coal that does not require washing to meet the marketing specification. ROM coal is crushed and bypass coal is placed directly onto the product coal stockpile.

Each of our mining operations has one or two CHPPs on-site, save for Donaldson which historically utilised the third party Bloomfield Coal Handling and Preparation Plant. Most of our on-site CHPPs have sufficient designed and production capacity and are generally well maintained to support the current ROM coal targets at each mine.

Processing and Blending

The products produced by our operations are a mix of premium thermal coal (<15% Ash), semi-soft coking and PCI coals together with mid – high ash thermal coals (15% – 30% Ash). Our premium grade products are typically sold to premium markets where the value of the coal can be reflected by the quality of the product. However, in some circumstances and some markets coal may be blended to satisfy customer requirements. We focus on ensuring that blends satisfy customer requirements, but we also pursue blending strategies to augment our revenue return that would otherwise have been received by selling the products independently. Due to the number of pits, product types and required product specification of our customers, we have the ability to blend ROM coal and washed coal to optimise products and add value. We have a dedicated marketing department which analyses both short term and medium term market conditions with the aim of strategically blending the various coal products from each operation to maximise the revenue generated. In addition, as we further integrate HVO and MTW into our operations, we plan to deploy our blending strategy to further optimise our mining operations.

Blending of our coal products starts at the pits which have the ability to blend coal on the ROM coal stockpiles. Coal is then reclaimed via FEL and trucks for separate stacking and reclaiming based on coal quality prior to processing through our coal processing plants.

Product coal is conveyed or trucked from the CPP to rail loading points and segregated into product coal stockpiles at each loading point. Product coal may be blended from the stockpiles to meet specific customer and marketing requirements, and is then transported by rail to port terminals for seaborne export.

Transportation and Export

Details of the transportation of coal product from our mines to the ports of export are set forth in *"– Infrastructure, Transportation and Logistics"* above.

CUSTOMERS

All of the coal we produce is sold for export to customers located in various key markets across the Asia Pacific region, whether directly, through overseas traders or through other Australian coal companies. The end users for our coal products include major power utilities and steel mills in Japan, South Korea, the PRC, Singapore and Taiwan. During the Track Record Period, we have also supplied coal to power and steel mills in other Asian countries, such as Malaysia, Vietnam, Thailand, India and Indonesia, as well as customers in South America and Europe on an ad hoc basis.

In addition to major power utilities and steel mills in Asia, we also sell coal to customers in the commodities trading business, who purchase our coal for trading purposes or to on-sell the coal to their end customers. We sell to coal traders primarily to (i) enable access into markets where we have no direct relationship with end users and (ii) provide flexibility to sell any short-term unsold positions. Once we have developed relationships with new end users, we may opt to sell to them directly rather than through coal traders. For example, during the Track Record Period, we implemented a sales strategy of shifting away from coal traders in Singapore to sell directly to end users, which resulted in an overall decrease in the percentage of revenue attributable to customers located in Singapore, though total revenue from Singapore increased in line with our overall sales growth.

For the financial years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018, revenue from our five largest customers in aggregate amounted to A$630 million, A$480 million, A$839 million and A$788 million, respectively, representing approximately 47.8%, 38.8%, 32.3% and 33.8% of our revenue, respectively, and revenue from our largest customer in those periods amounted to A$247 million, A$162 million, A$216 million and A$225 million, respectively, representing approximately 19%, 13%, 8% and 9.7% of our revenue, respectively. To the best of our knowledge, as at the Latest Practicable Date, our five largest customers, except for Glencore, were independent third parties.

We have a mix of long term, annual and spot customer contracts. Some of our customer contracts are evergreen in nature, which are annual contracts with the same customer for the same coal type, have been ongoing for several years, and are renewed every year. However, as our strategy is to have a mix of contract tenures in our customer portfolio, we have contracts with tenures for the next three to five, eight to ten and fifteen year periods.

Our strategy is to have a mix of pricing structures in our contractual base. This mix includes fixed prices for contracts of three, six and 12 month periods and spot contracts. Adjustment to fixed prices are typically based on the quality of coal supplied and variation to contract specifications. Sales are also priced on an index basis using indices such as the globalCOAL benchmark price for seaborne thermal coal, API5 and Platts coking coal index for the various product categories.

We have an experienced in-house team responsible for marketing and the co-ordination of marketing of coal for all our mine sites. In addition, there are certain third party marketing arrangements applicable to certain mine sites.

Marketing And Sales Arrangements

Middlemount

Following the merger with Gloucester Coal in June 2012, we acquired the rights to receive a royalty of free on board trimmed sales from the Middlemount Mine. This royalty continues for the life of the Middlemount Mine. The marketing function of Middlemount coal is split between us and Peabody Energy, the joint venture partner.

Moolarben

Moolarben Coal Sales Pty Ltd, a wholly owned subsidiary of the Company, is the exclusive marketing agent for coal produced by Moolarben. The Company has entered into the Moolarben Japan marketing agency agreement, pursuant to which Sojitz has the exclusive marketing rights in respect of all coal produced by Moolarben which is sold to certain entities in Asia.

Ashton

Under the terms of a market representation agreement between Ashton Coal Mines Limited ("**ACM**") and Itochu, Itochu has exclusive marketing rights in Japan in respect of coal produced by Ashton. Itochu has retained these exclusive marketing rights following completion of the Company's acquisition (via its wholly owned subsidiary, White Mining (NSW) Pty Ltd) of the outstanding interests in Ashton.

C&A Marketing and Sales Arrangements

Pursuant to the Glencore Transaction, we were appointed as the exclusive marketing representative for sales of HVO coal products in the PRC, Taiwan (other than for certain specified customers), Thailand and Malaysia.

In connection with the C&A Acquisition, we have entered into coal sale and marketing arrangements with Evercharm International Investments Ltd ("**General Nice**", an entity associated with General Nice Development Ltd.) and Shandong Taizhong Energy Co., Ltd ("**Taizhong**"). General Nice and Taizhong were placement investors in the Company in August 2017.

Under the agreements, we will provide thermal coal to each of Tianjin Belong Faith Energy Minerals Co., Ltd, a subsidiary of General Nice, and Hong Kong Taizhong Energy Pty Ltd, a subsidiary of Taizhong, for a term not exceeding 36 months at a price linked to a published index on terms otherwise materially consistent with market standards. In addition, we have appointed Taizhong to be the exclusive marketing agent for the sale of coal by us to a specified customer in the PRC.

Noble marketing services

Gloucester Coal entered into a marketing services agreement with Noble and Noble Marketing in connection with Gloucester Coal's acquisition of 100% of Noble's interest in Donaldson (prior to the merger between the Company and Gloucester Coal in 2012).

The marketing services agreement appoints Noble Marketing to provide, as and when required by Gloucester Coal, long-term international marketing services, advice and information from time to time in relation to the sale and marketing of coal produced or sold by Gloucester Coal.

These arrangements are obligations of the Company as a consequence of its merger with Gloucester Coal. This appointment of Noble Marketing does not preclude the Company from using its own internal resources instead of Noble Marketing but is otherwise exclusive, with the exception of other pre-existing exclusive marketing arrangements entered into by members of the Gloucester Coal group.

The marketing services fee to be provided for Noble Marketing's services in each calendar year is to be calculated based on the sales of coal by Gloucester Coal. As the transaction amounts had been below the threshold stipulated under the agreement, we have not incurred any fees under the agreement during the Track Record Period. The marketing services agreement will expire on 31 December 2040.

We are involved in certain legal proceedings which involve members of the Noble Group. See "– *Legal Proceedings and Non-compliance*".

QUALITY CONTROL AND PRODUCT DEVELOPMENT

Most of our coal supply agreements require the delivery of coal meeting specified quality thresholds for characteristics such as moisture content, sulphur content and ash content.

We blend and maximise utilisation of our different coal products from our diverse controlled and managed operations to better manage coal quality specifications, meet changing demands and realise higher overall coal product price.

SUPPLIERS

Our main supply contracts include infrastructure, fuel and electricity, explosives for blasting and critical spare parts from original equipment manufacturer suppliers.

Arrangements with Suppliers

Our contracts for port and rail infrastructure are generally under long-term take-or-pay agreements with the relevant operators, as further described in "– *Infrastructure, Transportation and Logistics*" above. We have entered into master supply agreements at the Group level with fuel suppliers for the supply of diesel and lubricants to our mining operations. We contract with blasting services experts for the provision of explosives and related explosive application and blasting services. We also have master supply agreements for the supply of spare parts which support our heavy mining equipment. For the financial years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018, our purchases from our five largest suppliers in aggregate amounted to A$333 million, A$353 million, A$508 million and A$326 million, respectively, representing 20.8%, 24.8%, 21.5% and 23.4% of our total purchases for the relevant period, and our purchases from our largest supplier amounted to A$89 million, A$94 million, A$133 million and A$89 million, respectively, representing 5.6%, 6.6%, 5.6% and 6.4% of our total purchase for the relevant period. As at the Latest Practicable Date, none of the Directors, their associates or the Controlling Shareholders is related to or owns any interest in any of our five largest suppliers. We usually make payments to our suppliers and settle trade payables by account transfer or remittance. Save for infrastructure which is operated by government-owned or regulated entities, there are generally multiple potential suppliers for each product or service. We procure products and services through a tender process for the most competitive value proposition. We have not experienced any shortage of supplies and were not dependent on any single supplier during the Track Record Period.

Utilities

We use electricity and water in our operations. Prices are determined by the relevant utility suppliers and there are typically multiple suppliers for electricity and water. We procure utilities through a tender process for the most competitive prices.

All of the operating sites have fully developed electrical reticulation systems in place. The sites have access to sufficient power supply to achieve the proposed life of mine development plans with routine ongoing maintenance to the supply network. We have not experienced any material disruption in electricity supply during the Track Record Period.

Water required for our operations is sourced by various methods, including wells, surface sumps and local rivers. As such, numerous water rights permits are required for our mines. All permits are currently in good standing to support current production. Mine sites have on-site storage for water.

Water management systems are established for each mine and include the capture of surface water and groundwater within licensed limits for the ongoing use at each mine site. Water is used primarily for dust suppression and use in coal processing plants. Potable water is produced from a number of sources including town water supply, surface and groundwater, processed water from onsite water treatment plants and purchases of water that are transported by truck onto the mine sites.

Coal Purchased Externally

In addition to selling coal produced from our operated or managed mines, we purchase coal from both related and third parties primarily as part of our coal blending strategy where by combining the qualities of our own coal with the qualities of others producers' coal results in an enhanced end-product capable of achieving a higher sale price. Our coal purchases amounted to A$158 million, A$211 million, A$340 million and A$182 million in 2015, 2016, 2017 and the six months ended 30 June 2018, respectively, representing 12.0%, 17.0%, 13.1% and 7.7% of our total revenue in those periods.

ACQUISITIONS AND DISPOSALS

Through organic and strategic acquisitive growth, we became Australia's largest pure-play coal producer. During the Track Record Period, we entered into the following transactions as part of our commitment to continued strategic growth:

C&A Acquisition

We acquired 100% of C&A from Rio Tinto on 1 September 2017. We entered into a binding agreement US$2.69 billion in value comprised US$2.45 billion cash payable on completion and US$240 million in non-contingent royalty payments payable over five years following completion which are not conditional on the volume of saleable coal produced by C&A and are secured with bank guarantees provided at completion, and a coal price linked contingent royalty of US$2.0 per tonne (indexed for the consumer price index) for a period of 10 years commencing on the third anniversary of completion payable if the Newcastle benchmark thermal coal price exceeds US$75 per tonne (indexed for the consumer price index) which is capped at US$410 million.

On completion in September 2017, we acquired the following interests in two of Australia's leading large-scale, long-life and low-cost coal mines located in the Hunter Valley region of New South Wales, as well as required export infrastructure:

- a 67.6% interest in HVO;
- an 80.0% interest in the Mt Thorley mine and a 55.6% interest in the Warkworth mine; and
- a 36.5% interest in PWCS.

See "*Financial Information – Acquisitions, Disposals and Deconsolidation – C&A Acquisition*" for further details.

Warkworth Acquisition

On 7 March 2018, we completed the purchase of an additional 28.9% interest in the Warkworth joint venture from MDP for US$230 million (which is subject to finalisation of a working capital adjustment which includes cash), increasing our interest in the Warkworth joint venture from 55.6% to 84.5% and our share of coal production from the integrated Mount Thorley Warkworth operations from 64.1% to 82.9%.

Glencore Transaction

On 27 July 2017, we entered into a binding agreement to establish a 51:49 unincorporated joint venture with Glencore Coal Pty Ltd ("**Glencore**") in relation to HVO, following completion of Yancoal's acquisition of C&A.

The joint venture arrangement provides significant synergies and commercial opportunities for both the Group and Glencore, combining the management experience and operational skills of two of Australia's leading coal producers. The HVO joint venture came into effect on 4 May 2018.

To establish the HVO JV, Glencore paid cash consideration of US$1,139 million for 49% of HVO, of which US$710 million was paid to HVO Resources Pty Ltd, a wholly owned subsidiary of Mitsubishi Development Pty Ltd, and US$429 million was paid to the Company (with further post-closing adjustments), plus a 27.9% share of US$240 million of non-contingent royalties and 49% of HVO contingent royalties payable by the Company in respect of the C&A Acquisition. Our ownership of HVO was reduced to 51.0%, and in PWCS to 30%, following the completion of the Glencore Transaction.

For further details on the management and marketing arrangements of HVO, see *"– Marketing and Sales Arrangements" and "Connected Transactions – Management Services in relation to the HVO JV"*.

Moolarben Acquisition

The Company has entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben for total consideration of A$84 million, which will be paid in four installments through to 31 December 2019, and adjusted for the economic benefit of the 4% interest from 15 April 2018, that will flow to the Company. The Moolarben Acquisition will raise our interest in the unincorporated Moolarben JV to 85%. The Moolarben Acquisition is subject to customary conditions precedent to completion.

COMPETITION

The global coal industry features a large number of both multinational coal producers with global supplies and reach as well as regional players which may have a more limited operating scale but a locally strong presence. As a pure-play Australian coal producer for which all of our products are exported to end customers located in the Asia-Pacific region, our main competitors consist of other Australian coal producers whose primary export markets overlap with ours. These competitors include Peabody Energy, Whitehaven, Centennial Coal and New Hope among the pure-play coal producers, and Glencore, BHP and Anglo American among the diversified mining companies. We also compete with Indonesian coal producers in the Asian seaborne market, which together are the largest exporters of thermal coal by volume but whose products are generally of lower quality, according to the Industry Report. These competitors include PT Bumi Resources Tbk. and PT Adaro Energy Tbk. which, in addition to having large coal deposits, also have the advantage of proximity to key Asian markets. In addition, within our end user markets, we may compete with domestic suppliers, particularly in the PRC, which is the world's largest overall coal producer and where major local producers may enjoy home market advantages. Furthermore, we may also face competition from other major coal exporting nations such as the United States, Canada, South Africa, Colombia and Russia.

Players in the export coal industry generally compete on cost and product quality. Higher quality coal is generally able to command higher market prices, which in turn could generate greater profitability and offset what may be a higher cost of production. Factors that directly influence coal producers' production costs include the geological characteristics of their coal deposits such as the depth of underground reserves (for underground mines) and the strip ratio of open cut reserves (for open cut mines),

transportation costs, and labour availability and cost. Coal producers may achieve cost advantages through greater scale of operations and producing from multiple mines, which may generate economies of scale synergies and enable coal blending to yield higher quality products for export.

There are significant barriers to entry in the coal industry, including high capital expenditure requirements and expertise and resources needed to identify and develop new mines, as well as regulatory barriers in the form of various government approvals and ongoing inspection and compliance obligations.

See *"Industry Overview – Competitive Landscape"* and *"Risk Factors – Coal markets are highly competitive and are affected by factors beyond our control"* for further details.

SEASONALITY

Our operations in Queensland and to a lesser extent in NSW are subject to seasonal weather conditions such as heavy rainfall and cyclones which may cause interruptions to production or disrupt access to coal transportation and handling services. During the Track Record Period, we did not experience material suspensions or delays in our production. In 2017, we successfully planned and completed drainage works prior to the arrival of Cyclone Debbie in Queensland which mitigated the impact of heavy weather impact at Yarrabee. Seasonal factors may also affect demand; for example, an unusually severe winter in the PRC in 2017-18 had an impact on global coal prices.

HEALTH, SAFETY AND ENVIRONMENTAL MATTERS

Environmental policies

Operating to stringent environmental management conditions, including the on and off-site management and monitoring of potential dust and noise impacts, we continue to work with Australian State and Federal Government departments to ensure full transparency in our environmental reporting. Each of our operations also implements robust rehabilitation plans, working to minimise potential impacts on the local environment and ultimately return completed mining areas to quality pastoral, woodland, forestry or native vegetation (as required) for future use. Leading edge sustainability practices ensure we are instituting and updating our water management, land use and monitoring plans throughout every stage of the mining process, from prior-to-commencement, until well after eventual close.

As part of our rehabilitation plans, we seed and plant across our operations. Total seeding and planting across all operations in 2017 is 285 hectares. Total new disturbance across all operations in 2017 is 442 hectares. We seed and plant disturbed areas at each operation progressively.

Environmental non-compliances

On 24 December 2015 (prior to the C&A Acquisition), C&A notified the Commonwealth Department of the Environment that 16.5 hectares of a critically endangered ecological community (Central Hunter Valley eucalypt forest and woodland ecological community) ("**CHVEF**") was inadvertently cleared without the relevant approvals under the (Commonwealth) *Environment Protection and Biodiversity Conservation Act 1999*. C&A subsequently sought and obtained the relevant approvals

under that act for future clearing of CHVEF. As those approvals do not operate retrospectively, C&A has entered into an enforceable undertaking with the Australian Minister for the Environment and Energy to provide a compensatory offset property, and to vegetate it appropriately.

On 15 December 2016 (prior to the C&A Acquisition), the Environment Protection Authority (New South Wales) commenced a prosecution against Warkworth Mining Limited, a subsidiary of C&A and an operator of the Warkworth joint venture, for an alleged breach of section 64 of the (NSW) Protection of the Environment Operations Act 1997 (breach of a licence condition, being the failure to carry out activities in a competent manner) relating to the partial failure of a temporary sediment dam wall at MTW and the uncontrolled release of water from the dam. Warkworth Mining Limited is a joint venture company owned by each of the Warkworth joint venture participants in proportion to their respective joint venture shares. Warkworth Mining Limited is the statutory operator of the Warkworth mine and holds the mining tenements. Our Australian legal advisers, Gilbert + Tobin, has advised us that that Warkworth Mining Limited, as holder of the Environment Protection Licence, is primarily exposed to a risk of regulatory action and prosecution in the event that there is a non-compliance with that Licence. The conviction was recorded prior to our acquisition of this asset and the fine and costs order were paid.

While we are committed to high levels of environmental protection and sustainability practices, we may also be involved in other environment non-compliance incidents from time to time in the ordinary course of business, which we believe would not individually or in the aggregate have a material adverse impact on our business or financial condition.

Occupational safety measures and policies

We have adopted policies to comply with occupational health, safety, environment and other laws. The Board has approved a Health, Safety and Environment Policy which applies across the Company. In addition, each mine site has its own health, safety and environment ("**HSE**") policies and procedures to deal with their particular HSE issues. The Board has established a Health, Safety and Environment Committee which assists the Board to fulfil its responsibilities in relation to the HSE matters arising out of the Group's activities, consider, assess and monitor whether or not the Group has in place the appropriate policies, standards, systems and resources required to meet the Company's HSE commitments and provide necessary focus and guidance on HSE matters across the Group. The committee meetings are held at one of the Company's mine sites, whenever possible, to receive feedback from the health, safety and environment forum held at the mine site and to address any mine specific health, safety and environment issues.

All of our mine sites are independently audited to ensure compliance with the relevant legislation and regulations, and audited to ensure the health and safety management system is effective. We have an ongoing process to ensure safe, compliant and effective mine sites. We address areas of improvement with specific training for individuals or crews, and redesigning of processes or system enhancements.

Health and safety duties and obligations

Officers (including directors) have certain duties and obligations under workplace health and safety laws in each jurisdiction in which we operate. These duties are generally non-delegable and can be held concurrently by multiple persons. The Yancoal directors hold such duties for each mine that is operated or managed by Yancoal,

including the Watagan Mines. In the case of the Watagan Mines, such duties are held concurrently between the Yancoal and Watagan boards. In respect of joint venture mines that are partly owned but not operated, by Yancoal (including the HVO and Middlemount mines), the Yancoal directors do not hold due diligence duties because Yancoal is not the operator of those mines (although certain officers of Yancoal who sit on joint venture subsidiary boards may hold such duties).

Safety incidents

On 15 April 2014, a major incident in the maingate A9 development panel in the Stage 3 area of the Austar mine on 15 April 2014 led to the death of two workers. The Resources Regulator, which is now part of the Department of Planning and Environment of the New South Wales government, regarded the incident as serious and a possible contravention of health and safety laws, and conducted an investigation into the matter including the mine's safety management systems and the level of compliance with health and safety laws by officers. The investigation identified that the incident was a result of a pressure burst of such magnitude and volume as to render the installed rib support ineffective. Following the investigation, the Resources Regulator notified Yancoal Australia Ltd and Austar Coal Mine Pty Ltd in April 2016 that it had decided not to institute prosecution proceedings.

On 19 August 2016, a coal burst occurred in longwall panel B2 in the Bellbird South working area of the Austar mine. A prohibition notice was issued by the Resources Regulator in relation to the incident. A prohibition notice is a direction to prohibit an activity issued when a mine inspector reasonably believes that there is a serious risk emanating from an immediate or imminent exposure to a hazard. The prohibition notice in relation to the Austar mine was cancelled on 14 September 2016. Additional safety controls were implemented at the mine, including the introduction of coal burst protection conveyor mats supported from the flippers of the longwall shields, the deployment of restricted face zones on the longwall face and the use of shield flippers to provide protection to workers, and these controls have been subsequently improved over time. No proceedings were commenced by the Resources Regulator in relation to this incident and the option of the Resources Regulator to commence such proceedings expired on 19 August 2018.

On 2 February 2018, an initial coal burst occurred in longwall panel B4 of the Bellbird South area of the Austar mine which resulted in minor injuries to a worker. A prohibition notice was issued as a result of that incident. This notice was varied by a replacement prohibition notice on 8 February 2018 which ceased to have effect on 21 February 2018. Subsequently, a series of coal bursts occurred in longwall panel B4 in the Bellbird South area of the Austar mine on 21 February 2018, 23 February 2018, 13 March 2018 and 15 March 2018, none of which resulted in any injuries to workers although the 23 February 2018 event caused damage to the longwall shearer. Another coal burst occurred on 16 March 2018, and while no injuries were caused a prohibition notice was issued by the Resources Regulator. This prohibition notice was subsequently replaced with a fresh prohibition notice on 9 April 2018, which was in turn replaced by another notice on 12 May 2018 that allowed limited mining activities. An additional coal burst occurred on 17 May 2018 which did not result in any injuries, but caused damage to the longwall shearer and resulted in another prohibition notice being issued on 18 May 2018.

Between 19 February 2018 and 24 May 2018, we made a series of submissions to the Resources Regulator seeking to have the prohibition notices dated 12 May 2018 and 18 May 2018 cancelled. On 1 June 2018, we were notified by the Resources Regulator that its investigation unit had commenced an investigation into all coal bursts that have occurred at the Austar mine since 15 April 2014. As part of this investigation, four notices to obtain documents, information and evidence were issued, which were complied with on 22 June 2018, 27 June 2018, 31 July 2018 and 15 August 2018 respectively, as required. Inspectors from the investigation unit commenced interviews with longwall deputies in the last week of July 2018 and their investigation is ongoing and the results are pending. Four further notices to obtain documents, information and evidence were issued by a separate section of the Resources Regulator, which were complied with on 26 June 2018, 10 July 2018, 20 August 2018 and 24 August 2018 respectively, as required.

Following agreement as to the provision of limited information to the Resources Regulator, the two prohibition notices dated 12 May 2018 and 18 May 2018 were cancelled on 30 July 2018 and 3 August 2018, respectively. Operations at Austar recommenced on 14 August 2018 subject to certain restrictions and remediation measures set out in a notice issued by the Resources Regulator on 3 August 2018. This new prohibition notice imposes certain conditions (e.g. with respect to stress measurement tests, amongst other things) relating to mining to up to a particular location in the current B4 longwall panel where the longwall equipment will then be recovered and relocated to the next longwall panel for further mining. On 30 August 2018 operations were halted on account of technical issues related to de-stressing activity in certain areas of the long wall, and on 5 September 2018 a prohibition notice was received relating to this activity which was cancelled on 28 September 2018. As at the Latest Practicable Date, the prohibition notice issued on 3 August 2018 remained in force. The nature of the geological and technical challenges faced at the Austar mine exposes us to the risk of future prohibition notices and production delays at the mine.

Additional risk mitigation controls (meeting the statutory health and safety standard of "so far as is reasonably practicable" as stipulated by the relevant legislation) to manage and mitigate the hazard of coal bursts have been implemented on the current longwall panel B4 operation and are proposed to be implemented on any future longwall operations where high coal burst hazard exists. These consist of measures including, but not limited to (i) increased longwall equipment automation whereby workers are located 50 metres from the operating shearer, (ii) introduction of variable web cutting method instead of bi-directional cutting methods, (iii) implementation of de-stress drilling from the tailgate roadway and/or the longwall face (if required) into the longwall block in advance of the retreating longwall face, (iv) extension of the coal burst protection mats supported from the tips of the longwall shields across the entire longwall face, (iv) installation of polypropylene "spikes" across the body of the operating shearer to contain coal bump and burst material on the armoured face conveyor and (v) ongoing borescope holes and cuttings tests to determine the level of "softening" and areas of increased stress as the longwall face retreats, respectively.

Due to the nature of coal burst risk in longwall mining, the location, timing and magnitude of coal bursts cannot be predicted and as a result are difficult to prevent. As such, the coal burst control strategy employed at Austar emphasises mitigation, which is in line with industry practice. Since the initial coal burst on 2 February 2018, which resulted in minor injuries to a worker, the mitigation controls implemented had been effective at preventing injuries in subsequent coal burst events at the longwall B4 panel.

The Directors are of the view that (a) these risk mitigation controls are sufficient to minimise risks to health and safety to any persons in the vicinity of the longwall face at the Austar Coal Mine while the shearer is in operation so far as is reasonably practicable as required by the relevant legislation; and (b) any matters giving rise, or that will give rise, to a serious risk to the health or safety of any person emanating from an immediate or imminent exposure to a hazard associated with production or use of the shearer at the longwall have been remedied. However, these measures may not be sufficient to prevent similar incidents or production shutdowns in the future. See "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents or outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown.*" for further details.

As a result of the C&A Acquisition, we inherited a safety prosecution that was underway in respect of an incident at MTW which happened prior to the acquisition of our interests in MTW. These proceedings were discontinued in 2017 upon MTW agreeing to undertake an enforceable undertaking social project that will be completed in 2019.

After considering the remedial actions taken by the Group and the nature and scale of our business, the Directors are of the view that our internal control system is adequate and effective for our current operations and that the incidents listed above do not have any material impact on the suitability of the Directors under Rules 3.08 and 3.09 of the Listing Rules or our suitability for listing under Rule 8.04 of the Listing Rules.

Save as disclosed above, no significant events were recorded at our mine sites during the Track Record Period, with sites continuing to operate to legislative and safety standards. We remain committed to proactively improving the systems and processes employed across sites to educate, communicate and record employee safety initiatives. Under the direction of the Health, Safety and Environment Committee, we continue to build the leadership, capabilities, systems and reporting procedures required to deliver on its objectives of achieving zero harm at its operations.

While we are committed to the health and safety of our employees and contractors, there are safety incidents and personal injury claims made against the Group in the ordinary course of business which are generally covered by our insurance policies and which we believe would not individually or in the aggregate have a material adverse impact on our business or financial condition.

SOCIAL SUSTAINABILITY AND COMMUNITY DEVELOPMENT

In the ordinary course of business, we receive complaints from local communities, generally in respect of noise, blasting and air quality. We keep comprehensive records of complaints received at each mine site. In addition to maintaining complaints and information hotlines, we also engage with our surrounding communities through community consultative committees. During the Track Record Period, none of these complaints received was as a result of any material breach of mining approval conditions by our mining operations.

We allocate funds at both the site and corporate levels to financially support community groups and programmes on health, environment, sport, education, community and training. We also invest in local initiatives, fund environmental projects and support social and education initiatives. We work cooperatively with community stakeholders through community consultative committees, local newsletters and media

to help ensure our surrounding communities are engaged and informed of matters relevant to our operations. Amongst other matters, we provide annual funding to The Clontarf Foundation, which runs programmes in NSW, Queensland, Victoria, WA and the Northern Territory. This Foundation's mission is to ensure education and social engagement for Aboriginal school-aged male students.

PROPERTIES

As at the Latest Practicable Date, we owned freehold properties and leased long-term leasehold properties at each of our operated and managed mines which consisted of approximately 1,640 parcels of land with a total site area of approximately 71,000 hectares and approximately 270 dwellings (excluding properties in Middlemount). These properties include real property within tenements, ancillary properties surrounding the mining leases and remote properties acquired for housing accommodation, as well as offset properties to compensate for disturbance of native vegetation.

As none of our properties had a carrying amount of 15% or more of our consolidated total assets, we are not required to include a valuation report in this prospectus with respect to our property interests.

INTELLECTUAL PROPERTY

We began employing the LTCC technology for the first time in Australia at Austar in September 2006. LTCC technology is ideal in thick coal seams and enables greater resource recovery, and is utilised in Austar depending on the mining conditions.

As at the Latest Practicable Date, we have applied for the registration of one trademark and have registered 14 domain names which are material to our business. See "*Appendix VII – Statutory and General Information – Further Information About the Business – Intellectual Property*" for further details.

As at the Latest Practicable Date, the Group has not been engaged in any material litigation or legal proceedings relating to the violation of intellectual property rights.

RISK MANAGEMENT AND INTERNAL CONTROLS

Our future operating performance may be affected by risks relating to our business. Some of these risks are specific to us while others relate to economic conditions and the general industry and markets in which we operate. See "*Risk Factors*" for further discussion.

Our risk management policies and procedures have been designed and implemented to identify, manage and mitigate any exposure to risks relating to our business, including economic, environmental, safety and social sustainability risks. We undertake regular monitoring and assessment of these risks and implements risk mitigation strategies to minimise its exposure to such risks where appropriate.

The Board, through the Audit and Risk Management Committee, is responsible for satisfying itself that a sound system of risk oversight and management exists and that internal controls are effective. The Audit and Risk Management Committee receives periodic reports on the performance of our risk management framework, as well as on key risk exposures to satisfy itself that it continues to be sound. A review of the risk management framework was conducted in 2017.

Formal risk identification activities are undertaken on an annual basis, with Risk Identification and Analysis undertaken at a functional level, as well as at each of the organisation's mine sites. In addition, where appropriate, project specific risk assessments are conducted. The EGM of Risk Management and Auditing is responsible for establishing and managing the company wide risk management system, risk management framework and practices, reviewing the impact of the risk management framework on its control environment and insurance arrangements and reviewing the risk of major investment projects. Together with the Chair of the Executive Committee, the Board and the Audit and Risk Management Committee, the Executive General Manager of Risk Management and Auditing is responsible for developing a risk matrix and framework and for implementing related risk assurance processes and audits of compliance for the Group.

The responsibility for managing risks, risk controls or risk management action plans is embedded within the business and undertaken as part of everyday activities.

INSURANCE

We maintain director and officer liability insurance, property damage insurance for our properties, plant and equipment and third-party liability insurance to cover claims in respect of third party injury or property damage arising from incidents occurring on our properties or as a result of our operations. We do not currently maintain business interruption insurance. Insurance coverage and terms are benchmarked against industry peers. After taking into account the assessment of the risk exposure of our operations, the Directors are of the view that our insurance coverage is appropriate.

We will continue to review and assess our risk portfolio and make necessary and appropriate adjustments to our insurance practice in line with business needs and industry practice. See "*Risk Factors – Our operations may be affected by uncertain mining conditions and we may suffer losses resulting from mining safety incidents, which may not be covered by our insurance*".

EMPLOYEES

We had 1,890,1,866, 3,983 and 3,041 employees (including casual labour which are full-time equivalents) as of 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. After giving effect to the Glencore Transaction and as at the Latest Practicable Date, we had 3,064 employees. The following table shows a breakdown of our employees by function and location as at 30 June 2018:

Function	**Total**
Mining operations	1,781
Maintenance	808
General administration	452
Total	3,041

Our recruitment process is merit based and we recruit internally and externally through recruitment agencies. Employee individual training plans are managed by each employee and endorsed and supported by their line managers. Our remuneration policies are to ensure remuneration is equitable, align with the long-term interests of the Company and Shareholders, comply with diversity policy, provide market competitive remuneration to attract and retain skilled and motivated employees and structure incentives to link reward with performance.

Labour Unions and Disputes

A substantial portion of our employees are members of the Construction, Forestry, Maritime, Mining and Energy Union ("**CFMMEU**"). Each of our mine sites (except for Yarrabee) has made collective agreements known as enterprise agreements with CFMMEU. These agreements primarily cover employees' responsibilities, remuneration, benefits and grounds for termination of employment. Current enterprise agreements are typically three to four years in duration. As employees have the right to take protected industrial action during the negotiation of new enterprise agreements, we occasionally experience industrial action from CFMMEU members in the ordinary course of business. In March 2018, during the renegotiation of the enterprise agreement at Ashton, we experienced an industrial action from CFMMEU members which resulted in a 24-hour stoppage, which was withdrawn by CFMMEU. We are also involved in labour disputes and unfair dismissal claims in the ordinary course of business. During the Track Record Period, we did not experience any strikes, work stoppages, labour disputes or actions which individually or in the aggregate had a material adverse impact on our business or financial condition.

Third Party Contractors

While our mining operations are self-operated and not contracted, we enter into agreements with independent third party contractors and other third party services providers for ancillary or specialised mining services and contracted labour for the provision of additional mining services when required. In 2015, 2016, 2017 and the six months ended 30 June 2018, we had incurred total contracting fees of A$155 million, A$78 million, A$134 million and A$96 million, respectively.

Contractors at our mine sites are required to comply with the site's health and safety management system. While the contractors are generally responsible for compliance with applicable legislation and regulations and safety standards and liable for workers' compensation and employer's liability in relation to any death of or injury to any employee of the contractor, we are also accountable for ensuring their compliance. To give flexibility to our operations, we generally contract with such third party contractors on a short term or project basis.

In the selection of third party contractors, we take into account a variety of factors, including qualifications, relevant skills and experience, ability to perform the activity, price and reputation in the industry. To the best of our knowledge, each of our third party contractors has obtained the relevant material licences and permits to conduct activities it engaged.

As there are a number of local contractors providing similar services for coal mines, we believe we are able to engage replacement contractors on similar terms and conditions if any of our existing contractors discontinues its services.

LEGAL PROCEEDINGS AND NON-COMPLIANCE

We are involved in certain disputes which involve members of the Noble Group, which was one of our largest customers from 2015 to 2017. Brief details of these disputes are set out below:

(1) We commenced arbitration proceedings against the Noble Group in May 2018 seeking relief, including damages, on account of the Noble Group's failure to purchase coal from us between 2015 and 2017 under an existing contract between us and the Noble Group dated 30 June 2014. The contract provides for the sale to the Noble Group of coal mined from operations owned and/or managed by us, and includes *de facto* liquidated damages payments where the Noble Group fails to purchase coal from us. We estimate these liquidated damages to be approximately US$35.7 million, excluding interest, and have claimed this amount in these proceedings. As at the Latest Practicable Date, this claim is in the early stages of arbitration proceedings.

(2) On 3 August 2018, the Noble Group commenced proceedings against us in the Supreme Court of New South Wales (an Australian State court) claiming, among other things, amounts in respect of certain marketing fees that are alleged to have become payable under a contract and for damages (as described in more detail below) flowing from an alleged repudiation of that same contract. These claims arise from a contract entered into in 2011 between Noble Resources Pte Ltd ("**Noble Resources**"), a subsidiary of the Noble Group, and Gloucester Coal, a subsidiary of the Company, which has a term ending in 2040. Under this contract, Gloucester Coal appointed Noble Resources to provide marketing services in relation to coal exports, and Gloucester Coal pays a marketing fee to Noble Resources calculated on the basis of tonnage of export coal mined from the Stratford, Duralie and Donaldson mines (which were acquired by the Company in 2012; Duralie is the only one of these mines currently producing). As Noble Resources does not operate those mines, Noble Resources regularly requests information as to the quantity and timing of exports from those mines in order to verify the marketing fee payable, if any.

    The Noble Group's claims derive mainly from its allegation that Gloucester Coal failed to notify and pay marketing fees, and failed to provide certain information to the Noble Group so as to allow the Noble Group to verify the marketing fees payable (if any), which allegedly had the effect of Gloucester Coal repudiating the contract. The Noble Group also alleges that the Company caused or procured Gloucester Coal to breach the contract. The Noble Group asserts that Gloucester Coal is in breach of contract in the sum of approximately US$172.5 million, comprising claimed losses for 2014 of approximately US$1.5 million, claimed estimated losses for 2015 to 2017 of US$44 million, and claimed estimated damages for "loss of bargain" of US$127 million (which represents the amount Noble Group alleges would be payable from 2018 to 2040). That is, the maximum claim that has been asserted against the Company by the Noble Group is US$172.5 million in relation to these proceedings. As at the Latest Practicable Date, the parties continue to exchange pleadings in respect of the proceedings. We and Gloucester Coal intend to vigorously defend the proceedings.

(3) Gloucester SPV Pty Ltd ("**Gloucester SPV**"), a subsidiary of the Company, is one of several respondents to proceedings commenced in 2015 by Oceltip Pty Ltd ("**Oceltip**") against Noble Resources in the Supreme Court of Queensland. Oceltip is an independent third party of the Group and we have no commercial relationship with Oceltip. The subject of the dispute involves the transfer of Noble Resources' right to receive certain royalty payments under a royalty deed to Gloucester SPV, who since the transfer now enjoys the right to those royalty payments. The consideration for the transfer was A$168 million and as at the Latest Practicable Date we estimate the potential value of the royalty streams to be approximately A$195 million. Oceltip's claim disputes the validity of the transfer and seeks to enforce its pre-emptive rights under the royalty deed against Noble Resources. There is no claim for damages against Gloucester SPV in those proceedings, and as such those proceedings did not involve a dispute between the Noble Group and the Company. The damages claim was directed only to Noble Resources (and was pleaded in the alternative to its primary claim for declarations and specific performance). As a consequence, there is no ability for Oceltip to seek compensation from Gloucester SPV, Gloucester Coal or Yancoal in the event it is successful in these proceedings). On 14 November 2018, a related claim was served on Gloucester Coal and Gloucester SPV in which Oceltip has alleged that Gloucester SPV induced or procured Noble Resources' alleged breach of the royalty deed by reason of transferring the rights to receive those payments to Gloucester SPV, and has claimed unspecified damages.

As at the Latest Practicable Date, the Oceltip matters remain at preliminary stage and may be consolidated into a single proceeding, and we are unable to assess the Group's potential exposure (if any) on account of these matters.

Given the early stage nature of these matters above and ongoing fact-finding, we are not yet in a position to determine whether the potential impact on us will be material. The Noble Group is undertaking a financial restructuring through proposed schemes of arrangement, which were sanctioned by the relevant courts in the United Kingdom and Bermuda on 13 and 14 November 2018, respectively. As of the Latest Practicable Date we are not able to predict the outcome of such schemes or the effect, if any, that such schemes (or any compromise or arrangement reached in connection therewith), may have on our rights or entitlements against the Noble Group.

Save as disclosed above, during the Track Record Period and up to the Latest Practicable Date, neither we nor any of the Directors was engaged in any litigation, claim or arbitration of material importance nor, to the best of the Directors' knowledge, is any litigation, claim or arbitration of material importance pending or threatened against us or the Directors in relation to the Group.

In addition, as at the Latest Practicable Date, neither we nor any of the Directors was the subject of any actual, pending or threatened bankruptcy or receivership claims.

Save as disclosed in *"– Health, Safety and Environmental Matters – Safety Incidents"* above, during the Track Record Period and up to the Latest Practicable Date, we had complied with the relevant laws and regulations in relation to our business in all material respects and there were no material breaches or violations of laws or regulations applicable to us that would have a material adverse effect on our business or financial condition taken as a whole.

Save for the regulatory approvals, permits and licences set out in "– *Mining and Exploration Licences – Approvals, Permits and Licenses to be Obtained*" which have been applied for but have yet to be granted, during the Track Record Period and up to the Latest Practicable Date, we had obtained all material licences and permits necessary for the operation of our business in the jurisdictions in which we operate and such licences and permits are still valid and in force. We have not experienced any refusal of the renewal application of any material licences and permits necessary for the operation of our business. Further information on the material licences and permits necessary for the operation of our business is set out in below in "– *Mining and Exploration Licences*" and *"Appendix IV – Taxation and Regulatory Overview"*.

You should read the following discussion and analysis in conjunction with our audited consolidated financial statements as at and for the years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, including the notes thereto, set out in the "Appendix IA – Accountants' Report of the Group". Our audited consolidated financial statements have been prepared in accordance with IFRS, which may differ in material aspects from generally accepted accounting principles in other jurisdictions. Historical results are not indicative of future performance.

The following discussion contains forward-looking statements that involve risks, uncertainties and assumptions. We caution you that our business and financial performance are subject to substantial risks and uncertainties. Our actual results could differ materially from those projected in the forward-looking statements. In evaluating our business, you should carefully consider the information provided in "Risk Factors" and "Responsibility Statement and Forward-looking Statements".

We also present in this prospectus a discussion and analysis of the financial condition and results of operations of C&A. See "Financial Information of C&A" for further details. The pro forma effects of the C&A Acquisition, along with certain other transactions as described in more detail in this "Financial Information" section, are set out in "Appendix IIB – Unaudited Pro Forma Financial Information of the Enlarged Group".

OVERVIEW

We are Australia's largest pure-play coal producer based on aggregate Coal Reserves and marketable coal production, and have been listed on the ASX since 2012. Of all Australian coal producers, we rank third on both these aforementioned metrics, behind only Glencore and BHP. We have ownership interests in, and operate, five mine complexes across New South Wales and Queensland and manage five others across New South Wales, Queensland and Western Australia.

Our principal business activity is the production of thermal and metallurgical coal for use in the power generation and steel industries in Asian markets. On an ex-mine basis, in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, our average selling price for thermal coal was A$68, A$71, A$102, A$90 and A$117 per tonne, respectively, and our average selling price for metallurgical coal was A$100, A$106, A$165, A$174 and A$191 per tonne, respectively. Total ex-mine sales volume in the same periods was 8.1 Mt, 8.8 Mt, 15.5 Mt, 4.9 Mt and 13.8 Mt for thermal coal, respectively, and 5.3 Mt, 3.3 Mt, 3.8 Mt, 1.3 Mt and 2.4 Mt for metallurgical coal, respectively.

In contrast to coal companies that are currently listed on the Hong Kong Stock Exchange, all of the coal we produce is sold for export to customers located overseas, whether directly, through overseas traders or through other Australian coal companies. During the Track Record Period, our largest jurisdictions by revenue were the South Korea, the PRC, Singapore and Japan. We had revenue of A$1,319 million, A$1,238 million, A$2,601 million, A$832 million and A$2,347 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, and a loss after income tax of A$291 million, A$227 million and A$14 million in 2015 and 2016 and the six months ended 30 June 2017, respectively, and a profit after income tax of A$246 million and

A$361 million in 2017 and the six months ended 30 June 2018, respectively. The increases in 2017 and the six months ended 30 June 2018 were largely attributable to the C&A Acquisition, the Moolarben expansion and a substantial increase in coal prices.

BASIS OF PRESENTATION

Our consolidated financial statements have been prepared in accordance with IFRS and on a going concern basis. All financial information presented in this section relates to the historical audited financial information of the Group, unless indicated otherwise as being pro forma financial information. In addition, due to significant acquisitions, disposals and deconsolidation which have taken place since the beginning of the Track Record Period (as described in more detail below), this historical financial information is not necessarily indicative of the Group's current financial performance and position, and results from earlier periods may not be comparable to those from later periods going forward.

All sales and production volume data in this section is presented on an attributable basis, unless indicated otherwise as being presented on a 100% basis.

ACQUISITIONS, DISPOSALS AND DECONSOLIDATION

This discussion and analysis should be reviewed in the context of certain material acquisitions, disposals and deconsolidation of mines and other assets and interests that we have undertaken during the Track Record Period. These are described below. In addition, the pro forma effects of the C&A Acquisition, Glencore Transaction and Warkworth Transaction, each as described in further detail below, are presented in "– *Pro Forma Financial Information of the Enlarged Group*" and Appendix IIB to this prospectus.

C&A Acquisition

On 1 September 2017, we completed the C&A Acquisition, for which the consideration was US$2.69 billion, comprising US$2.45 billion cash payable on completion, US$240 million in future non-contingent royalty payments over five years following completion, and a coal price-linked contingent royalty (with further post-closing adjustments). On completion, we acquired:

(i) interests in two of Australia's leading tier-one large-scale, long-life and low-cost coal mines located in the Hunter Valley region of New South Wales, including:

  (a) a 67.6% interest in the HVO mine; and

  (b) an 80.0% interest in the Mount Thorley mine and a 55.6% interest in the Warkworth mine, which are located adjacent to each other and are operationally integrated as MTW; and

(ii) a 36.5% interest in PWCS, which provides the export infrastructure for the acquired mines.

Prior to its acquisition by us, C&A itself had disposed of certain of its mining operations in 2016, including interests in projects located in Bengalla and Mount Pleasant, and undertook a restructuring of its interest in HVO. As a result, the financial information of C&A as disclosed in "*Financial Information of C&A*" is presented on a carve-out basis as if such interests were disposed of on 1 January 2015. However, the audited consolidated financial statements of C&A as disclosed in the Accountants' Report of C&A as set out in Appendix IB to this prospectus are presented without the carve-outs applied, save as indicated in note 36 therein.

The C&A Acquisition contributed to a substantial increase in our total assets from A$7,660 million as at 31 December 2016 to A$11,914 million as at 30 June 2018. In addition, we began consolidating the profit and loss accounts of C&A from 1 September 2017, the date of completion of the C&A Acquisition, and our results of operations for 2017 and the six months ended 30 June 2018 reflect the consolidation of C&A's results from 1 September 2017 to 30 June 2018. This contributed to the increase in our total revenue from A$1,238 million in 2016 to A$2,601 million in 2017, and our profit after income tax of A$246 million in 2017 compared to a loss after income tax of A$227 million in 2016. Similarly, our total revenue increased from A$832 million in the six months ended 30 June 2017 to A$2,347 million in the six months ended 30 June 2018, and we had a loss after income tax of A$14 million and a profit after income tax of A$361 million in the same periods, respectively.

Glencore Transaction

On 4 May 2018, we completed the Glencore Transaction by selling a 16.6% interest in the HVO mine to Glencore, reducing our interest in the unincorporated HVO JV from 67.6% to 51% and resulting in a 51%:49% unincorporated JV between us and Glencore. Glencore acquired its 49% interest for consideration of US$1,139 million, of which (i) US$710 million was paid to HVOR for its 32.4% interest in HVO and (ii) US$429 million (with further post-closing adjustments) was paid to us for a 16.6% interest in HVO. Glencore will also pay us a 27.9% share of US$240 million of future non-contingent royalty payments and 49% of coal price-linked royalty payments associated with HVO, which are payable by us to Rio Tinto pursuant to the terms of the C&A Acquisition agreements. HVOR is wholly owned by Mitsubishi Development Pty Ltd. ("**MDP**"), which exercised its tag-along right in connection with the C&A Acquisition.

We classified our 16.6% interest in HVO to be sold to Glencore as assets held for sale as at 31 December 2017, based on our determination that the Glencore Transaction was likely to be completed. Following completion, we will continue to account for the financial results of HVO under the proportional consolidation method of accounting. The pro forma income statement of the Enlarged Group for the year ended 31 December 2017 and the six months ended 30 June 2018 gives effect to the Glencore Transaction as if it had been completed on 1 January 2017.

Warkworth Transaction

On 7 March 2018, we completed the Warkworth Transaction to acquire an additional 28.9% interest in the unincorporated Warkworth JV from MDP for consideration of US$230 million, subject to post-closing working capital adjustments, which increased our ownership of the Warkworth JV from 55.6% to 84.5%. The Warkworth Transaction was executed pursuant to a call option that we held in connection with the C&A Acquisition. As MTW is an integrated operation consisting of the Mount Thorley mine (owned by the unincorporated Mount Thorley JV, of which we own 80.0%) and the Warkworth mine (owned by the unincorporated Warkworth JV),

following the Warkworth Transaction, our share of coal production from the MTW mine has increased from 64.1% to 82.9%. We will continue to account for the financial results of the MTW mine under the proportional consolidation method of accounting. As with the Glencore Transaction, the pro forma income statement of the Enlarged Group for the year ended 31 December 2017 and the six months ended 30 June 2018 gives effect to the Warkworth Transaction as if it had been completed on 1 January 2017.

Moolarben Acquisition

We have entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben for total consideration of A$84 million, which will be paid in four installments through to 31 December 2019 (the "**Moolarben Acquisition**"), and adjusted for the economic benefit of the 4% interest from 15 April 2018 that will flow to us. We intend to finance the Moolarben Acquisition with a portion of the expected proceeds from the Global Offering. See "*Future Plans and Use of Proceeds*" for further details.

The Moolarben Acquisition will raise our interest in the unincorporated Moolarben JV to 85%. As a result, following the completion of the Moolarben Acquisition, we will proportionally consolidate 85% of the financial results of Moolarben. See note 45 to the Accountants' Report of the Group in Appendix IA to this prospectus for certain stand-alone financial information of Moolarben during the Track Record Period.

Watagan Deconsolidation

Effective on and from 31 March 2016, the Company entered into certain financing arrangements with Watagan and the Bondholders. These arrangements involved the issue of the Watagan Bonds, a loan facility agreement between Watagan and the Company, and certain other agreements or deeds ancillary to the issue of the Watagan Bonds.

In accordance with the terms of the Watagan Agreements, our interests in the Ashton, Austar and Donaldson mines were transferred to Watagan for consideration of A$1,363 million (equal to the book value of the three mines at the time). Watagan fully funded the purchase with the Watagan Loan. The outstanding interest and principal of this loan is guaranteed by Yankuang, our ultimate controlling shareholder. Watagan can make prepayments of the outstanding loan balance at any time, and (subject to there being no default continuing and other customary conditions) any amounts prepaid may be redrawn by Watagan in the future for specified permitted purposes. As at 30 June 2018, the loan receivable from Watagan was A$730 million (re-drawable to A$1,363 million).

While we wholly-own Watagan, upon the issuance of the Watagan Bonds, the Bondholders were given the power to nominate two of its three directors, which together with other terms included in the Watagan Agreements resulted in the determination that we had lost accounting control of Watagan. The loss of accounting control resulted in us deconsolidating the financial results of Watagan as a subsidiary from our consolidated financial statements with effect from 31 March 2016. From that time, we began to account for our equity interest in Watagan as an associate rather than a subsidiary. We also designated the value of the Ashton, Austar and Donaldson mines as assets classified as held for sale as at 31 December 2015, pending completion of their transfer to Watagan in early 2016. While Watagan is deconsolidated from our consolidated financial statements for accounting purposes, Watagan remains within our tax consolidated group as a result of our ongoing 100% equity ownership of Watagan.

The determination of loss of accounting control of Watagan is a matter of accounting judgement, which could be subject to review and change. The International Financial Reporting Standards ("**IFRS**") under which we prepare our financial statements requires us to make certain judgements and estimates when preparing our financial statements, and are issued by the International Accounting Standards Board ("**IASB**"), along with other authoritative pronouncements and interpretations. The IASB or other agencies and authorities may not agree with the judgements or estimates applied by us. Moreover, the IASB may amend IFRS and the related pronouncements and interpretations or replace them with new standards, and such amendment or replacement is beyond our control. Any changes to IFRS or to the interpretation of those standards, such as a change which would require us to reconsolidate Watagan's results and financial position ahead of the scheduled date in 2025, may have an adverse effect on our reported financial performance or financial position.

Watagan is required to redeem all of the outstanding Watagan Bonds on the maturity date of 8 January 2025 (if the put option is exercised on or after 1 January 2025, the maturity date would be deferred to 1 April 2025), and may elect to redeem any or all of them commencing from 31 March 2019. Additionally, the Bondholders have a put option that allows them to transfer the issued Watagan Bonds at face value to Yankuang during specified put option exercise windows during the first week of January in each of 2019, 2021, 2023 and 2025. The Bondholders may also exercise the put option after 1 January 2019 while an event of default under the bond terms is subsisting in relation to Watagan or Yankuang. The put option must be exercised by a Bondholder in respect of all (but not some) of its respectively held bonds. If the put option is exercised (i) by UNE, as the instructing Bondholder of the investor syndicate, or (ii) with respect to least 50.1% of the face value of the Watagan Bonds, the put option will be deemed to have been exercised as to all of the bonds. In accordance with the Watagan Agreements, if Yankuang becomes the sole bondholder of the Watagan Bonds following the purchase of the Watagan Bonds by Yankuang consequent to the exercise of the put option, certain bondholder rights including the right to nominate a majority of the board of directors, would terminate, and these rights would revert to the Company as the sole shareholder of Watagan. Watagan would thereafter owe an amount payable to Yankuang for the face value of the put bonds, minus any capitalised interest. Watagan would separately pay to the exercising Bondholders the accrued interest and any capitalised interest on the put bonds.

If (i) Bondholders holding a sufficient proportion of the principal amount of the Watagan Bonds exercise their put option to Yankuang such that Yankuang acquires all of the bonds, (ii) Watagan fully redeems the Watagan Bonds or (iii) certain other events occur (such as a change to the terms and conditions of the Watagan Bonds that gives us the power to nominate the majority of the board of Watagan) that would result in us regaining control of Watagan, we will be required to reconsolidate Watagan as a subsidiary into our consolidated financial statements from the time that control is determined to be regained. We do not currently have any plan or intention to effect the early redemption of the Watagan Bonds.

Upon reconsolidation we will: (i) cease to recognise interest income on the Watagan Loan, which in the year ended 31 December 2017 and the six months ended 30 June 2018 was A$67 million and A$32 million, respectively, as well as forgo the margin recognised under the various service agreements, and de-recognise the Watagan loan receivable, which as at 30 June 2018 was drawn to A$730 million, as these amounts will become intercompany balances and eliminate on consolidation; (ii) recognise an interest expense on the Watagan Bonds (or the Yankuang loan payable if the put option has been fully exercised), which during the year ended 31 December 2017 and the six months

ended 30 June 2018 was A$102 million and A$35 million, respectively, and recognise the fair value of the Watagan Bonds at that time, which as at 30 June 2018 had a book value of A$1,049 million; and (iii) recognise the operating results of Watagan, including the three Watagan Mines, in our statement of profit and loss and recognise the fair value of the assets and liabilities of Watagan (including the Watagan Bonds) on our balance sheet at that time. In 2016 and 2017 and the six months ended 30 June 2017 and 2018, Watagan had loss after tax of A$162 million, A$58 million, A$7 million and A$90 million, respectively. See note 23(a) to the Accountants' Report of the Group in Appendix IA to this prospectus for further stand-alone financial information of Watagan during the Track Record Period.

The loss after tax of A$162 million in 2016 was due in significant part to the Austar mine only commencing longwall mining activities in the Bellbird South area half way through the year following a fatal incident in the Stage 3 area in 2014. The improvement in performance to a loss after tax of A$58 million in 2017 was primarily due to an improvement in coal prices between the periods and a full year of production at Austar, partially offset by an increase in finance costs primarily due to an additional A$30 million of interest owing to the bondholders due to Watagan achieving an EBITDA related threshold. The loss of A$90 million in the six months ended 30 June 2018 was primarily due to a significant reduction in production at the Austar mine due to the occurrence of multiple coal bursts resulting in repeated shutdowns during the period. See "*Risk Factors – We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of operations*" and "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents and outcomes may occur, including permanent shutdown. Investigations into challenging geological structures at Austar may lead to similar outcomes, including permanent shutdown*".

Since Watagan has thus far been loss-making and, moreover, has incurred ordinary course depreciation and amortisation, the book value of Watagan's net assets has declined since inception and at 30 June 2018 was negative A$311 million as noted in Appendix IA to this prospectus. While the book value decline is not necessarily an indicator of Watagan's fair value, if the fair value of Watagan's net assets is negative (meaning that the value of its assets is lower than the value of its liabilities, including any outstanding loan balances) at the time of reconsolidation, goodwill will be recognised by us. This goodwill will be subject to impairment testing based on the cash generating units to which it is allocated. To the extent that any goodwill recognised cannot be supported by an impairment model, it will be written off by us as a loss on acquisition. Similarly, if prior to reconsolidation, and whilst we recognise a loan receivable from Watagan, there is any such determination of a decline in the fair value of Watagan, this would trigger an impairment assessment of the carrying value of the outstanding balance of the Watagan Loan. As at 30 June 2018, the total assets of the Company were A$11,914 million and the total liabilities of the Company were A$6,649 million, and the total assets of Watagan were A$1,783 million and the total liabilities of Watagan were A$2,094 million. The impact of reconsolidating Watagan as at 30 June 2018, without reflecting any fair value adjustments that may arise on reconsolidation (including the recognition of any potential goodwill as noted above), and after intercompany balance eliminations of A$827 million for both total assets and total liability, would be material. Our gearing ratio (which is calculated as gross debt divided by total equity at the end of the relevant period) would exhibit a material increase from our gearing ratio of 0.81x as at 30 June 2018, primarily due to Watagan's interest-bearing debt and negative equity position as at that date.

During the Track Record Period, Donaldson's remaining Abel underground mine was moved to a care and maintenance phase and feasibility studies have subsequently commenced to explore potential future mining operations. In addition, multiple incidents have recently occurred in Austar's Bellbird South area due to coal bursts and other occurrences. These incidents have resulted in property and site damage and consequent loss of production and shutdowns, including as a result the regulator issuing notices to stop production for periods of time, during the Track Record Period. Ongoing work and investigations are being undertaken by Watagan in respect of the very challenging geological and geotechnical conditions at the Austar mine, including both the Bellbird South and Stage 3 areas that may have a significant adverse impact on future commercial operations, including, potentially, permanent shutdown. See "*Risk Factors – Multiple coal bursts and other incidents have occurred at the Austar mine which have resulted in property and site damage, production shutdowns and fatalities, and further such incidents or outcomes may occur, including permanent shutdown*" for further details.

The future prospects of the Donaldson and Austar mines are therefore uncertain, and will depend upon the work currently being conducted by Watagan and its advisers. If it is determined, by Watagan, that either or both mines are unable to restart operations or return to previously forecast levels of production or there are materially negative changes to other operating assumptions, including coal prices, exchange rates, operating costs or capital expenditure, it is likely that the fair value of these mines, and therefore Watagan, would be reduced materially. In that event, a material impairment charge may be recognised on the Watagan loan receivable, prior to reconsolidation, or any goodwill recognised on reconsolidation. In addition, the Bondholders may be more inclined to exercise the put option which, as described above, will result in the reconsolidation of Watagan. We do not control Watagan and as such are not able to control or predict the amount of any such impairment or the extent of the resulting effect on our financial condition and results of operations, which could be material and adverse.

See "*Risk Factors – We will be required to reconsolidate Watagan once we reacquire control of it, which could result in adverse consequences to our financial condition and results of operations*" for further details.

SIGNIFICANT FACTORS AFFECTING OUR RESULTS OF OPERATIONS AND FINANCIAL CONDITION

Our results of operations and financial condition have been, and are expected to continue to be, affected by a variety of factors, including those set forth below:

Demand for Our Coal Products

Our financial results are largely dependent on the demand for thermal and metallurgical coal, which in turn depends on macroeconomic trends, including regional and global economic activity, and the price and availability of alternative forms of energy production. In addition, our customers are located throughout the Asia-Pacific region, with South Korea, the PRC, Singapore and Japan comprising our largest jurisdictions by revenue during the Track Record Period. Consequently, major regional events which may affect coal supply and demand, such as Cyclone Debbie adversely affecting coal production in Queensland in March 2017, a severe 2017-2018 winter season in the PRC which increased demand and changes in coal supply and consumption policies in the PRC and elsewhere, may result in significant fluctuations in demand and, in turn, price volatility.

Thermal coal is primarily used in electricity generation and its end users are typically power and utilities companies. According to the Industry Report, aggregate electricity generation from coal in the PRC, Japan and South Korea, which are some of

our key markets in the Asia-Pacific region, increased from 4,389 billion kWh in 2015 to 4,625 billion kWh in 2017, representing a CAGR of 2.7%. This has partially contributed to an increase in aggregate demand for imported thermal coal in these countries from 395 Mt in 2015 to 458 Mt in 2017, representing a CAGR of 7.6%.

Metallurgical coal is primarily used to produce coke for blast furnace steel production. End users of metallurgical coal are thus typically steel plants. According to the Industry Report, aggregate crude steel production in the PRC, Japan and South Korea increased from 979 Mt in 2015 to 1,007 Mt in 2017, representing a CAGR of 1.5%. This has partially contributed to an increase in aggregate demand for imported metallurgical coal in these countries from 153 Mt in 2015 to 176 Mt in 2017, representing a CAGR of 7.6%.

We also sell coal to customers in the commodities trading business, who purchase our coal for trading purposes or to on-sell the coal to their end customers. Commodities traders are similarly exposed to global and regional demand trends in the coal market. As a result, fluctuations in their demand for coal products may directly affect their purchases from us. We sell to coal traders primarily to (i) enable access into markets where we have no direct relationship with end users and (ii) provide flexibility to sell any short-term unsold positions. Once we have developed relationships with new end users, we may opt to sell to them directly rather than through coal traders. For example, during the Track Record Period, we implemented a sales strategy of shifting away from coal traders in Singapore to sell directly to end users, which resulted in an overall decrease in the percentage of revenue attributable to customers located in Singapore, though total revenue from Singapore increased in line with our overall sales growth.

In November 2018, China imposed a quota on imports of coal, following which China has halted coal imports for the remainder of the year. We believe that this development will not have a material impact on us. However, if the Chinese government were to impose stricter import quotas for 2019 or future periods, our revenues and results of operations in future periods could be adversely affected, unless we are able to find alternative destinations for the coal we designate for export to China.

Price and Sales Volume of Coal

Our revenue is determined by the sale price and sales volume of our coal. The sale price depends on market demand and macroeconomic trends as discussed above. The table below sets forth, for the periods indicated, a breakdown of our ex-mine[(1)] sales volume and average selling price between thermal and metallurgical coal[(2)], presented on an attributable basis:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
Thermal coal					
Average selling price (A$ per tonne)	68	71	102	90	117
Sales volume (Mt)	8.1	8.8	15.5	4.9	13.8
Total ex-mine thermal coal revenue (A$ million)	548	617	1,585	447	1,607
Average Newcastle 6,000 NAR spot price (A$ per tonne)[(3)]	76	90	115	107	135

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
Metallurgical coal					
Average selling price (A$ per tonne)	100	106	165	174	191
Sales volume (Mt)	5.3	3.3	3.8	1.3	2.4
Total ex-mine metallurgical coal revenue (A$ million)	526	350	619	224	468
Average premium hard-coking coal FOB spot price (A$ per tonne)(3)	118	195	246	240	273
Total coal					
Average selling price (A$ per tonne)	80	80	114	108	128
Sales volume (Mt)	13.4	12.1	19.3	6.2	16.2
Total ex-mine coal revenue (A$ million)	1,074	967	2,204	671	2,075
Coal purchases(4)	214	232	355	164	156
Other(5)	–	–	64	–	19
Total coal revenue from customers	1,288	1,199	2,623	835	2,250

Notes:

(1) Ex-mine coal represents coal directly produced at our mines, and excludes coal purchased from other parties.

(2) Includes our attributable interest in production from (a) in 2015, the Moolarben, Yarrabee, Stratford Duralie and Watagan mines, (b) in 2016, the Moolarben, Yarrabee, Stratford Duralie and Watagan mines (until 31 March 2016), (c) in 2017, the Moolarben, Yarrabee, Stratford Duralie, and C&A mines (HVO (67.6%) and MTW (64.1%), from 1 September 2017) and (d) in 2018, the Moolarben, Yarrabee, Stratford Duralie, and C&A mines (HVO (67.6% until 30 April 2018 and 51% thereafter) and MTW (64.1% until 28 February and 82.9% thereafter). Does not include the results of Middlemount, which is an incorporated joint venture in which we hold a 49.9997% interest. For accounting purposes, we equity account for our share of the profit or loss after tax of Middlemount as a single line item.

(3) According to the Industry Report. The A$ per tonne is calculated at an US$:A$ foreign exchange rate of 1.33, 1.35, 1.30, 1.33 and 1.33 in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. The average premium HCC price represents the most readily-available index price for metallurgical coal.

(4) Represents sales made as part of our coal blending strategy attributable to coal purchased from related parties and third parties and any increase or decrease in ex-mine revenue recognised on coal purchased from our mines. See "– *Description of Major Line Items in Our Consolidated Statements of Profit or Loss and Other Comprehensive Income – Coal Purchases*" for further details.

(5) Other coal revenue mainly represented acquisition accounting fair value adjustments with respect to the below market customer contract with BLCP, which we took on as part of the C&A Acquisition and which obligates us to deliver coal to BLCP at a price that we deem to be below market relative to our long-term coal price forecast.

Sales price

Regional and global trends in the demand for coal, taken together with coal supplies, are key drivers of prevailing market prices for coal. According to the Industry Report, in general, the majority of export coal is priced starting from supply contracts negotiated between Japanese end users (primarily utilities companies for thermal coal and steel mills for metallurgical coal) and Australian coal producers, from which the benchmark prices are established. The supply contracts have historically been negotiated on an annual basis but have more recently shifted to a quarterly basis. Coal sales are then priced by reference to this benchmark and adjusted for quality and loading port costs. In 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, our average selling price per tonne for thermal coal was A$68, A$71, A$102, A$90 and A$117, respectively, while our average selling price per tonne for metallurgical coal was A$100, A$106, A$165, A$174 and A$191, respectively. While we did not experience any significant fluctuations in our average selling prices in 2015 and 2016, we had a significant increase in 2017 and the six months ended 30 June 2018, primarily due to:

(i) supply-side measures implemented by the PRC in late 2016 to curb domestic coal production, which had the effect of supporting global coal prices. This resulted in a significant increase in the global price for both thermal and metallurgical coal. Thermal prices increased from approximately US$50 per tonne to US$100 per tonne and semi-soft coking coal increased from approximately US$70 per tonne to US$130 per tonne. These developments contributed to increases in our prices towards the end of 2016 and for much of the first quarter of 2017;

(ii) Cyclone Debbie which struck Queensland in March 2017, causing a significant supply disruption in thermal and metallurgical coal;

(iii) industrial action at Glencore's Australian mine sites which supported the thermal coal price;

(iv) long vessel queues at Australia's Queensland ports, which supported the metallurgical coal price; and

(v) low-ash thermal prices continued to strengthen in the first half of 2018 due to a significant tightness in supply out of NSW together with increased demand, while high-ash thermal prices have been supported by higher demand from India.

These factors were partially offset by:

(i) environmental reform policies and the later easing of supply-side restrictions implemented by the Chinese government during part of 2017, which resulted in certain price decreases;

(ii) a softening of prices in the third quarter of 2017, though global prices continued to remain at above US$70 per tonne for thermal coal and above US$100 per tonne for semi-soft coking coal; and

(iii) towards the end of the first half 2018, the Chinese government re-implemented import restrictions on both thermal and metallurgical coal, which led to a decrease in demand.

During the Track Record Period, we largely priced our coal products by reference to the appropriate market price or benchmark, whilst also taking into consideration the quality of the coal relative to the market benchmark. Our customer contracts typically set out the coal sales amount by volume, with price determined either on a quality-adjusted fixed or index-linked price. Over the Track Record Period, we have sought to control our exposure to price volatility by targeting more end users to develop direct business relationships and diversify our customer base, while shifting away from selling to coal traders or engaging the spot market, which is more sensitive to price fluctuations. As a result, our customer base became increasingly dispersed over the Track Record Period. In 2015, 2016 and 2017 and the six months ended 30 June 2018, our top five customers accounted for 47.8%, 38.8%, 32.3% and 33.8% of our revenue, respectively, in the aggregate, and our top three customers accounted for 39.5%, 29.1%, 21.7% and 26.5% of our revenue, respectively, in the aggregate. No single customer represented more than 8.5% of our total revenue in 2017 or 10% in the six months ended 30 June 2018. See "*Business – Customers*" for further details.

The table below sets forth, for the periods indicated, a sensitivity analysis of the impact of hypothetical fluctuations in the average selling price of our coal products on our revenue and profit/loss after tax, assuming a 7% state government royalty and a 30% corporate income tax rate, and excluding the results of Middlemount:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ million		
Thermal coal					
Increase in ASP of 5%					
Revenue	27	31	79	22	80
Profit/loss after tax	18	20	52	15	52
Decrease in ASP of 5%					
Revenue	(27)	(31)	(79)	(22)	(80)
Profit/loss after tax	(18)	(20)	(52)	(15)	(52)
Increase in ASP of 10%					
Revenue	55	62	159	45	161
Profit/loss after tax	36	40	103	23	105
Decrease in ASP of 10%					
Revenue	(55)	(62)	(159)	(45)	(161)
Profit/loss after tax	(36)	(40)	(103)	(29)	(105)
Metallurgical coal					
Increase in ASP of 5%					
Revenue	26	18	31	11	23
Profit/loss after tax	17	11	20	7	15
Decrease in ASP of 5%					
Revenue	(26)	(18)	(31)	(11)	(23)
Profit/loss after tax	(17)	(11)	(20)	(7)	(15)

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Increase in ASP of 10%					
Revenue	53	35	61	22	47
Profit/loss after tax	34	23	40	15	30
Decrease in ASP of 10%					
Revenue	(53)	(35)	(61)	(22)	(47)
Profit/loss after tax	(34)	(23)	(40)	(15)	(30)
Total coal					
Increase in ASP of 5%					
Revenue	54	48	110	34	104
Profit/loss after tax	35	31	72	22	68
Decrease in ASP of 5%					
Revenue	(54)	(48)	(110)	(34)	(104)
Profit/loss after tax	(35)	(31)	(72)	(22)	(68)
Increase in ASP of 10%					
Revenue	107	97	220	67	208
Profit/loss after tax	70	63	144	44	135
Decrease in ASP of 10%					
Revenue	(107)	(97)	(220)	(67)	(208)
Profit/loss after tax	(70)	(63)	(144)	(44)	(135)

Sales volume

In 2015, 2016, and 2017 and the six months ended 30 June 2017 and 2018, our sales volume for thermal coal was 8.1 Mt, 8.8 Mt, 15.5 Mt, 4.9 Mt and 13.8 Mt, respectively, while our sales volume for metallurgical coal was 5.3 Mt, 3.3 Mt, 3.8 Mt, 1.3 Mt and 2.4 Mt, respectively, in each case exclusive of sales of purchased coal. Thermal coal sales volume increased during the Track Record Period due to the C&A Acquisition in 2017 and the expansion of Moolarben from 9.0 Mtpa ROM in 2015 to 17.0 Mtpa ROM in 2018 (on a 100% basis). Metallurgical coal sales volume decreased in 2016 due to the deconsolidation of the Austar, Ashton and Donaldson mines and increased in 2017 and the six months ended 30 June 2018 with the C&A Acquisition. Our coal sales volume is largely dependent on our production volume and transportation capacity. In particular, our ability to increase our sales volume in line with our planned growth strategies relies on efficiently increasing both our production capacity and transportation capacity over time to respond suitably to coal demand. Conversely, any bottlenecks in respect of either capacity could restrict our growth potential.

Production volume

We produced coal at five mine complexes (HVO (which is operated as an unincorporated joint venture with Glencore), MTW, Moolarben, Yarrabee and Stratford Duralie) as at 30 June 2018, all located across Australia. As at 31 December 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, our total saleable

production volume for thermal coal was 8.1 Mt, 8.8 Mt, 15.5 Mt, 5.2 Mt and 14.4 Mt, respectively, while our total saleable production volume for metallurgical coal was 5.2 Mt, 3.3 Mt, 3.8 Mt, 1.3 Mt and 2.6 Mt, respectively. Similar to our sales volumes, our production volume has historically grown organically, through a mix of capital investment in the expansion and upgrade of existing mines, as well as inorganically, through significant acquisitions that we have undertaken, particularly during the Track Record Period. See "– *Acquisitions, Disposals and Deconsolidation*".

With respect to growth through acquisitions, during the Track Record Period we most notably acquired C&A in September 2017 for US$2.69 billion, which included interests in two mine complexes. The C&A Acquisition increased our total ROM production volume by approximately 152% based on 2017 annual ROM production. We intend to continue to expand our production capacity both organically and inorganically in the future, which will require significant further investments. See "*Business – Our Business Strategies*" and "*Risk Factors – We may experience difficulty in integrating our acquisitions, which could result in a material adverse effect on our business, financial condition and results of operations"* for further details.

Transportation capacity

We primarily rely on rail and port networks in Australia to transport our products to our customers. The rail networks that we utilise include:

- the Hunter Valley rail network to transport coal from the HVO, MTW, Moolarben and Stratford Duralie mines to PWCS and NCIG;

- the Blackwater rail network to transport coal from the Yarrabee mine to WICET and RGTCT; and

- with respect to the Middlemount JV, the Goonyella railway system to transport coal from the Middlemount mine to APCT.

In 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, we transported 13.3 Mt, 12.0 Mt, 19.3 Mt, 6.5 Mt and 16.6 Mt, respectively, of coal products through the rail networks available to us (excluding Middlemount). Over the Track Record Period, we did not experience any shortage of railway capacity for transportation of our coal. We do not have any priority or exclusivity over railway utilisation. Given the location of the mines, the bulk nature of coal and the export nature of all of our coal, we expect to continue to rely extensively on rail networks for our coal transportation needs to port in respect of both maintaining support for our current transportation needs (including the C&A mines that we acquired) as well as any future transportation needs arising out of mines under exploration or development coming into production.

We have contracted five port terminals in three locations in Australia (two in Queensland and one in New South Wales) for our freight transport needs. Our total freight allocation (on a 100% basis including Middlemount) across PWCS, NCIG, WICET, RGTCT and APCT was 60.8 Mtpa as at both 30 June 2018 and 31 December 2017, 32.6 Mtpa as at 31 December 2016 and 28.9 Mtpa as at 31 December 2015. As at the Latest Practicable Date, we were also a 30.0% equity shareholder in PWCS, a 27.0% shareholder in NCIG and held 9.38% voting entitlements in WICET. We believe that shareholding in ports generally provides us with better access to capacity commitments from these ports. As our mines under exploration or development enter production, we intend to increase our freight allocation by contracting for additional capacity with these ports. We may also identify additional ports to contract with, depending on business needs, location and other commercial considerations.

We currently have excess port capacity commitments across our NSW operations (where the substantial majority of our coal production volume is generated), which allows us to increase production volume at our existing mines and bring new mines online in the near future without experiencing significant bottlenecks in our port capacity. However, excess capacity also results in incurred costs for us. We generally contract for both our port and rail capacity under long-term take-or-pay contracts, under which we are required to pay for the contracted port or rail tonnage regardless of whether it is utilised. Unused port or rail capacity can arise as a result of circumstances including insufficient production from any given mine, or an inability to transfer the unused capacity due to a lack of demand from third parties. As a result, we constantly aim to achieve a sustainable balance between our contracted transportation capacity (taking into account potential fluctuations in production volume) and our costs incurred for excess capacity. With this aim in mind, in 2017 we reduced our take-or-pay exposure to A$65 million (including take-or-pay contracts obtained under the C&A Acquisition) from A$74 million in 2016 (on a 100% basis including Middlemount) by (i) increasing our production, particularly at Moolarben, and (ii) utilising opportunities to trade port capacity commitments with other coal producers who need additional capacity from time to time on a spot basis. In the medium to long-term, we aim to reduce our overall take-or-pay exposure in NSW by continuing to seek opportunities for organic growth and capture savings as a result of economies of scale, as well cancelling the long-dated rollovers on certain contracts, which reduces our overall port capacity in the longer term to align more closely with our actual expected production. See "*– Description of Major Line Items in Our Consolidated Statements of Profit and Loss and Other Comprehensive Income – Transportation*" for further details on our transportation costs and a sensitivity analysis of hypothetical fluctuations in our transportation costs during the Track Record Period.

See "*Business – Infrastructure, Transportation and Logistics*" and "*Risk Factors – Fluctuations in transportation costs and disruptions to our railway and port linkages could disrupt our coal deliveries and adversely affect our business, financial condition and results of operations*" for further details.

Operating and Production Costs

Our all-in total production costs, which include cash and non-cash operating costs, represent costs directly attributable to the production, transportation and selling of coal as well as indirect corporate costs, in particular corporate employee costs, but excluding transaction costs incurred on the C&A Acquisition and in connection with the Listing. Cash operating costs comprise the cost of raw materials and consumables used, employee benefits, contractual services and plant hire and transportation. Non-cash operating costs include depreciation and amortisation. See "*– Description of Major Line Items in Our Consolidated Statements of Profit or Loss and Other Comprehensive Income*" for further details on the nature of our cash operating costs and "*– Review of Historical Results of Operations*" for a discussion of the year-on-year changes and trends in these line items. Our total production cost per sales tonne, excluding royalties, was A$84, A$74, A$76, A$77 and A$81 in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. The decrease in 2016 was primarily due to the deconsolidation of the Watagan underground mines and reduced operations at Stratford Duralie, together with ongoing cost saving initiatives across all sites. The increase in 2017 and 2018 was primarily due to the additional depreciation and amortisation of property, plant and equipment and mining tenements recognised on the C&A Acquisition and an increase in raw materials and consumables used.

Given the significant amounts of our production costs, our profitability is directly affected by our ability to control them. At the same time, we must balance cost considerations with ensuring that we have a reliable and adequate supply of materials and manpower in order to carry out our operations at the scale that we seek to achieve or maintain. These costs may fluctuate significantly due to market or other forces which may be out of our control. For example, our suppliers for raw materials and consumables may experience changes in their own operating or supply costs, which they may pass on to us. Similarly, changes in macroeconomic conditions may affect the cost and availability of labour, which, depending on our own staffing needs as we adjust our operating scale through capital expenditure, acquisitions and disposals, may result in us incurring higher average labour costs in certain periods than others. See "*Risk Factors – Our coal production is subject to conditions and events beyond our control that could result in high expenses and decreased supply*" for further details.

The table below sets forth, for the periods indicated, a breakdown of our total production costs:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ million		
Cash operating costs					
Raw materials and consumables used	213	187	349	109	337
Employee benefits	229	188	302	102	254
Transportation	261	267	312	122	274
Contractual services and plant hire	218	121	241	69	196
Cash operating costs (excluding royalties)	921	763	1,204	402	1,061
Royalties	77	71	173	53	161
Total cash operating costs	998	834	1,377	455	1,222
Non-cash operating costs					
Depreciation and amortisation	200	133	256	80	244
Total production costs	1,198	967	1,633	535	1,466
Total production costs (excluding royalties)	1,121	896	1,460	482	1,305

During the Track Record Period, the overall increase in total production costs (excluding royalties) was in line with the overall increase in production volume and revenue, particularly when taking into account the Moolarben expansion and the operating results of C&A. Our production costs in the future are likely to continue to be driven by material changes in the amount of coal produced and to a lesser extent by the cost per tonne produced.

The table below sets forth, for the periods indicated, a breakdown of our total production costs per sales tonne, excluding the impact of movements in coal inventory:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
	A$ per tonne				
Cash operating costs					
Raw materials and consumables used	16	15	18	18	21
Employee benefits	17	16	15	16	16
Transportation	20	22	16	20	17
Contractual services and plant hire	16	10	13	11	12
Cash operating costs (excluding royalties)	69	63	62	65	66
Royalties	6	6	9	9	10
Cash operating costs	75	69	71	74	76
Non-cash operating costs					
Depreciation and amortisation	15	11	14	12	15
Total production costs	90	80	85	86	91
Total production costs (excluding royalties)	84	74	76	77	81

During the Track Record Period, our total production costs (excluding royalties) decreased from A$84 per saleable tonne in 2015 to A$81 per saleable tonne in the six months ended 30 June 2018. Our cash operating cost per sales tonne before royalties was A$69, A$63, A$62, A$65 and A$66 in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. The decrease in 2016 was primarily due to the deconsolidation of the Watagan underground mines and reduced operations at Stratford Duralie, together with ongoing cost saving initiatives across all sites. Between 2016 and 2017, there was a slight decrease from A$63 to A$62 per sales tonne, and between the six months ended 30 June 2017 and the six months ended 30 June 2018 there was a slight increase from A$65 to A$66 per sales tonne. Cash operating costs between these periods remained relatively unchanged despite an increase in market-driven costs of consumables such as diesel and electricity and despite the fact that in each of the former periods Moolarben (which is a low cost mine that is in the first quartile

of the cash cost curve) had a materially high weighting in our overall portfolio. While HVO and MTW are higher operating cost mines than Moolarben, they still fall within the second quartile of the cash cost curve (and rank higher than Moolarben on the cash margin curve) and as such are considered low cost mines. See "*Industry Overview – Competitive Landscape – Cost Competitiveness Analysis*". Our total production costs in the future are likely to continue to be driven by material changes in the amount of coal produced at each site, further synergies from the C&A Acquisition and further cost saving initiatives.

The table below sets forth, for the periods indicated, a breakdown of our total and per tonne production costs by: (i) workforce employment; (ii) consumables; (iii) fuel, electricity, water and other utilities services; (iv) contractual services and plant hire, (v) on and off-site administration; (vi) environmental protection and monitoring; (vii) transportation of workforce; (viii) product marketing and transport; (ix) non-income taxes, royalties and other governmental charges; and (x) contingency allowances, in each case as applicable.

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ million		
Cash operating costs					
Workforce employment	227	184	299	100	253
Consumables	149	138	248	76	227
Fuel, electricity, water and other utilities services	64	49	101	33	109
Contractual services and plant hire	195	110	213	62	181
On and off site administration	17	14	22	5	12
Environmental protection and monitoring	8	5	9	4	5
Transportation of workforce	–	–	–	–	–
Product marketing and transport	261	267	312	122	274
Non-income taxes, royalties and other government charges	77	71	173	53	161
Contingency allowances	–	–	–	–	–
Total cash operating costs	998	838	1,377	455	1,222

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ per tonne		
Cash operating costs					
Workforce employment	17	15	15	16	16
Consumables	11	11	13	12	14
Fuel, electricity, water and other utilities services	5	4	5	5	7
Contractual services and plant hire	15	9	12	10	11
On and off site administration	1	1	1	1	1
Environmental protection and monitoring	1	1	–	1	–
Transportation of workforce	–	–	–	–	–
Product marketing and transport	19	22	16	20	17
Non-income taxes, royalties and other government charges	6	6	9	9	10
Contingency allowances	–	–	–	–	–
Total cash operating costs	75	69	71	74	76

Workforce employment

Workforce employment primarily consists of salaries, wages, benefits, short-term and long-term incentives and employee onboarding costs for all our employees. Workforce employment amounted to A$227 million, A$184 million, A$299 million, A$100 million and A$253 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, with per tonne workforce employment costs of A$17, A$15, A$15, A$16 and A$16, respectively. The decrease in per tonne costs was primarily due to the deconsolidation of the Watagan Mines, the expansion of Moolarben and the C&A Acquisition.

Consumables

Our consumables include maintenance, explosives, tyres and other general consumables. Consumables used amounted to A$149 million, A$138 million, A$248 million, A$76 million and A$227 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, with per tonne consumables used of A$11, A$11, A$13, A$12 and A$14, respectively. The increase in per tonne costs in 2017 and the six months ended 30 June 2018 was primarily due to larger truck fleets at the acquired C&A mines due to longer haulage distances.

Fuel, electricity and water

Fuel, electricity and water amounted to A$64 million, A$49 million, A$101 million, A$33 million and A$109 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, with per tonne fuel, electricity and water costs of A$5, A$4, A$5, A$5 and A$7 over the same period with the increase in the six months ended 30 June 2018 primarily due to an increase in diesel and electricity prices.

Contractual services and plant hire

Contractual services and plant hire primarily consists of contractors, including contract mining, consultants and equipment hire costs, but excluding contracted service expenses for environmental protection and monitoring. These costs amounted to A$195 million, A$110 million, A$213 million, A$62 million and A$181 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, with per tonne costs of A$15, A$9, A$12, A$10 and A$11, respectively. The decrease in 2016 was primarily due to the deconsolidation of the Watagan mines and the shift in Stratford Duralie's operations from outsourced contractual management to an insourced owner-operator model. The increase in 2017 was primarily due to the acquisition of C&A mines which utilise a significant number of contractors and hire equipment. We believe that contractual services and plant hire costs are most appropriately categorised as a separate component of cash operating costs. In particular, contractual services and plant hire costs include contractors who are not full-time workforce employees nor administrative in nature, as well as equipment hires which are not consumables nor used for transportation.

On and off site administration

On and off site administration primarily consists of administrative expenses, including legal, accounting and tax and other professional service fees, and excluding transaction costs incurred on the C&A Acquisition and in connection with the Listing. These costs amounted to A$17 million, A$14 million, A$22 million, A$5 million and A$12 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, with per tonne on and off site administration costs of A$1 in each period.

Product marketing and transport

Product marketing and transport costs consist of our transport costs incurred primarily in connection with the cost of transporting our coal products to customers, including handling and delivery of coal from our mines to the relevant port via rail for export to overseas end customers (typically on a FOB basis). Our transportation costs amounted to A$261 million, A$267 million and A$312 million, A$122 million and A$274 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, with per tonne costs of A$19, A$22, A$16, A$20 and A$17, respectively. The increase in per tonne costs in 2016 was primarily due to an increase in take-or-pay port commitments. The decrease in 2017 and the six months ended 30 June 2018 was primarily due to lower average rail costs and spreading our take-or-pay port exposure across a larger transport volume.

Non-income taxes, royalties and other government charges

Non-income taxes, royalties and other government charges consist of royalties paid to the governments of New South Wales and Queensland on coal produced in these states. These royalties amounted to A$77 million, A$71 million, A$173 million, A$53 million and A$161 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, with per tonne costs of A$6, A$6, A$9, A$9 and A$10, respectively. The increase in 2017 and the six months ended 30 June 2018 was primarily due to the increase in average selling prices and the higher volume of coal produced in open-cut mines in part due to the C&A Acquisition. Royalties are determined on an ad valorem basis by reference to the value of the coal sold and the type of mine, with open-cut mines generally having higher royalty rates than underground mines.

Capital Expenditure

We undertake both sustaining and expansionary capital expenditure. Sustaining capital expenditure is generally undertaken to maintain our current level of production for existing operations. Expansionary capital expenditure includes growth projects with the aim of increasing our production. Capital expenditure in respect of mine expansions and business improvement projects was A$159 million, A$237 million, A$165 million, A$87 million and A$19 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively. This was mainly attributable to our Moolarben mine, which during the Track Record Period has expanded from a 9.0 Mtpa ROM mine in 2015 to 14.7 Mtpa in 2017, and which we intend to further expand to 17.0 Mtpa ROM in 2018 (each on a 100% basis). Capital expenditure investments in Moolarben primarily consisted of developing and expanding the open cut portions of the mine as well as the underground complex, together with investments in the equipment needed. We undertake expansionary capital expenditure following a strict business case analysis, including in respect of viability, source and cost of funds and the timing and sensitivity to movements in coal prices. We also incurred exploration expenditure of A$2.7 million, A$0.4 million, A$2.8 million, A$1.4 million and A$1.9 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, in relation to mines in operation, which we capitalised. See "– *Capital Expenditure*" for a breakdown of our total capital expenditure during the Track Record Period.

The costs associated with capital expenditure plans could have a significant impact on our financial condition and results of operations, particularly if we are unable to generate sufficient coal production and sales to recover our investment or generate a profit. See "*Risk Factors – We may not be able to meet our capital expenditure requirements or secure additional financing on favourable terms, whether from external sources or our major shareholders, in the future*" for further details.

Financing Arrangements and Interest Rate Movements

We operate in a capital-intensive industry that requires a significant investment of funds. We have historically relied heavily on borrowings from banks and related parties, including Yanzhou, our direct Controlling Shareholder, for these funding needs. As at 31 December 2015, 2016 and 2017 and 30 June 2018, our total interest-bearing loans and lease liabilities amounted to A$4,732 million, A$4,950 million, A$4,699 million and A$4,284 million, respectively, of which the majority were subject to floating interest rates based on US$ LIBOR and secured against corporate guarantees from Yanzhou and certain of our assets. See "– *Indebtedness*" for further details. Our finance costs, which primarily consist of interest expenses on our borrowings as well as bank fees and other charges associated with those borrowings (which are classified under other operating

expenses) amounted to A$278 million, A$323 million, A$403 million, A$154 million and A$214 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, for an average cost of funds of 6.45%, 7.29%, 7.93%, 7.85% and 8.42%, respectively. Given that global interest rates are currently increasing and are expected to further increase in the foreseeable future, our finance costs could increase as well. See "*Risk Factors – We are exposed to fluctuations in exchange rates and interest rates*" for further details.

At the same time, we also derive interest income from loans to other parties. For example, as part of the transfer of interest in the Ashton, Austar and Donaldson mines to Watagan on 31 March 2016, the purchase consideration was effectively funded through a loan provided to Watagan bearing interest at the bank bill swap bid rate plus 7.06%. The loan matures in 2025 and is repayable earlier at Watagan's option. The transfer of ownership on 31 March 2016 occurred between wholly owned subsidiaries of the Company at book value with the loan representing non-cash consideration.

Foreign Exchange Rate Fluctuations

We have export sales across the Asia-Pacific region and significant debt funding, both largely denominated in US dollars, and our imported plant and equipment may be priced in US dollars or another foreign currency. At the same time, we operate entirely in Australia with an Australian dollar functional currency. As a result, our financial results are exposed to foreign exchange rate movements, particularly those relating to the Australian dollar and US dollar rate exchange rate.

During the Track Record Period, the A$:US$ exchange rate experienced frequent fluctuations. For example, according to the H.10 statistical release of the Federal Reserve Board, the Australian dollar generally weakened against the US dollar throughout 2015 and early 2016, with the A$:US$ ratio reaching a low of approximately 0.6864 as at 16 January 2016. During this time, our US dollar-denominated sales generated higher revenue as reported in Australian dollars (without taking into account fluctuations in coal prices generally). The A$:US$ rate then gradually strengthened over 2016 and 2017 to reach a high of approximately 0.8071 as at 8 September 2017, during which time our sales and costs experienced the inverse effect.

As foreign exchange rates can vary significantly based on factors outside our control, we seek to hedge our currency exposures. We apply a natural hedge strategy whereby the scheduled repayment of our US dollar denominated loans is nominated against forecast US dollar denominated revenue in the future period matching the scheduled loan repayment date. Through this strategy any unrealised foreign exchange rate gains or losses incurred through the periodic translation of the US dollar denominated loans is deferred on the balance sheet within a hedge reserve. This hedge reserve reverses to the profit and loss in the financial period corresponding with the scheduled loan maturity date. We also enter short term forward exchange contracts to manage the currency exposure between the invoice date of US dollar denominated sales and the cash collection date. Our hedging policy aims to protect against reduced collection of receivables and to reduce the volatility of our US dollar debt. See "*– Qualitative and Quantitative Disclosures on Market Risk"* and "*Risk Factors – We are exposed to fluctuations in exchange rates and interest rates*" for further details.

Taxation

As all our operating entities and operational activities, including those of C&A, are located in Australia, we are generally subject to the statutory corporate tax rate in Australia of 30%. Broadly, as we recorded a loss before income tax in 2015 and 2016 and the six months ended 30 June 2017, we recorded an income tax benefit of A$63 million, A$85 million and A$4 million, respectively. On the other hand, we had profit before income tax in 2017 and the six months ended 30 June 2018, resulting in an income tax expense of A$89 million and A$178 million, respectively. As a result of accumulated tax losses incurred through 2016, we did not pay any cash income tax during the Track Record Period, and do not expect to pay any cash income tax for the near future as we continue to carry forward, and expect to recoup, our prior tax losses. As at 30 June 2018, we had approximately A$2.4 billion of available carried forward tax losses which can be applied to reduce future liability for income tax on our taxable profits, so long as they remain available. Our ability to use these carried forward tax losses will depend, in part, on our continued satisfaction of the loss recoupment tests under Australian tax laws. See "*Risk Factors – The Company may lose the benefit of existing and carried forward tax losses, which may have an adverse effect on its profits*" for further details.

Our effective income tax benefit/expense rate was 17.8%, 27.2%, 26.6%, 22.2% and 33.0% in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, which was lower than the statutory tax rate. This was primarily due to non-temporary differences arising (i) in 2015 and 2016, from non-deductible expenses and prior year under or over provisions for taxes, (ii) in 2015 and 2017, from share of profit or loss non-deductible of equity-accounted investees and (iii) in the six months ended 30 June 2018, from non-deductible expenses, in particular, the impairment of investments in GILTs and WIPs in connection with the WICET senior debt refinancing. See note 10 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details. We expect taxation to continue to materially affect our operating results going forward, regardless of whether we generate a profit before tax or not.

In addition, our tax expenses are not currently affected by the tax benefits/expenses of Watagan. While Watagan is part of the tax consolidated Group, each member entity of the Group is responsible for its own tax obligations. As Watagan is currently deconsolidated for accounting purposes, any resultant tax expense or benefit of Watagan results in a payable or receivable balance between us and Watagan, but the Group's overall tax expenses are otherwise not affected by Watagan.

Impact of Acquisitions, Disposals and Deconsolidation

We have historically have a number of significant transactions in the form of acquisitions, disposals and deconsolidation which had a substantial impact on our historical financial results. See "– *Acquisitions, Disposals and Deconsolidation*" for further details. We may continue to explore and evaluate undertaking these and similar types of transactions going forward, which may further impact our financial results, including to a degree where prior periods are not necessarily comparable with future periods.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

This discussion and analysis of our financial position and results of operations is based on our consolidated financial statements, which have been prepared in accordance with IFRS. The preparation of our consolidated financial statements requires management to make estimates, judgments and assumptions that affect the

reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities at the end of each reporting period. Uncertainty about these estimates and assumptions could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods. Our more critical accounting policies and significant estimates, assumptions and judgments are described below. See notes 4 and 5 to the Accountants' Report of the Group in Appendix IA in this prospectus for further details on our accounting policies, judgments and estimates.

Business Combinations

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs incurred to effect a business combination are recognised in profit or loss as incurred.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date, except that:

- deferred tax assets or liabilities arising from the assets acquired and liabilities assumed in the business combination are recognised and measured in accordance with IAS 12 *Income Taxes*;

- assets or liabilities related to the acquiree's employee benefit arrangements are recognised and measured in accordance with IAS 19 *Employee Benefits*;

- liabilities or equity instruments related to share-based payment transactions of the acquiree or the replacement of the acquiree's share-based payment transactions with the share-based payment transactions of the Group are measured in accordance with IFRS 2 *Share-based Payment* at the acquisition date (see the accounting policy below); and

- assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* are measured in accordance with that standard.

Goodwill is measured as the excess of the aggregate of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of our previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after re-assessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the aggregate of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognised immediately in profit or loss as a gain on bargain purchase.

Non-controlling interests, unless as required by another standards, are measured at acquisition-date fair value except for non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation are measured either at fair value or at the present ownership instruments' proportionate share in the recognised amounts of the acquiree's identifiable net assets on a transaction-by-transaction basis.

Where the consideration transferred by the Group in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with the corresponding adjustments being made against goodwill or gain on bargain purchase. Measurement period adjustments are adjustments that arise from additional information obtained during the measurement period about facts and circumstances that existed as of the acquisition date. Measurement period does not exceed one year from the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounting for within equity. Contingent consideration that is classified as an asset or a liability is remeasured at subsequent reporting dates at fair value with corresponding gain or loss being recognised in profit or loss.

When a business combination is achieved in stages, our previously held equity interest in the acquiree is remeasured to fair value at the acquisition date (i.e., the date when we obtain control), and the resulting gain or loss, if any, is recognised in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in other comprehensive income are reclassified to profit or loss where such treatment would be appropriate if that interest were disposed of.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, we report provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (see above), or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognised as of that date.

Interests in Other Entities

Associates

Associates are all entities over which we have significant influence but not control or joint control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting, after initially being recognised at cost. Our investments in associates includes goodwill identified on acquisition.

Our share of our associates' post-acquisition profits or losses is recognised in profit or loss, and our share of post-acquisition other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. Dividends receivable from associates are recognised as a reduction in the carrying amount of the investment.

When our share of losses in an associate equals or exceeds our interest in the associate (which includes any long-term interests that, in substance, form part of our net investment in the associate), we do not recognise further losses, unless we have incurred obligations or made payments on behalf of the associate.

Unrealised gains on transactions between us and our associates are eliminated to the extent of the our interest in the associates. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the associates have been changed where necessary, to ensure consistency with the policies adopted by us.

Joint arrangements

A joint arrangement is a contractual arrangement whereby two or more parties undertake economic activities under joint control. Joint control exists only when the strategic, financial and operational policy decisions relating to the activities of the joint arrangement require the unanimous consent of the parties sharing control.

A joint arrangement is either a joint operation or a joint venture. The structure of each joint arrangement is analysed to determine whether the joint arrangement is a joint operation or a joint venture. The classification of a joint arrangement is dependent on the rights and obligations of the parties to the arrangement.

Joint operations

We recognise our proportional right to the assets, liabilities, revenues and expenses of joint operations and its share of any jointly held or incurred assets, liabilities, revenues and expenses. These have been incorporated in the financial statements under the appropriate headings.

Joint ventures

A joint venture is structured through a separate vehicle and the parties have rights to the net assets of the arrangement. Joint ventures are accounted for using the equity method where the assets and liabilities will be aggregated into one line item on the face of the consolidated statements of financial position, after adjusting for the share of profit or loss after tax, which is shown as a separate line item on the face of the consolidated statements of profit or loss and other comprehensive income, after adjusting for amounts recognised directly in equity.

When our share of losses in a joint venture equals or exceeds our interest in the joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the joint venture), we do not recognise further losses, unless we have incurred obligations or made payments on behalf of the joint venture.

Unrealised gains on transactions between us and our joint ventures are eliminated to the extent of our interest in the joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary, to ensure consistency with the policies adopted by us.

Coal Reserves and Resources

We estimate our coal resources and reserves based on information compiled by competent persons as defined by the JORC Code and the ASX Listing Rules.

Mineral resources and ore reserves are based on geological information and technical data relating to the size, depth, quality of coal, suitable production techniques and recovery rates. Such an analysis requires complex geological judgements to interpret the data. The estimation of recoverable reserves is based on factors such as estimates of foreign exchange rates, coal price, future capital requirements, rehabilitation obligations and production costs, along with geological assumptions and judgements made in estimating the size and quality of the reserves. Management forms a view of forecast sales prices based on current and long-term historical average price trend.

As the economic assumptions used may change and as additional geological information is produced during the operations of a mine, estimates of reserves may change. Additionally the amount of reserves that may actually be mined in the future and our current reserve estimate may vary. Such changes may impact our reported financial position and results including:

- the carrying value of the exploration and evaluation assets, mine properties, property, plant and *equipment* and goodwill may be affected due to changes in estimated future cash flows;

- depreciation and amortisation charges in the statement of profit and loss and other *comprehensive* income may change where such charges are determined using the units of production method, or where the useful life of the related assets change; and

- the carrying value of deferred income tax assets may change due to changes in the judgements regarding the existence of such assets and in estimates of the likely recovery of such assets.

Revenue Recognition

Revenue is recognised when the control of the products or services has transferred to the customer. Revenue is measured at the amount of consideration to which we expect to be entitled in exchange for transferring control of products or services to the customer. Amounts disclosed as revenue are net of returns, trade allowances, rebates and amounts collected on behalf of third parties.

Descriptions of our performance obligations in contracts with customers and significant judgments applied in revenue recognition are as follows:

Sales of coal

We produce and sell a range of thermal and metallurgical coal products. Revenue from the sale of coal is recognised when control of the product has transferred to the customer. Control of the product is considered transferred to the customer at a point in time which is the time of delivery, usually on a Free On Board ("**FOB**") basis or a Cost and Freight ("**CFR**") basis. For CFR contracts the performance obligation relating to freight services is accounted for as a separate performance obligation pursuant to IFRS 15. On occasion revenue from the sale of coal is recognised as the ship pulls into harbour on a Free Alongside Ship ("**FAS**") basis or from the stockpile on an ex-works basis. The adoption of IFRS 15 has not had, and is not expected to have, a significant effect on our financial position or performance.

A receivable is recognised when the products are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due. Payment of the transaction price is usually due within 21 days of the date when control of the products is transferred to the customer.

Some of our coal sales contracts are long-term supply agreements which stipulate the nominal annual quantity and price negotiation mechanism. For those contracts, the actual quantity and transaction price applicable for future shipments are only negotiated or determined prior to the beginning of, or a date which is after, each contract year or delivery period. The transaction price for a future shipment is based on, or derived from, a market price prevailing at the time of the future shipment. As the future market price for coal is highly susceptible to factors outside the Group's influence, the transaction price for a shipment is not readily determinable until or nearing the time of the shipment. As a result, we have concluded that a contract with the customer does not exist for those shipments for which the actual delivery quantity and transaction price have not yet been negotiated or determined.

Other revenue

Interest

Interest income from a financial asset is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts the estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount. Interest income from a finance lease is recognised over the term of the lease based on a pattern reflecting a constant periodic rate of return on the net investment in the lease.

Mining services fees

We provide corporate support services, IT services and mining services which relates to the management of mines. The management and mining service agreements stipulate a fixed monthly service fee and payment of the service fees is usually due within 21 days after the end of each calendar month in which the service is rendered. Revenue from providing management and mining services is recognised in each month in which the services are rendered.

Sea freight services

When contracts for sale of coal include freight on a CFR basis the performance obligation associated with providing the shipping is separately measured and recognised as the service is provided.

Other

Other primarily consists of dividends, rents, sub-lease rental and management fees. Dividends are recognised as revenue when the right to receive payment is established, it is probable that the economic benefits associated with the dividend will flow to us and the amount of the dividend can be measured reliably. Rental income arising on land surrounding a mine site is accounted for on a straight-line basis over the lease term. Contingent rental income is recognised as income in the periods in which it is earned. Management fees are recognised upon the delivery of the service to the customer.

Other income

Gain on acquisition is recognised in line with the accounting for business combinations.

Taxation

The income tax expense or benefit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate enacted or substantially enacted at the end of the reporting period for each jurisdiction, adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses. The carrying value of the deferred tax asset is reviewed at each reporting period and reduced to the extent that it is no longer probable that future taxable profit will be available to allow all or part of the asset to be recovered.

Deferred tax liabilities and assets are recognised for taxable temporary differences between the carrying amount and tax bases of investments in controlled entities, except where the parent entity is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where we have a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Current and deferred tax is recognised in the profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

Property, Plant and Equipment

Items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses. The cost includes expenditure directly attributable to the acquisition of the items and the estimated restoration costs associated with the asset.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of any component accounted for as a separate asset is derecognised when replaced. All other repairs and maintenance are charged to profit or loss during the reporting period in which they are incurred.

Mine development assets include all mining related development expenditure that is not included under land, buildings and plant and equipment.

The open pit operations capitalise mine development costs including both direct and indirect costs incurred to remove overburden and other waste materials to enable access to the coal seams during the development of a mine before commercial production commences, and during future development of new open pit mining areas. Amortisation of those capitalised costs over the life of the operation commences at the time that commercial production begins for the mine for the new open pit mining area.

Underground mine development costs include both direct and indirect mining costs relating to underground longwall panel development and mains development (primary access/egress roads for the mine).

Mains development costs are capitalised net of the coal sales revenue earned from coal extracted as part of the mains development process. These capitalised costs are amortised over the life of the mine if the roads service the entire mine or over the life of the panels accessible from those mains if shorter than the mine life.

A regular review is undertaken of each area of interest to determine the appropriateness of continuing to carry forward mine development costs in relation to that area of interest. Accumulated costs in relation to an abandoned area are written off in full in the period in which the decision to abandon the area is made.

Assets under construction represent production site development projects under construction for production or for its own use purposes. Assets under construction are carried at cost less any impairment loss. Costs included costs of constructing the production plant and acquisition of mining rights, mining permits and licenses that form an integral part of the overall development projects. Assets under construction are classified to the appropriate category of property, plant and equipment or intangible assets when completed and ready for intended use. Depreciation or amortisation commences when the assets are ready for their intended use.

Open cut

During the commercial production stage of open pit operations, production stripping costs comprises the accumulation of expenses incurred to enable access to the coal seam, and includes direct removal costs (inclusive of an allocation of overhead expenditure) and machinery and plant running costs.

Production stripping costs are capitalised as part of an asset, if it can be demonstrated that it is probable that future economic benefits will be realised, the costs can be reliably measured and the entity can identify the component of the ore body for which access has been improved. The asset is called "stripping activity asset" included in mine development.

The stripping activity asset is amortised on a systematic basis, over the expected useful life of the identified component of the ore body that becomes more accessible as a result of the stripping activity. The units of production method shall be applied.

Production stripping costs that do not satisfy the asset recognition criteria are expensed.

Depreciation and amortisation

The depreciable amount of all fixed assets, excluding freehold land, is depreciated on a straight-line or units of production basis over the asset's useful life to us based on life of mine plans and JORC estimated reserves, commencing from the time the asset is held ready for use. Leased assets are depreciated over the asset's useful life or over the shorter of the asset's useful life and the lease term if there is no reasonable certainty that we will obtain ownership at the end of the lease term. Leasehold improvements are depreciated over the period of the lease or estimated useful life, whichever is the shorter, using the straight-line method.

For some assets, the useful life of the asset is linked to the level of production. In such cases, depreciation is charged on a units of production basis based on the recoverable reserves or the remaining useful hours. For example, the cost of mining development is depreciated using the unit of production method based on the estimated production volume for which the structure was designed. The management exercises their judgment in estimating the useful lives of the depreciable assets and the production volume of the mine. The estimated coal production volumes are updated at regular intervals and have taken into account recent production and technical information about each mine. These changes are considered a change in estimate for accounting purposes and are reflected on a prospective basis in related depreciation rates. Estimates of the production volume are inherently imprecise and represent only approximate amounts because of the subjective judgements involved in developing such information. Alternatively, the straight-line method may be used where this provides a suitable alternative because production is not expected to fluctuate significantly from one year to another.

Mining reserve and mining resources are amortised on a straight line basis or unit of production basis over the shorter of their useful lives and the contractual period. The expensing of overburden removal costs is based on saleable coal production over estimated economically recoverable reserves. The useful lives are estimated on the basis of the total proven and probable reserves of the mine. Proven and probable mining reserve estimates are updated at regular intervals and have taken into account recent production and technical information about each mine.

The estimated useful lives, residual values and depreciation method are reviewed at the end of each annual reporting period and any change in estimate is taken into account in the determination of remaining depreciation charges.

The estimated useful lives are as follows:

- Buildings 10 – 25 years
- Mine development 10 – 40 years
- Plant and equipment 2.5 – 40 years
- Leased plant and equipment 2 – 20 years

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Any gain or loss arising on the disposal of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

Mining Tenements

Mining tenements have a finite useful life and are carried at cost less any accumulated amortisation and impairment losses. Mining tenements are amortised from the date when commercial production commences, or the date of acquisition. Amortisation is calculated over the life of the mine on a 'units of production' method based on the JORC estimated reserves.

Changes in the annual amortisation rate resulting from changes in the remaining estimated reserves, are applied on a prospective basis from the commencement of the next financial year. Every year the mining tenement's carrying amount is compared to its recoverable amount and assessed for impairment, or for possible reversals of prior year impairment (see the accounting policy in respect of impairment losses on tangible and intangible assets below).

Exploration and Evaluation Assets

Exploration and evaluation expenditure incurred is accumulated in respect of each separately identifiable area of interest which is at the individual exploration permit or licence level. These costs are only carried forward where the right of tenure for the area of interest is current and to the extent that they are expected to be recouped through successful development and commercial exploitation, or alternatively, sale of the area, or where activities in the area have not yet reached a stage which permits reasonable assessment of the existence of economically recoverable reserves and active and significant operations in, or in relation to, the area of interest are continuing.

Exploration and evaluation assets acquired in a business combination are recognised at their fair value at the acquisition date. The carrying amount of exploration and evaluation assets are assessed for impairment when facts or circumstances suggest the carrying amount of the assets may exceed their recoverable amount. A regular review is undertaken for each area of interest to determine the appropriateness of continuing to carry forward costs in relation to each area of interest. Accumulated costs in relation to an abandoned area are written off in full in the period in which the decision to abandon the area is made.

Once the technical feasibility and commercial viability of the extraction of mineral resources in an area of interest are demonstrable, the exploration and evaluation assets attributable to that area of interest are first tested for impairment and then reclassified to mining tenements.

Interest-bearing Liabilities

Interest-bearing liabilities (excluding financial guarantees) are initially recognised at fair value, net of transaction costs. They are subsequently measured at amortised cost using the effective interest rate method. US dollar interest bearing loans are designated as a hedge instrument in a cash flow hedge.

Leases

Property, plant and equipment held by us under leases that transfer substantially all of the risks and rewards of ownership to us are classified as finance leases.

The leased property, plant and equipment are initially measured at an amount equal to the lower of their fair value and the present value of the minimum lease payments. Subsequently they are accounted for in accordance with the property, plant and equipment accounting policy.

The corresponding minimum lease payments are included in lease liabilities within interest bearing liabilities. Each lease payment is allocated between finance cost and a reduction in the outstanding lease liability. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

The net gains arising on the sale of an asset and the leasing back of the same asset using a finance lease are included as deferred income in the statement of financial position and are released to the profit or loss on a straight-line basis over the term of the lease.

We expect to adopt IFRS 16 on leases commencing from 1 January 2019, which may affect our accounting results for leases going forward. See "*Risk Factors – The future adoption of IFRS 16 on the accounting treatment of our leases may impact our financial results*" for further details.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of assets that necessarily take a substantial period of time to prepare for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

All other borrowing costs are recognised as an expense in the period in which they are incurred.

DESCRIPTION OF MAJOR LINE ITEMS IN OUR CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

The table below sets forth our consolidated statements of profit or loss for the periods indicated:

	Year ended 31 December						Six months ended 30 June			
	2015		2016		2017		2017		2018	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
	A$ million	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*
Revenue	1,319	100.0	1,238	100.0	2,601	100.0	832	100.0	2,347	100.0
Other income	34	2.6	15	1.2	325	12.5	8	1.0	115	4.9
Changes in inventories of finished goods and work in progress	2	0.2	(7)	(0.6)	7	0.3	10	1.2	24	1.0
Raw materials and consumables used	(213)	(16.2)	(187)	(15.1)	(349)	(13.4)	(109)	(13.1)	(337)	(14.3)
Employee benefits expenses	(229)	(17.4)	(188)	(15.2)	(302)	(11.6)	(102)	(12.3)	(254)	(10.8)
Depreciation and amortisation	(200)	(15.2)	(133)	(10.7)	(256)	(9.8)	(80)	(9.6)	(244)	(10.4)
Transportation	(261)	(19.8)	(267)	(21.6)	(312)	(12.0)	(122)	(14.7)	(274)	(11.7)
Contractual services and plant hire	(218)	(16.5)	(124)	(10.0)	(274)	(10.5)	(90)	(10.8)	(206)	(8.8)
Government royalties expense	(77)	(5.8)	(71)	(5.7)	(173)	(6.7)	(53)	(6.4)	(161)	(6.9)
Changes in deferred mining costs	(7)	(0.5)	–	–	–	–	–	–	–	–
Coal purchases	(158)	(12.0)	(211)	(17.0)	(340)	(13.1)	(148)	(17.8)	(182)	(7.7)
Other operating expenses	(147)	(11.1)	(163)	(13.2)	(330)	(12.7)	(76)	(9.1)	(170)	(7.2)
Finance costs	(162)	(12.3)	(209)	(16.9)	(294)	(11.3)	(105)	(12.6)	(152)	(6.5)
Share of profit/(loss) of equity-accounted investees, net of tax	(37)	(2.8)	(5)	(0.4)	32	1.2	17	2.0	33	1.4
Profit/(loss) before income tax	(354)	(26.8)	(312)	(25.2)	335	12.9	(18)	(2.2)	539	23.0
Income tax (expense)/benefit	63	4.8	85	6.9	(89)	(3.4)	4	0.5	(178)	(7.6)
Profit/(loss) after income tax	(291)	(22.0)	(227)	(18.3)	246	9.5	(14)	(1.7)	361	15.4
Other comprehensive income for the year	(319)		63		404		274		(141)	
Total comprehensive income for the year	(610)		(164)		650		260		220	

Revenue

We present revenue in our consolidated statements of profit or loss as revenue from continuing operations, which primarily consists of revenue from sales to external customers (including both sales of coal produced from our operating mines and coal which we purchase from third party suppliers and onsell to customers). We then adjust revenue from external customers for fair value losses recycled from our hedge reserve in order to present segment revenue. To a lesser extent, our revenue also includes interest income, mining services fees, and other revenue. The table below sets forth, for the periods indicated, a reconciliation and breakdown of components of our revenue:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Revenue from external customers	1,288	1,199	2,623	835	2,250
Fair value losses recycled from hedging reserve[(1)]	(22)	(133)	(229)	(101)	(45)
Total segment revenue	1,266	1,066	2,394	734	2,205
Interest income	50	125	114	57	58
Mining services fees	–	38	52	29	26
Sea freight	–	–	12	–	37
Other revenue	3	9	29	12	21
Total revenue from continuing operations	1,319	1,238	2,601	832	2,347

Note:

(1) The scheduled repayment of the principal amounts on our U.S. dollar denominated loans are designated to hedge the cash flow risks on the portion of forecast U.S. dollar denominated sales that are not hedged through bank-issued instruments, resulting in a natural cash flow hedge. Unrealised foreign exchange gains or losses arising on the translation of hedged U.S. dollar denominated loans are deferred on our balance sheet to a cash flow hedge reserve in equity. Such deferred gains or losses attributable to a U.S. dollar denominated loan are then recycled to the income statement, in the future, during the six-month period in which the loan is scheduled to be repaid. During the Track Record Period this has resulted in net foreign exchange losses previously recognised in the hedge reserve being recycled to the income statement. Net unrealised hedge losses have resulted from a general weakening of the Australian dollar against the U.S. dollar resulting in an increase in the Australian dollar translated liability recognised on the balance sheet. As at 30 June 2018, we had A$791 million of unrealised foreign exchange losses before tax and A$554 million of unrealised foreign exchange losses after tax deferred on our balance sheet in equity. See "*Risk factors – We do not make use of hedging instruments to hedge foreign exchange risks in respect of U.S. dollar denominated loans, and the natural cash flow hedge created by hedging a portion of these loans against our U.S. dollar denominated sales may not be sufficient to offset our foreign exchange losses*".

Revenue from external customers

Our customers are primarily located in the Asia-Pacific region. The table below sets forth, for the periods indicated, a breakdown of our revenue from external customers by jurisdiction, as determined based on the jurisdiction in which the customer is located:

	Year ended 31 December						Six months ended 30 June			
	2015		2016		2017		2017		2018	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
	A$ million	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*
Australia	28	2.2	69	5.7	322	12.2	118	14.1	228	10.1
Singapore	315	24.4	261	21.8	337	12.9	161	19.3	451	20.0
South Korea	427	33.2	296	24.7	415	15.8	181	21.7	333	14.8
PRC	107	8.3	179	14.9	654	24.9	196	23.5	479	21.3
Japan	152	11.8	143	11.9	489	18.7	99	11.9	440	19.6
Taiwan	68	5.3	93	7.8	131	5.0	24	2.9	210	9.3
Others[(1)]	191	14.8	158	13.2	275	10.5	56	6.6	109	4.9
Total revenue from external customers	1,288	100.0	1,199	100.0	2,623	100.0	835	100.0	2,250	100.0

Note:

(1) Includes Malaysia, Vietnam, Thailand, India, Indonesia and Chile.

During the Track Record Period, our largest jurisdictions by revenue were the PRC, South Korea, Singapore and Japan. Revenue from the PRC increased at the fastest pace, from A$107 million in 2015 to A$654 million in 2017, representing 8.3% and 24.9% of our total revenue from external customers in the same years, respectively. Revenue from the PRC also increased from A$196 million in the six months ended 30 June 2017 to A$479 million in the six months ended 30 June 2018, representing 23.5% and 21.3% of our total revenue from external customers in the same periods, respectively. Import restrictions were imposed by the PRC government prior to 2015, resulting in a decrease in sales. Since then, we have employed dedicated sales staff for the PRC to work closely with potential customers in order to establish new business into the PRC in compliance with the import restrictions imposed, which has led to entering into long-term contracts with Chinese end customers.

Revenue from South Korea and Singapore as a percentage of our total revenue from external customers decreased at the fastest pace during the Track Record Period, from 33.2% and 24.4% in 2015, respectively, to 15.8% and 12.9% in 2017, respectively. Lower sales in South Korea in 2016 were partly the result of the deconsolidation of the Ashton, Austar and Donaldson mines, while lower sales in Singapore in 2016 were partly the result of our strategy to shift away from coal traders to coal end customers, for whom our sales are more profitable. The increase in absolute sales in South Korea and Singapore in 2017 was due to the increase in production volume driven by the C&A Acquisition. Total revenue from South Korea and Singapore in 2017 was largely in line with revenue in 2015. In the six months ended 30 June 2018 compared to the six months ended 30 June 2017, revenue from South Korea decreased from 21.7% of our total revenue from external customers to 14.8% of such revenue, while revenue from Singapore as a percentage of total revenue remained stable at 20.0% and 19.3% in those periods, respectively.

Revenue from Australia and Japan also saw an overall increase from 2015 to 2017 in terms of both absolute amounts and as a percentage of our total revenue. Revenue from Australia as a percentage of our total revenue then declined in the six months ended 30 June 2018 compared to the six months ended 30 June 2017, while revenue from Japan as a percentage of our total revenue increased over this period. For both jurisdictions, revenue increased in terms of absolute amounts over this period. The overall increases in revenue from Australia were primarily driven by the C&A Acquisition, which included an increase in sales made to other Australian coal companies. Similarly, the overall increases in revenue from Japan were primarily driven by the C&A Acquisition, with the quality of coal from the HVO and MTW mines being suitable for the Japanese market.

See "*– Significant Factors Affecting Our Results of Operations and Financial Condition – Price and Sales Volume of Coal*" for further details.

Segment revenue

We categorise our operating segments as (i) our coal mining segment, which consists of the New South Wales sub-segment and the Queensland sub-segment, where all our owned mines in operation are located and (ii) our corporate segment. We present our segment revenue net of intersegment sales, which are eliminated on consolidation. The table below sets forth, for the periods indicated, a breakdown of our segment revenue as reconciled with revenue from external customers:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ million		
Revenue from external customers					
New South Wales	998	873	2,163	616	2,051
Queensland	290	326	460	219	199
Corporate	–	–	–	–	–
Total	1,288	1,199	2,623	835	2,250
Fair value losses recycled from hedge reserve					
New South Wales	–	–	–	–	–
Queensland	–	–	–	–	–
Corporate	(22)	(133)	(229)	(101)	(45)
Total	(22)	(133)	(229)	(101)	(45)
Total segment revenue					
New South Wales	998	873	2,163	616	2,051
Queensland	290	326	460	219	199
Corporate	(22)	(133)	(229)	(101)	(45)
Total	1,266	1,066	2,394	734	2,205

Our New South Wales segment consists of revenue from the Moolarben, HVO, MTW and Stratford Duralie mines. Our Queensland segment consists of revenue from the Yarrabee mine. The increase in revenue reported in the New South Wales segment in 2017 and the six months ended 30 June 2018 resulted from the inclusion of sales from C&A from 1 September 2017.

Fair value losses recycled from hedge reserve represent retranslation losses on our US dollar-denominated loans which are attributable to changes in US$:A$ foreign exchange rates. Under our natural hedge policy, such losses are recycled to the income statement based on the scheduled loan maturity dates. The amount of any fair value loss or gain recycled from the hedge reserve in a period is a function of the amount of the hedged US dollar loan scheduled to mature in that period and the respective US$:A$ exchange rates at the time the hedge was put in place and at the time the loan matured. See note 6 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details.

Interest income, mining services fees and other revenue

Interest income primarily consists of interest generated on our loan to Watagan, which we provided in 2016 to finance Watagan's purchase of control of the Austar, Ashton and Donaldson mines from us, while we retain full ownership interest in those mines. The loan is scheduled to be repaid in 2025. See "*– Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation*" for further details.

Mining services fees primarily consist of fees that we charge for providing management services to the Austar, Ashton and Donaldson mines on behalf of Watagan and in 2017 and the six months ended 30 June 2018 for the management of the Cameby Downs and Premier mines on behalf of Yanzhou. In 2015 and 2016 the fees charged to the Cameby Downs and Premier mines were credited against the corporate costs incurred, mainly employee benefits. See "*Business – Our Mining Operations – Managed Mines*" for further details.

Sea freight revenue is recognised on a CFR contract, held by C&A, where the customer pays for the coal supplied inclusive of the sea freight incurred on transporting the coal from Australia to the discharge port. The sea freight component is recognised separately from revenue from coal sales. No sea freight was recognised prior to the C&A Acquisition.

Other revenue primarily consists of management fees charged for operating the unincorporated mine joint ventures.

Other Income

Our other income during the Track Record Period primarily consisted of (i) a gain on acquisition of A$177 million in connection with mine assets acquired from C&A benefiting from improved valuation assumptions on the completion date compared to the date of determining the acquisition price, (ii) a reversal of impairment of mining tenements of A$100 million for the Moolarben mine and (iii) a fair value gain on refinancing our secured bank loan at a lower margin of A$31 million on the adoption of IFRS 9. The gain on acquisition, reversal of impairment of mining tenements and the refinance gain were recorded in 2017. Our other income in the six months ended 30 June 2018 of A$115 million primarily consisted of (i) a gain on disposal of A$78 million on the sale of a 16.6% interest in HVO to Glencore and (ii) net foreign exchange gains of A$30 million primarily on US$ cash balances. Our other income in the six months ended 30 June 2017 primarily consisted of a one-off receipt from a joint venture partner. Our other income in 2015 and 2016 primarily consisted of net gains on foreign exchange.

Raw Materials and Consumables Used

Our raw materials and consumables used includes diesel, consumables, maintenance, explosives, tyres, electricity and other general consumables. The table below sets forth, for the periods indicated, a breakdown of our raw materials and consumables used:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Diesel	45	37	80	26	84
Consumables	40	29	68	22	57
Maintenance	53	44	66	18	69
Explosives	26	36	62	21	50
Tyres	16	17	29	9	28
Electricity	18	11	20	6	25
Other	15	13	24	7	24
Total raw materials and consumables used	213	187	349	109	337

Raw materials and consumables used amounted to A$213 million, A$187 million, A$349 million, A$109 million and A$337 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 16.2%, 15.1%, 13.4%, 13.1% and 14.3% of our total revenue in the same periods, respectively. Per tonne raw materials and consumables used were A$16, A$15, A$18, A$18 and A$21 over the same period.

The table below sets forth a sensitivity analysis of hypothetical fluctuations in the cost of utilities (consisting of diesel and electricity) on our profit/loss after tax:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Impact on profit/loss after tax of increase in utilities costs of:					
5%	(2)	(2)	(3)	(1)	(4)
10%	(4)	(3)	(7)	(2)	(8)
Impact on profit/loss after tax of decrease in utilities costs of:					
5%	2	2	3	1	4
10%	4	3	7	2	8

Raw materials and consumables used attributable to underground development is capitalised as mine development and amortised in future periods.

Employee Benefits Expenses

Employee benefits expenses consist of salaries, wages, benefits, short-term and long-term incentives and employee on-costs for all our employees. Employee benefits expenses amounted to A$229 million, A$188 million, A$302 million, A$102 million and A$254 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 17.4%, 15.2%, 11.6%, 12.3% and 10.8% of our total revenue in the same periods, respectively. Per tonne employee benefits expenses were A$17, A$16, A$15, A$16 and A$16 over the same period. In addition to employee benefits expenses recognised in our consolidated statements of profit and loss, we also capitalised A$45 million, A$26 million, A$17 million, A$6 million and A$1 million in such expenses in these periods, respectively, which related to underground development and the Moolarben expansion.

Depreciation and Amortisation

All fixed assets, excluding freehold land, are depreciated on a straight-line or units of production basis over the asset's useful life. Mining tenements are amortised on a life of mine units of production basis based on estimated reserves. Depreciation and amortisation expenses amounted to A$200 million, A$133 million, A$256 million, A$80 million and A$244 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 15.2%, 10.7%, 9.8%, 9.6% and 10.4% of our total revenue in the same periods, respectively. Per tonne depreciation and amortisation costs were A$15, A$11, A$14, A$12 and A$15 over the same period. See "– *Critical Accounting Policies and Estimates – Property, plant and equipment*" for further details.

Transportation

We incur transportation costs primarily in connection with the cost of transporting our coal products to customers, including handling and delivery of coal from our mines to the relevant port via rail for export to overseas end customers (typically on a FOB basis). The table below sets forth, for the periods indicated, a breakdown of our transportation costs:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ million		
Rail	158	143	165	70	124
Port	91	118	119	47	103
Sea freight	–	–	12	–	37
Other	12	6	16	5	10
Total transportation costs	261	267	312	122	274

Port costs consist of (i) the actual throughput charge incurred on tonnes discharged through the port and (ii) take-or-pay costs incurred on the unutilised capacity and (iii) other adjustments, which mainly include certain non-cash fair value accounting adjustments. The table below sets forth, for the periods indicated, a breakdown of our port costs:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ million		
Port throughput	68	74	100	37	79
Take-or-pay	37	52	42	15	38
Other	(14)	(8)	(23)	(5)	(14)
Total port costs	91	118	119	47	103

Our transportation costs amounted to A$261 million, A$267 million, A$312 million, A$122 million and A$274 million in 2015, 2016 and 2017 in the six months ended 30 June 2017 and 2018, respectively, representing 19.8%, 21.6%, 12.0%, 14.7% and 11.7% of our total revenue in the same periods, respectively. Per tonne transportation costs were A$20, A$22, A$16, A$20 and A$17 over the same period. The table below sets forth, for the periods indicated, a breakdown of our per tonne transportation costs:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
			A$ per tonne		
Rail	12	12	8	11	8
Port					
Throughput	5	6	5	6	5
Take or pay	3	4	2	3	2
Other	(1)	(1)	(1)	(1)	(1)
Subtotal	7	9	6	8	6
Sea freight	–	–	1	–	2
Other	1	1	1	1	1
Per tonne transportation costs	20	22	16	20	17

The table below sets forth a sensitivity analysis of hypothetical fluctuations in transportation costs on our profit/loss after tax:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Impact on profit/loss after tax of increase in transportation costs of:					
5%	(9)	(9)	(11)	(4)	(10)
10%	(18)	(19)	(22)	(9)	(19)
Impact on profit/loss after tax of decrease in transportation costs of:					
5%	9	9	11	4	10
10%	18	19	22	9	19

Contractual Services and Plant Hire

Contractual services and plant hire expenses represent contract labour, including contract mining, consultants and equipment hire costs. Excluding C&A Acquisition transaction costs and costs in connection with the Listing, contractual services and plant hire expenses amounted to A$218 million, A$121 million, A$241 million, A$69 million and A$196 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 16.5%, 9.8%, 9.3%, 8.3% and 8.4% of our total revenue in the same periods, respectively. Per tonne contractual services and plant hire expenses were A$16, A$10, A$13, A$11 and A$12 over the same period. The table below sets forth a sensitivity analysis of hypothetical fluctuations in the cost of contractual services and plant hire on our profit/loss after tax:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Impact on profit/loss after tax of increase in contractual services and plant hire of:					
5%	(8)	(4)	(9)	(2)	(7)
10%	(15)	(9)	(16)	(5)	(14)
Impact on profit/loss after tax of decrease in contractual services and plant hire of:					
5%	8	4	9	2	7
10%	15	9	16	5	14

Government Royalties

Government royalties primarily represent royalties paid to the governments of New South Wales and Queensland on coal produced in these states. Government royalties amounted to A$77 million, A$71 million, A$173 million, A$53 million and A$161 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 5.8%, 5.7%, 6.7%, 6.4% and 6.9% of our total revenue in the same periods, respectively. Royalties are determined on an ad valorem basis by reference to the value of the coal sold and the type of mine, and may be adjusted by the respective state governments separately at their discretion. See "*Appendix IV – Taxation and Regulatory Overview – Regulatory Overview*" and "*Risk Factors – Our business, financial condition and results of operations are subject to government royalties on the production of coal*" for further details.

Coal Purchases

We regularly purchase coal from both related party and third party coal producers located in Australia, which we then on-sell to our customers. Our coal purchases amounted to A$158 million, A$211 million, A$340 million, A$148 million and A$182 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 12.0%, 17.0%, 13.1%, 17.8% and 7.7% of our total revenue in the same periods, respectively. We purchase coal from both related (primarily Watagan) and third parties as part of our coal blending strategy whereby combining the qualities of our own coal with the qualities of others producers' coal results in an enhanced end-product capable of achieving a higher sale price. We do not undertake material amounts of coal purchases for the purpose of coal trading.

Other Operating Expenses

Our other operating expenses amounted to A$147 million, A$163 million, A$330 million, A$76 million and A$170 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, respectively, representing 11.1%, 13.2%, 12.7%, 9.1% and 7.2% of our total revenue in those periods. During the Track Record Period, our other operating expenses primarily consisted of bank fees and other charges incurred in connection with our interest-bearing loans, whereby in addition to the finance costs discussed below, we also incurred bank guarantee fees, which amounted A$116 million, A$113 million, A$109 million, A$49 million and A$62 million, respectively, representing 78.9%, 69.3%, 33.0%, 64.5% and 36.5% of our total other operating expenses in those same periods. In addition, stamp duty incurred in connection with the C&A Acquisition was a major component of our other operating expenses in 2017, amounting to A$167 million and representing 50.6% of our other operating expenses. In the six months ended 30 June 2018, our other operating expenses included A$16 million in stamp duty incurred in connection with the Warkworth Transaction and A$50 million related to the partial impairment of our investment in GILTs and full impairment of our investment in WIPs issued by WICET as a result of the WICET senior debt refinancing, which together represented 38.8% of our other operating expenses in this period. Stamp duty expenses are only incurred if acquisitions are undertaken. Other components of our other operating expenses include travel and accommodation for our staff, net losses on disposal of property, plant and equipment, insurance, and other duties and levies.

Finance Costs

Our finance costs primarily consist of interest expenses incurred on our interest-bearing bank loans, loans from related parties and secured lease liabilities. Our finance costs amounted to A$162 million, A$209 million, A$294 million, A$105 million and A$152 million in 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, representing 12.3%, 16.9%, 11.3%, 12.6% and 6.5% of our total revenue in those periods, respectively. See *"– Indebtedness"* for further details.

Income Tax Expense/Benefit

We are generally subject to the statutory corporate tax rate in Australia of 30%. We recorded a loss before income tax in 2015, 2016 and the six months ended 30 June 2017, resulting in an income tax benefit of A$63 million, A$85 million and A$4 million, respectively. On the other hand, we had profit before income tax in 2017 and the six months ended 30 June 2018, resulting in an income tax expense of A$89 million and A$178 million, respectively. As a result of accumulated tax losses incurred through 2016, we did not pay any cash income tax during the Track Record Period, and do not expect to pay any cash income tax for the near future as we continue to carry forward and expect to recoup our prior tax losses. Our effective income tax benefit/expense rate was 17.8%, 27.2%, 26.6%%, 22.2% and 33.0% in the same periods, respectively. See "– *Significant Factors Affecting Our Results of Operations and Financial Condition – Taxation*" and note 10 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details.

Other Comprehensive Income

Our other comprehensive income consists of cash flow hedges involving US dollar denominated interest-bearing liabilities hedged against future coal sales. The table below sets forth, for the periods indicated, a breakdown of our other comprehensive income:

	As at 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Fair value gains/(losses) on US$ interest-bearing liabilities	(475)	(43)	348	290	(246)
Fair value losses transferred to profit or loss	22	133	229	101	45
Deferred income tax benefit/(expense)	134	(27)	(173)	(117)	60
Other comprehensive income/(expense), net of tax	(319)	63	404	274	(141)

REVIEW OF HISTORICAL RESULTS OF OPERATIONS

Six Months Ended 30 June 2018 Compared to Six Months Ended 30 June 2017

The below period-on-period comparison of our financial results in the six months ended 30 June 2018 with the six months ended 30 June 2017 is materially impacted by changes in our portfolio of assets, most significantly:

- The C&A Acquisition from 1 September 2017;
- The Warkworth Transaction from 1 March 2018;
- The Glencore Transaction from 4 May 2018; and
- The expansion of the Moolarben mine from 7.5 Mt ROM in the six months ended 30 June 2017 to 9.8 Mt in the six months ended 30 June 2018 (on a 100% basis).

Revenue

Our total revenue increased by 182% from A$832 million in the six months ended 30 June 2017 to A$2,347 million in the six months ended 30 June 2018, primarily due to a 169% increase in coal sales (which is revenue from external customers excluding revenue from sea freight services of A$37 million in the six months ended 30 June 2018 in accordance with IFRS 15) from A$835 million to A$2,250 million over this period, partially offset by a decrease in fair value losses recycled from the hedge reserve from A$101 million to A$45 million over this period. With respect to coal sales, the key factors were:

(i) an increase in our overall average selling price of coal from A$108 per tonne in the six months ended 30 June 2017 to A$128 per tonne in the six months ended 30 June 2018, mainly as a result of the increase in global coal market prices during this period, including thermal coal market prices increasing by approximately US$22 per tonne and metallurgical coal market prices increasing by approximately US$16 per tonne. Our average selling price of thermal coal increased from A$90 per tonne to A$117 per tonne, while our average selling price of metallurgical coal increased from A$174 per tonne to A$191 per tonne; and

(ii) an increase in our sales volume of coal from 6.2 Mt in the six months ended 30 June 2017 to 16.2 Mt in the six months ended 30 June 2018, mainly as a result of increased production volume from mines in New South Wales due to (a) the C&A Acquisition, for which all of C&A's mines in production are located therein and (b) the expansion of Moolarben from 4.7 Mt in the six months ended 30 June 2017 to 6.5 Mt in the six months ended 30 June 2018 (on an attributable basis).

The increase in production volume in New South Wales, together with the increase in average selling price of coal, resulted in our segment revenue (excluding freight services revenue) for New South Wales increasing from A$616 million in the six months ended 30 June 2017 to A$2,051 million in the six months ended 30 June 2018. Segment revenue for Queensland decreased from A$219 million in the six months ended 30 June 2017 to A$199 million in the six months ended 30 June 2018, primarily due to lower sales volume.

We achieved an increase in revenue (excluding freight services revenue) from external customers across each of our key geographic markets. In particular, we experienced substantial increases in revenue from the six months ended 30 June 2017 to the six months ended 30 June 2018 from (i) A$196 million to A$479 million in the PRC, (ii) A$99 million to A$440 million in Japan and (iii) A$118 million to A$228 million in Australia. The increase in the PRC was primarily due to our efforts to increase sales of our higher ash products to end users in the PRC following the implementation of import restrictions by the Chinese government prior to 2015. The increase in Japan was primarily attributable to the C&A Acquisition, with the quality of coal from the HVO and MTW mines being suitable for the Japanese market. The increase in sales within Australia was also driven by the C&A Acquisition, and included sales made to other Australian coal companies.

See "– *Significant Factors Affecting Our Results of Operations and Financial Condition – Price and Sales Volume of Coal*" for further details.

Other income

Our other income significantly increased from A$8 million in the six months ended 30 June 2017 to A$115 million in 30 June 2018, primarily due to (i) a gain on disposal of A$78 million on the Glencore Transaction and (ii) net foreign exchange gains of A$30 million primarily on US$ cash balances.

Raw materials and consumables used

Our raw materials and consumables increased by 209% from A$109 million in the six months ended 30 June 2017 to A$337 million in the six months ended 30 June 2018, primarily due to the impact of the C&A Acquisition and the Moolarben expansion that contributed to a 165% increase in saleable tonnes. In particular, our diesel costs increased by 223%, primarily due to increased market prices for diesel fuel and larger truck fleets at the acquired C&A mines due to longer hauls. In addition, electricity costs increased by 317% due to increased market prices and the use of electric draglines at the C&A mines. This contributed to an increase in per tonne raw materials and consumables used from A$18 to A$21 over the same period.

Employee benefits expenses

Our employee benefits expenses increased by 149% from A$102 million in the six months ended 30 June 2017 to A$254 million in the six months ended 30 June 2018, primarily due to the increase in overall headcount as a result of the C&A Acquisition and the Moolarben expansion. Employee benefits expenses as a percentage of revenue decreased from 12.3% to 10.8% over the same period, primarily due to the additional sales primarily being attributable to our Tier 1 mines (Moolarben, HVO (which is operated as an unincorporated joint venture with Glencore) and MTW). Per tonne employee benefits expenses were in line at A$16 over both periods.

Depreciation and amortisation

Our depreciation and amortisation expenses increased by 205% from A$80 million in the six months ended 30 June 2017 to A$244 million in the six months ended 2018, primarily due to an increase in mining tenements and plant and equipment of A$2,456 million and A$1,326 million, respectively, primarily from the C&A Acquisition, together with expansionary capital incurred at Moolarben. Per tonne depreciation and amortisation costs increased from A$12 to A$15 over the same period.

Transportation

Our transportation costs increased by 125% from A$122 million in the six months ended 30 June 2017 to A$274 million in the six months ended 30 June 2018, primarily due to increased sales volume of coal requiring additional payments for rail and freight services. However, transportation costs as a percentage of our total revenue decreased from 14.7% to 11.7% in those periods, respectively, primarily due to an increase in revenue and a lower rail cost per tonne on the C&A acquired mines due to their relative proximity to port and less exposure to take-or-pay commitments. This contributed to a decrease in per tonne transportation costs from A$20 to A$17 over the same period, with a A$4 per tonne decrease attributable to a lower average rail cost.

Contractual services and plant hire

Our contractual services and plant hire expenses increased by 129% from A$90 million in the six months ended 30 June 2017 to A$206 million in the six months ended 30 June 2018, primarily due to the C&A Acquisition, as C&A mines utilise a significant number of contractors and hire equipment, as well as professional service fees and other costs incurred in connection with the C&A Acquisition and the Listing. This contributed to an increase in per tonne contractual services and plant hire from A$11 to A$12 over the same period.

Government royalties

Our government royalties expenses increased by 204% from A$53 million in the six months ended 30 June 2017 to A$161 million in the six months ended 30 June 2018, primarily due to increased royalties levied on our increased sales revenue, which were driven by both higher prices and production volumes.

Coal purchases

Our coal purchases increased by 23% from A$148 million in the six months ended 30 June 2017 to A$182 million in the six months ended 30 June 2018, primarily due to an increase in coal blending activity driven by the increase in ex-mine coal production as a result of the C&A Acquisition and the Moolarben expansion. Coal purchases as a percentage of our total revenue decreased from 17.8% to 7.7% over the same period, primarily due to a relatively lower amount of coal blending being undertaken on the C&A sales while we evaluate and adjust to C&A's customer relationships and their coal quality needs, as well as the impact of the new management arrangements at HVO.

Other operating expenses

Our other operating expenses increased by 124% from A$76 million in the six months ended 30 June 2017 to A$170 million in the six months ended 30 June 2018, primarily due to stamp duty incurred in connection with the Warkworth Transaction and A$50 million related to partial impairment of our investment in GILTs and the full impairment of our investment in WIPs as a result of the WICET senior debt refinancing.

Finance costs

Our finance costs increased by 45% from A$105 million in the six months ended 30 June 2017 to A$152 million in the six months ended 30 June 2018, primarily due to an increase in US LIBOR and a weaker Australian dollar. Finance costs as a percentage of revenue decreased from 12.6% to 6.5% over the same period, primarily due to the increase in revenue, including from the equity-funded C&A Acquisition, and the matters noted above.

Loss/profit before tax and loss/profit before tax margin

As a result of the aforementioned reasons, we had a loss before income tax of A$18 million in the six months ended 30 June 2017 and a profit before income tax of A$539 million in the six months ended 30 June 2018. Our loss/profit before income tax margin was (2.2)% and 23.0% in those periods, respectively.

Income tax expense/benefit

We had an income tax benefit of A$4 million in the six months ended 30 June 2017 and an income tax expense of A$178 million in the six months ended 30 June 2018. Our effective income tax benefit/expense rate was 22.2% and 33.0% in the same periods, respectively. Our tax benefit in the six months ended 30 June 2017 was partially offset by a non-deductible share of equity-accounted profit of A$10 million, while our tax expense in the six months ended 30 June 2018 was impacted by non-deductible accounting expenses, including the A$50 million impairment on GILTs and WIPs in connection with the WICET senior debt refinancing.

Loss/profit after tax and loss/profit after tax margin

As a result of the aforementioned reasons, we had a loss after income tax of A$14 million in the six months ended 30 June 2017 and a profit after income tax of A$361 million in the six months ended 30 June 2018. Our loss/profit after income tax margin was (1.7)% and 15.4% in the same periods, respectively.

Year Ended 31 December 2017 Compared to Year Ended 31 December 2016

The below year-on-year comparison of our financial results in 2017 with 2016 is materially impacted by changes in our portfolio of assets, most significantly:

- The C&A Acquisition from 1 September 2017;
- The deconsolidation of Watagan from 31 March 2016; and
- The expansion of the Moolarben mine from 11.8 Mt ROM in 2016 to 13.0 Mt ROM in 2017 (on a 100% basis).

Revenue

Our total revenue increased by 110.1% from A$1,238 million in 2016 to A$2,601 million in 2017, primarily due to a 118.8% increase in coal sales (which is revenue from external customers excluding revenue from sea freight services of A$12 million in 2017 in accordance with IFRS 15) from A$1,199 million in 2016 to A$2,623 million in 2017, partially offset by an increase in fair value losses recycled from the hedge reserve from A$133 million in 2016 to A$229 million in 2017. With respect to coal sales, the key factors were:

(i) an increase in our overall average selling price of coal from A$80 per tonne in 2016 to A$114 per tonne in 2017, mainly as a result of the increase in global coal market prices during this period, including thermal coal market prices increasing by approximately US$20 per tonne and metallurgical coal market prices increasing by approximately US$50 per tonne. Our average selling price of thermal coal increased from A$71 per tonne to A$102 per tonne, while our average selling price of metallurgical coal increased from A$106 per tonne to A$165 per tonne; and

(ii) an increase in our sales volume of coal from 12.1 Mt in 2016 to 19.3 Mt in 2017, mainly as a result of increased production volume from mines in New South Wales due to (a) the C&A Acquisition, for which all of C&A's mines in production are located therein and (b) the expansion of Moolarben from 7.4 Mt in 2016 to 10.2 Mt in 2017.

The increase in production volume in New South Wales, together with the increase in average selling price of coal, resulted in our segment revenue for New South Wales increasing from A$873 million in 2016 to A$2,163 million in 2017, while the increase in segment revenue for Queensland from A$326 million in 2016 to A$460 million in 2017 was more price-driven.

We achieved an increase in revenue from external customers across each of our key geographic markets. In particular, we experienced substantial increases in revenue from 2016 to 2017 from (i) A$179 million to A$654 million in the PRC, (ii) A$143 million to A$489 million in Japan and (iii) A$69 million to A$322 million in Australia. The increase in the PRC was primarily due to our efforts to increase sales of our higher ash products to end users in the PRC following the implementation of import restrictions by the Chinese government prior to 2015. The increase in Japan was primarily attributable to the C&A Acquisition, with the quality of coal from the HVO and MTW mines being suitable for the Japanese market. The increase in sales within Australia was also driven by the C&A Acquisition, and included sales made to other Australian coal companies.

See "– *Significant Factors Affecting Our Results of Operations and Financial Condition – Price and Sales Volume of Coal*" for further details.

Other income

Our other income significantly increased from A$15 million in 2016 to A$325 million in 2017, primarily due to (i) a gain on acquisition of A$177 million in connection with mine assets acquired from C&A benefiting from improved valuation assumptions on the completion date compared to the date of determining the acquisition price, (ii) a reversal of impairment of mining tenements of A$100 million in connection with the Moolarben mine and (iii) a fair value gain on refinancing our secured bank loan at a lower margin of A$31 million on the adoption of IFRS 9.

Raw materials and consumables used

Our raw materials and consumables increased by 86.6% from A$187 million in 2016 to A$349 million in 2017, primarily due to the impact of the C&A Acquisition and the Moolarben expansion that contributed to a 59.9% increase in saleable tonnes. In particular, our diesel costs increased by 116.2%, primarily due to increased market prices for diesel fuel and larger truck fleets at the acquired C&A mines due to longer hauls. This contributed to an increase in per tonne raw materials and consumables used from A$15 to A$18 over the same period.

Employee benefits expenses

Our employee benefits expenses increased by 60.6% from A$188 million in 2016 to A$302 million in 2017, primarily due to the increase in overall headcount as a result of the C&A Acquisition and the Moolarben expansion. Employee benefits expenses as a percentage of revenue decreased from 15.2% to 11.6% over the same period, primarily due to the additional sales primarily being attributable to our Tier 1 mines (Moolarben, HVO and MTW). Per tonne employee benefits expenses decreased slightly from A$16 to A$15 over the same period.

Depreciation and amortisation

Our depreciation and amortisation expenses increased by 92.5% from A$133 million in 2016 to A$256 million in 2017, primarily due to an increase in mining tenements and plant and equipment of A$2,456 million and A$1,326 million, respectively, from the C&A Acquisition, together with expansionary capital incurred at Moolarben. Per tonne depreciation and amortisation costs increased slightly from A$11 to A$14 over the same period.

Transportation

Our transportation costs increased by 16.9% from A$267 million in 2016 to A$312 million in 2017, primarily due to increased sales volume of coal requiring additional payments for rail and freight services. However, transportation costs as a percentage of our total revenue decreased from 21.6% to 12.0% in the same years, respectively, primarily due to an increase in revenue and a lower rail cost per tonne on the C&A acquired mines due to their relative proximity to port and less exposure to take-or-pay commitments. This contributed to a decrease in per tonne transportation costs from A$22 to A$16 over the same period, with a A$4 per tonne decrease attributable to lower average rail cost and A$2 per tonne decrease attributable to spreading our port take-or-pay exposure across a larger transport volume.

Contractual services and plant hire

Our contractual services and plant hire expenses increased by 121.0% from A$124 million in 2016 to A$274 million in 2017, primarily due to the C&A Acquisition, as C&A mines utilise a significant number of contractors and hire equipment, as well as professional service fees and other costs incurred in connection with the C&A Acquisition. This contributed to an increase in per tonne contractual services and plant hire from A$10 to A$13 over the same period.

Government royalties

Our government royalties expenses increased by 143.7% from A$71 million in 2016 to A$173 million in 2017, primarily due to increased royalties levied on our increased sales revenue, which were driven by both higher prices and production volumes.

Coal purchases

Our coal purchases increased by 61.1% from A$211 million in 2016 to A$340 million in 2017, primarily due to an increase in coal blending activity driven by the increase in ex-mine coal production as a result of the C&A Acquisition and the Moolarben expansion. Coal purchases as a percentage of our total revenue decreased from 17.0% to 13.1% over the same period, primarily due to a relatively lower amount of coal blending being undertaken on the C&A sales while we evaluate and adjust to C&A's customer relationships and their coal quality needs.

Other operating expenses

Our other operating expenses increased by 102.5% from A$163 million in 2016 to A$330 million in 2017, primarily due to stamp duty incurred in connection with the acquisition of C&A.

Finance costs

Our finance costs increased by 40.7% from A$209 million in 2016 to A$294 million in 2017, primarily due to (i) an unwinding of discounts on provisions for a below market sales contract, rehabilitation costs and take-or-pay exposure including those acquired with C&A, of A$50 million, (ii) deferred consideration of A$13 million in connection with the C&A Acquisition and (iii) the modification of loans of A$7 million in accordance with IFRS 9. Finance costs as a percentage of revenue decreased from 16.9% to 11.3% over the same period, primarily due to the increase in revenue, including from the equity-funded C&A Acquisition, and the matters noted above.

Loss/profit before tax and loss/profit before tax margin

As a result of the aforementioned reasons, we had a loss before income tax of A$312 million in 2016 and a profit before income tax of A$335 million in 2017. Our loss/profit before income tax margin was 25.2% and 12.9% in those years, respectively.

Income tax expense/benefit

We had an income tax benefit of A$85 million in 2016 and an income tax expense of A$89 million in 2017. Our effective income tax benefit/expense rate was 27.2% and 26.6% in the same years, respectively. Our tax benefits in 2016 were partially offset by non-deductible debt of A$19 million, while our tax expenses in 2017 were partially offset by share of profit of non-deductible equity-accounted investees of A$10 million.

Loss/profit after tax and loss/profit after tax margin

As a result of the aforementioned reasons, we had a loss after income tax of A$227 million in 2016 and a profit after income tax of A$246 million in 2017. Our loss/profit after income tax margin was 18.3% and 9.5% in the same years, respectively.

Year Ended 31 December 2016 Compared to Year Ended 31 December 2015

The below year-on-year comparison of our financial results in 2016 and 2015 is materially impacted by changes in our portfolio of assets, most significantly:

- The deconsolidation of Watagan from 31 March 2016, and
- The expansion of the Moolarben mine from 9.0 Mt ROM in 2015 to 11.8 Mt ROM in 2016 (on a 100% basis).

Revenue

Our total revenue decreased by 6.1% from A$1,319 million in 2015 to A$1,238 million in 2016, primarily due to a 6.9% decrease in coal sales from A$1,288 million in 2015 to A$1,199 million in 2016, partially compounded by an increase in fair value losses recycled from the hedge reserve of A$22 million in 2015 to A$133 million in 2016. With respect to coal sales, the key factor was a decrease in our sales volume of coal from 13.4 Mt in 2016 to 12.1 Mt in 2017, mainly as a result of decreased production volumes from mines in New South Wales as a result of deconsolidation of the Watagan mines, partially offset by the expansion of Moolarben from 5.5 Mt in 2015 to 7.4 Mt in 2016. The decrease in production volume for New South Wales was also in line with the decrease in our segment revenue for New South Wales from A$998 million in 2015 to A$873 million in 2016, while the segment revenue for Queensland slightly increased from A$290 million in 2015 to A$326 million in 2016.

Our overall average selling price of coal remained stable at A$80 per tonne in both 2015 and 2016, mainly as a result of general stagnation experienced in the global coal market during this period. Our average selling price of thermal coal slightly increased from A$68 per tonne to A$71 per tonne, while our average selling price of metallurgical coal increased slightly from A$100 per tonne to A$106 per tonne.

By geographic region, we experienced a decrease in revenue from external customers from 2015 to 2016 primarily in (i) South Korea from A$427 million to A$296 million, respectively, a decrease of 30.7%, (ii) Singapore from A$315 million to A$261 million, respectively, a decrease of 17.1% and (iii) others from A$191 million to A$158 million, respectively, a decrease of 17.3%. The decrease in South Korea was primarily due to the deconsolidation of the Watagan Mines for which South Korean steel mills were one of the major end customers. The decrease in Singapore was due to our efforts to sell more coal to end users and less to traders, who are generally domiciled in Singapore. The decrease in other jurisdictions was driven by our strategy of establishing contracts directly with end-users, therefore making fewer "spot" sales, which we frequently use in our less traditional markets. These decreases were partially offset by an increase in revenue from 2015 to 2016 in (i) the PRC from A$107 million to A$179 million, respectively, an increase of 67.3%, (ii) Australia from A$28 million to A$69 million, respectively, an increase of 146.4% and (iii) Taiwan from A$68 million to A$93 million, respectively, an increase of 36.8%. The increase in sales to the PRC was primarily due to the active marketing of some of our higher ash products and followed a decline in sales prior to 2015 as a result of import restrictions by the Chinese government. The modest increase in Australia was driven by an increased level of trade with fellow Australian coal producers. The increase in Taiwan was primarily due to the timing of a Taiwanese power utility contract commencing in 2016.

See "– *Significant Factors Affecting Our Results of Operations and Financial Condition – Price and Sales Volume of Coal*" for further details.

Other income

Our other income decreased by 55.9% from A$34 million in 2015 to A$15 million in 2016, primarily due to certain income received in 2015 which we did not receive in 2016, including a gain on acquisition of an additional 1% interest in Moolarben, the release of research and development provisions and sundry income.

Raw materials and consumables used

Our raw materials and consumables decreased by 12.2% from A$213 million in 2015 to A$187 million in 2016, primarily due to a 9.1% decrease in saleable tonnes due to the Watagan deconsolidation, partially offset by the Moolarben expansion. Electricity costs and consumables decreased by 38.9% and 27.5%, respectively, as the Watagan underground mines consume relatively large quantities of each. This contributed to a slight decrease in per tonne raw materials and consumables used from A$16 in 2015 to A$15 in 2016.

Employee benefits expenses

Our employee benefits expenses decreased by 17.9% from A$229 million in 2015 to A$188 million in 2016, primarily due to the decrease in headcount costs in line with the decrease in saleable tonnes, as well as lower labour costs following the deconsolidation of Watagan mines, for which the underground mines are more labour intensive. Per tonne employee benefits expenses decreased slightly from A$17 to A$16 over the same period.

Depreciation and amortisation

Our depreciation and amortisation expenses decreased by 33.5% from A$200 million in 2015 to A$133 million in 2016, primarily due to decreases in depreciation of plant and equipment and mine development as a result of the deconsolidation of the capital-intensive Watagan underground mines. For the same reason, depreciation and amortisation expenses as a percentage of our total revenue decreased from 15.2% to 10.7% over the same period. This also contributed to a decrease in per tonne depreciation and amortisation costs from A$15 to A$11 over the same period.

Transportation

Our transportation costs increased by 2.3% from A$261 million in 2015 to A$267 million in 2016, primarily due to an increase in take-or-pay port commitments, partially offset by a decrease in rail charges as a result of reduced coal sale volume. Per tonne transportation costs increased from A$20 to A$22 over the same period for the same reasons.

Contractual services and plant hire

Our contractual services and plant hire expenses decreased by 43.1% from A$218 million in 2015 to A$124 million in 2016, and as a percentage of our total revenue decreased from 16.5% to 10.0% over the same period, primarily due to (i) the deconsolidation of the Watagan mines in March 2016, which used contractor crews to perform certain functions and (ii) the shift in Stratford Duralie's operations from outsourced contractual management to an insourced owner-operator model. This contributed to a decrease in per tonne contractual services and plant hire from A$16 to A$10.

Government royalties

Our government royalties expenses decreased by 7.8% from A$77 million in 2015 to A$71 million in 2016, primarily due to decreased royalties levied on our decreased sales volume of coal.

Coal purchases

Our coal purchases increased by 33.5% from A$158 million in 2015 to A$211 million in 2016, primarily due to the continued increase in coal blending opportunities that we undertook. Coal purchases as a percentage of our total revenue increased from 12.0% to 17.0% over the same period.

Other operating expenses

Our other operating expenses increased by 10.9% from A$147 million in 2015 to A$163 million in 2016, primarily due to additional stamp duty incurred in connection with the 2012 acquisition of the Donaldson mine and a fair value adjustment of the 4% royalties receivable from Middlemount. See "– *Description of Major Line Items in Our Consolidated Statements of Financial Position – Royalty Receivable*" for further details.

Finance costs

Our finance costs increased by 29.0% from A$162 million in 2015 to A$209 million in 2016, primarily due to an increase in interest expenses in connection with an overall increase in our interest-bearing liabilities and a slight increase in interest rates on our secured bank loans. Finance costs as a percentage of our total revenue increased from 12.3% to 16.9% over the same period, primarily due to the compounding impact of decreasing revenue and increasing finance costs.

Loss before tax and loss before tax margin

As a result of the aforementioned reasons, our loss before income tax decreased by 11.9% from A$354 million in 2015 to A$312 million in 2016. Our loss before income tax margin was 26.8% and 25.2% in the same years, respectively.

Income tax benefit

Our income tax benefit increased by 34.9% from A$63 million in 2015 to A$85 million in 2016, while our effective income tax benefit rate was 17.8% and 27.2% in the same years, respectively. Our tax benefits in 2015 were partially offset by reversals of over-provisions for taxes in prior years of A$19 million, while our tax benefits in 2016 were positively impacted by reversals of under-provisions for taxes in prior years of A$12 million. Our tax benefits in 2015 and 2016 were also partially offset by non-deductible debt of A$16 million and A$19 million, respectively.

Loss after tax and loss after tax margin

As a result of the aforementioned reasons, our loss after income tax decreased by 22.0% from A$291 million in 2015 to A$227 million in 2016. Our loss after income tax margin was 22.1% and 18.3% in the same years, respectively.

Non-IFRS Financial Measures

Operating EBITDA and operating EBIT are key metrics that our management uses to assess the performance of our individual segments and make decisions on the allocation of resources. Neither operating EBITDA nor operating EBIT is a standard measure under IFRS. As presented by our management, operating EBITDA represents profit or loss before income tax for the year as adjusted for net interest expense, depreciation and amortisation and any significant non-operating items, while operating EBIT represents profit or loss before income tax as adjusted for net interest expense and any significant non-operating items.

While operating EBITDA and operating EBIT provide additional financial measures for investors to assess our operating performance, the use of operating EBITDA and operating EBIT has certain limitations because they do not reflect all items of income and expense that affect our operations. In addition, operating EBITDA and operating EBIT do not reflect changes in working capital, capital expenditure or other investing and financing activities and therefore should not be considered a measure of our liquidity.

As a measure of our operating performance, we believe that the most directly comparable IFRS measure to operating EBITDA and operating EBIT is profit before income tax. The table below sets forth, for the periods indicated, a reconciliation of operating EBITDA and operating EBIT with profit before income tax under IFRS:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Profit before income tax	(354)	(312)	335	(18)	539
Adjustments for:					
Finance costs	162	209	294	105	152
Bank fees and other charges	116	113	109	49	62
Interest income	(50)	(125)	(114)	(57)	(58)
Stamp duty	–	12	167	3	16
Fair value losses recycled from hedge reserve	22	133	229	101	45
Gain on acquisition	(6)	–	(177)	–	–
Gain on disposal	–	–	–	–	(78)
Impairment reversal of mining tenements for Moolarben	–	–	(100)	–	–
GILTs and WIPs remeasurement and impairment	–	–	–	–	50
Gain on refinance	–	–	(31)	–	–
Transaction costs	–	3	33	21	10
JV receipt	–	–	(5)	(5)	–
Royalty remeasurement	(2)	6	(8)	(2)	(2)
Operating EBIT	(112)	39	732	197	736
Adjustment for depreciation and amortisation	200	133	256	80	244
Operating EBITDA	88	172	988	277	980

In 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018, our operating EBIT margin (calculated as operating EBIT divided by revenue and multiplied by 100%) was (8.5)%, 3.2%, 28.1%, 23.7% and 31.4%, respectively, while our operating EBITDA margin (calculated as operating EBITDA divided by revenue and multiplied by 100%) was 6.7%, 13.9%, 38.0%, 33.3% and 41.8%, respectively.

Operating EBITDA and operating EBIT should not be considered in isolation or construed as a substitute for analysis of IFRS financial measures. In addition, because operating EBITDA and operating EBIT may not be calculated in the same manner by all companies, our operating EBITDA and operating EBIT may not be comparable to the same or similarly titled measures presented by other companies.

DESCRIPTION OF MAJOR LINE ITEMS IN OUR CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

Property, Plant and Equipment

Our property, plant and equipment primarily includes (i) plant and equipment, (ii) assets under construction, (iii) freehold land and buildings and (iv) mine development assets, which represents all mining related development expenditure that is not included under land, buildings and plant and equipment. Our balance of property, plant and equipment was A$1,250 million, A$1,526 million, A$2,832 million and A$2,938 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. The substantial increase as at 30 June 2018 and 31 December 2017 was primarily due to our consolidation of property, plant and equipment of C&A following the acquisition. See "– *Critical Accounting Policies and Estimates – Property, plant and equipment*" and note 22 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details.

Mining Tenements

Our mining tenements represent the value that we have attributed to our mining leases as part of the opening balance sheet fair value accounting adopted on the acquisition of a mine. Generally, the value represents the premium paid for the mine excluding the separately identifiable tangible assets and liabilities, including exploration assets. The value is initially supported with reference to the estimated coal reserves included in the acquisition life of mine model. Such estimates may change as additional information becomes available over the course of developing or operating a mine, which would result in adjustments or amortisation of our reserves and resources, and in turn our mining tenements. Our balance of mining tenements was A$2,085 million, A$2,128 million, A$4,296 million and A$4,308 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. The substantial increase as at 30 June 2018 and 31 December 2017 was primarily due to our recognition of additional mining tenements as a consequence of the C&A Acquisition. See "– *Critical Accounting Policies and Estimates – Mining tenements*" and note 19 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details.

Exploration and Evaluation Assets

Exploration and evaluation assets represent our exploration leases and rights for mines and potential mines in the exploratory and development stages such as prospecting licenses and exploration licenses. Exploration and evaluation assets are recognised on the acquisition of a mine in respect of coal resources not included in the acquisition life-of-mine model and are subsequently transferred to mining tenements as the associated mine or mine area enters production. Our balance of exploration and evaluation assets decreased by 15.7% from A$591 million as at 31 December 2015 to A$498 million as at 31 December 2016, primarily due to a transfer of A$101 million to mining tenements in connection with the expansion of the Moolarben open cut mine, then increased by 13.5% to A$565 million as at 31 December 2017, primarily due to the consolidation of such assets from C&A following the acquisition and further increased by 2.1% to A$577 million as at 30 June 2018, primarily due to the Warkworth Transaction. See "– *Critical Accounting Policies and Estimates – Exploration and evaluation assets*" and note 20 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details.

Inventories

Our inventories consist of coal stocks and auxiliary materials, spare parts, small tools and fuel expected to be used in production. The table below sets forth, for the years indicated, a breakdown of our inventories:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Coal	49	47	87	123
Others	27	28	63	82
Total inventories	76	75	150	205

The increase in our balance of total inventories as at 31 December 2017 was primarily due to our consolidation of C&A's inventories following the C&A Acquisition. The further increase as at 30 June 2018 was primarily due to the timing of sales.

We state coal stocks at the lower of cost and net realisable value. Costs are assigned on a weighted average basis and include direct materials, direct labour and certain overheads. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. We write down coal stocks from cost to net realisable value when we determine that such write down is appropriate in the course of assessing our stocks for obsolescence. Coal stock write downs amounted to A$12 million, A$1 million, A$1 million and A$1 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively.

The table below sets forth, for the periods indicated, our average finished goods inventory turnover days:

	Year ended 31 December			Six months ended 30 June
	2015	2016	2017	2018
Average finished goods inventory turnover days[(1)]	25	24	21	21

Note:

(1) Calculated as the average monthly balance of finished goods inventory for the relevant period divided by FOB cash costs (excluding royalties) for the same month and multiplied by the number of days in the month. We believe that this presents the best approximation of average inventory turnover days in our operations. If calculated as the average annual balance of total inventories for the relevant period (which is the sum of the total balance as at the beginning and end of the period divided by two) divided by revenue from external customers for the relevant year and multiplied by 365 days (for the full-year periods) or 183 days (for the six months ended 30 June 2018), our average inventory turnover days would have been 26, 22, 16, 14 days in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively.

Our average finished goods inventory turnover days were largely stable over the Track Record Period.

As at 31 August 2018, A$121 million, or 99%, of our coal inventories as at 30 June 2018 had been sold or consumed.

Trade and Other Receivables

Our trade receivables are ordinary course, non-interest-bearing receivables due from our coal customers. Our trade receivables amounted to A$157 million, A$278 million, A$540 million and A$424 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively, none of which were past due or impaired. The substantial increase as at 30 June 2018 and 31 December 2017 was primarily attributable to the consolidation of C&A's receivables in connection with the C&A Acquisition. The table below sets forth our average trade receivable turnover days for the periods indicated:

	Year ended 31 December			Six months ended 30 June
	2015	2016	2017	2018
Average trade receivable turnover days[(1)]	22	22	23	23

Note:

(1) Calculated as the average monthly balance of trade receivables for the relevant period divided by revenue for the same month and multiplied by the number of days in the month. We believe that this presents the best approximation of average trade receivable turnover days in our operations. If calculated as the average annual balance of trade receivables for the relevant period (which is the sum of the total balance as at the beginning and end of the period divided by two) divided by revenue from external customers for the relevant period and multiplied by 365 days (for the full-year periods) or 183 days (for the six months ended 30 June 2018), our average trade receivable turnover days would have been 53, 64, 57 and 38 days in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively.

We typically provide customers with credit periods ranging from 5 to 21 days from invoice date and receipt of all required shipping documentation. Our average trade receivable turnover days remained stable at 22, 22, 23 and 23 days in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, which was in line with the credit periods we provide when taking into account the delay in issuing the invoice.

As at 31 August 2018, A$405 million, or 96%, of our trade receivables outstanding as at 30 June 2018 had been settled.

Our other receivables include, among other things, loans to related parties and investments in securities. The table below sets forth a breakdown of our other receivables as at the dates indicated:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Receivables from joint venture	331	347	332	274
Receivables from other entities	47	60	61	14
Long service leave receivables	–	–	80	62
Restricted cash	4	32	1	–
Promissory note receivable	21	21	36	38
Advances to controlled entities	2	3	–	–
Other receivables	42	101	81	97
Total other receivables	447	564	591	485

Receivables from other entities represent our investment in securities issued by WICET, including WIPs and GILTs. The WIPs are entitled to an annual dividend of 15%, which can be deferred for up to 7 years. Deferred dividends attract an annual finance charge of 15.75%. There is no scheduled maturity date but there are certain "remarketing dates" whereby the WIPs can be refinanced, the earliest of which is 2023. The GILTs have an effective interest rate of BBSY plus 6% with a maturity date of 30 September 2020. The decrease as at 30 June 2018 was attributable to the partial impairment of the GILTs and the full impairment of the WIPs.

Long service leave receivables represent amounts receivable from the Coal Mining Industry (Long Service Leave) Corporation, an industry fund established to accumulate employer contributions towards eligible employees' long service leave entitlements.

Other receivables primarily include advances to related parties, insurance and fuel rebates and dividends.

Royalty Receivable

Our royalty receivable represents the right to receive a royalty of 4% of FOB trimmed sales from the Middlemount mine as part of our acquisition of Gloucester Coal Limited. The royalty is payable by the Middlemount Joint Venture on 100% of the Middlemount sales. See "*History and Corporate Structure*" for further details. The balance of the royalty receivable was A$205 million, A$199 million, A$199 million and A$198 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively, with A$20 million, A$31 million, A$24 million and A$28 million being due within one year as at each date, respectively. We measure the value of the royalty receivable on a fair value basis by reference to the finite life of the Middlemount mine.

Interest-Bearing Loan to Associate

Our interest-bearing loan to associate arises from the transfer of our interest in the Austar, Ashton and Donaldson mines to Watagan in March 2016 for a purchase price of A$1,363 million (equal to the book value of the three mines at the time). Watagan fully funded the purchase with a A$1,363 million loan from us bearing interest at the bank bill swap bid rate plus 7.06% with a maturity date of 1 April 2025. Watagan can make prepayments of the outstanding loan balance at any time, and any amounts prepaid may be redrawn by Watagan in the future. The balance of the loan was A$775 million, A$712 million and A$730 million as at 31 December 2016 and 2017 and 30 June 2018. The loan is subject to impairment testing under our accounting standards. The outstanding interest and principal of this loan is guaranteed by Yankuang. See "*– Acquisitions, Disposals and Deconsolidation – Watagan Deconsolidation*" for further details.

Asset Classified as Held for Sale

Our assets classified as held for sale as at 30 June 2018 primarily consisted of parcels of non-mining land acquired as part of the C&A Acquisition.

Our assets classified as held for sale as at 31 December 2017 primarily consisted of our 16.6% interest in HVO that we expected to sell to Glencore in the course of establishing a 51:49 unincorporated joint venture with Glencore in relation to HVO, plus a share of certain contingent and non-contingent royalties and adjustments in relation to the C&A Acquisition. See "*Business – Joint Venture Agreements – HVO*" for further details. Our assets held for sale as at 31 December 2017 also included parcels of non-mining land acquired as part of the C&A Acquisition and a portion of our indirect interest in PWCS.

We did not have assets classified as held for sale as at 31 December 2016.

Our assets classified as held for sale as at 31 December 2015 consisted of the Austar, Ashton and Donaldson mines, for which we transferred our interest to Watagan in March 2016. As Watagan was to be deconsolidated from the Group, such mines were classified as held for sale.

Deferred Tax Assets

Our deferred tax assets consist of unused tax losses and tax credits which we carry forward to the extent that our management believes it is probable that taxable profits will be available against which such unused tax losses and credits can be utilised. Our deferred tax assets amounted to A$1,166 million, A$1,339 million, A$1,219 million and A$1,086 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. There is no expiry date on our ability to utilise such tax losses, although they are subject to the continuous satisfaction of certain tax rules.

Cash and Cash Equivalents

Our cash and cash equivalents primarily consist of cash on hand. As at 31 December 2015, we also had deposits at call for which the effective interest rate range was up to 2.10%.

Trade and Other Payables

Our trade payables are ordinary course, non-interest-bearing payables owed to our trade suppliers, including rail and port operators, utilities suppliers, equipment suppliers and coal suppliers. The table below sets forth, as at the dates indicated, an ageing analysis of our trade payables, based on the invoice date:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Due within:				
Less than 90 days	200	257	495	370
More than 90 days	–	–	1	1
Total trade payables	200	257	496	371

The substantial increase as at 30 June 2018 and 31 December 2017 was primarily due to the consolidation of C&A's payables in connection with the C&A Acquisition.

The table below sets forth our average trade payable turnover days for the periods indicated:

	Year ended 31 December			As at 30 June
	2015	2016	2017	2018
Average trade payable turnover days[(1)]	27	30	35	37

Note:

(1) Calculated as the average monthly balance of trade payables for the relevant period divided by FOB cash costs (excluding royalties) for the same month and multiplied by the number of days in the month. We believe that this presents the best approximation of average trade payable turnover days in our operations. If calculated as the average annual balance of trade payables for the relevant period (which is the sum of the total balance as at the beginning and end of the period divided by two) divided by revenue from external customers for the relevant period and multiplied by 365 days (for full-year periods) or 183 days (for the six months ended 30 June 2018), our average trade payable turnover days would have been 53, 67, 53 and 34 days in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively.

We typically receive credit periods ranging from 7 to 30 days from our suppliers. Our average trade payable turnover days were 27, 30, 35 and 37 days in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively. Trade payable turnover days increased over the Track Record Period primarily due to an increasing amount of capital creditors with the expansion of Moolarben, together with some delays experienced as part of the change of ownership of C&A. As at 31 August 2018, all of our trade payables outstanding as at 30 June 2018 had been settled.

Our other payables primarily consist of employee costs, interest and bank guarantee fees and Watagan tax payable. The table below sets forth, as at the dates indicated, a breakdown of our other payables and accrued expenses:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Employee benefits	36	53	112	85
Interest	28	44	72	100
Bank guarantee fees	28	52	27	74
Watagan tax	–	45	44	70
Other	–	18	7	82
Total other payables	92	212	262	411

Employee benefit payables increased from A$36 million at 31 December 2015 to A$85 million at 30 June 2018 due to our workforce headcount more than doubling during the Track Record Period. Interest and bank guarantee fees payable are primarily impacted by the timing of year end payments. Our level of overall debt has generally remained consistent across the Track Record Period. Watagan tax payable relates to tax losses incurred by Watagan that are transferred up to the parent entity under the Group's tax sharing arrangements. See "– *Significant Factors Affecting Our Results of Operations and Financial Condition – Taxation*" for further details.

Interest-Bearing Liabilities

See "– *Indebtedness*".

Deferred Tax Liabilities

Our deferred tax liabilities arise from temporary differences between accounting and tax reporting. Most our deferred tax losses arise on the treatment of mining tenements where an accounting value is ascertained with the balance reduced over time through amortisation to the profit and loss but no corresponding income tax value is attributed. This is typically due to the asset being eligible for a capital gains tax base rather than an income tax base, or the mining tenement being deemed a first use exploration asset for tax purposes and where we received a 100% deduction in the year of first use. Our deferred tax liabilities amounted to A$692 million, A$762 million, A$1,037 million and A$990 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively.

Provisions

Provisions represent cash outflow obligations for which the amount can be reliably estimated. Our provisions, including both current and non-current provisions, amounted to A$143 million, A$127 million, A$547 million and A$502 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. Our provisions as at 31 December 2015 and 2016 primarily related to mine rehabilitation costs and take or pay rail and port contracts. Our provisions significantly increased as at 31 December 2017, primarily due to increases in the aforementioned costs as well as provisions for a below market sales

contract and employee benefits, which arose in connection with the C&A Acquisition. Our provisions then decreased as at 30 June 2018, primarily due to the utilisation of provisions during the period and the Glencore Transaction. See note 28 to the Accountants' Report of the Group in Appendix IA to this prospectus.

IMPAIRMENT ASSESSMENT

As described in note 19 to the Accountants' Report of the Group in Appendix IA to this prospectus, an impairment assessment of the carrying value of certain assets is undertaken each reporting period. Goodwill of A$60 million for all periods in the Track Record Period is included in the Yarrabee CGU and is tested through this process. The detailed assumptions are included in note 19 to the Accountants' Report of the Group in Appendix IA to this prospectus. In assessing whether these assets are impaired management utilises external experts and considers these to be reasonable as they are supportable evidence for the assumptions.

In undertaking the impairment assessment the sensitivities are determined as being those that have the greatest impact and are most likely to change in future periods. From the analysis performed the key assumptions are US dollar coal prices, the Australian dollar exchange rate and discount rates. The results of the impairment testing and the key sensitivities considered possible by us are detailed in the table below:

	Year ended 31 December									Six months ended		
	2015			2016			2017			30 June 2018		
	NSW	Yarrabee	Middlemount	NSW	Yarrabee	Middlemount	NSW	Yarrabee	Middlemount	NSW	Yarrabee	Middlemount
	A$'m	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*	*A$'m*
Book Value	2,418	449	339	2,556	418	310	6,086	434	383	5,844	396	382
Recoverable Amount	3,681	452	472	4,231	783	678	12,294	846	627	12,412	588	723
Head Room	1,263	3	133	1,675	365	368	6,208	412	244	6,568	192	341
US$ Coal Price [(1)]												
+10%	900	252	190	870	296	193	2,649	423	181	2,564	315	167
-10%	(903)	(270)	(236)	(871)	(300)	(211)	(2,650)	(427)	(199)	(2,570)	(341)	(182)
Exchange Rate [(2)]												
+5 cents	(485)	(128)	(106)	(474)	(154)	(101)	(1,270)	(210)	(80)	(1,210)	(144)	(71)
-5 cents	557	144	105	543	176	106	1,451	240	83	1,380	159	72
Discount Rate [(3)]												
+50 bps	(184)	(23)	(16)	(156)	(17)	(12)	(525)	(34)	(11)	(509)	(15)	(11)
-50 bps	197	24	16	165	18	12	565	37	11	548	16	11

Notes:

(1) This represents the change in recoverable amount due to a +/-10% change to our coal price assumptions as detailed in note 19 to to the Accountants' Report of the Group in Appendix IA to this prospectus.

(2) This represents the change in recoverable amount due to a +/-5 cents change to the long-term US$:A$ foreign exchange rate adopted by us as detailed in note 19 to Accountants' Report of the Group in Appendix IA to this prospectus.

(3) This represents the change in recoverable amount due to a +/-50 bps change to the discount rate adopted by us as detailed in note 19 to Accountants' Report of the Group in Appendix IA to this prospectus.

The change in the key sensitivities outlined above are considered reasonably possible changes based on the historical volatility of the long term pricing for foreign exchange and coal prices. We have only adjusted the discount rate by 0.5% in prior periods and this is considered to be a reasonable basis to assess this sensitivity.

LIQUIDITY AND CAPITAL RESOURCES

Our primary sources of liquidity have consisted of operating cash flows, interest-bearing liabilities, including shareholder loans, and new equity. We expect that our cash needs in the near future will primarily relate to organic and inorganic growth opportunities, debt repayments and dividends. We may also continue to seek external debt financing as a supplemental source for our cash needs, in particular to the extent we seek to acquire companies, make strategic investments, materially expand our mine assets or undertake other activities which require substantial capital expenditure, subject to pricing and other market conditions that we consider satisfactory. In addition, the expected proceeds of the Global Offering and the Australian Entitlement Offer will contribute positively to our liquidity position.

During the Track Record Period and as at the Latest Practicable Date, we are and have been in compliance with all material covenants in our financings, and we did not have any material default in payment of payables for trade payables, interest-bearing liabilities or other financing obligations.

Net Current Assets

The table below sets forth, for the dates indicated, a breakdown of our current assets and current liabilities:

	As at 31 December			As at 30 June	As at 31 October
	2015	2016	2017	2018	2018
			A$ million		(unaudited)
Current assets					
Cash and cash equivalents	154	190	207	485	545
Trade and other receivables	225	435	658	561	418
Inventories	76	75	150	205	208
Royalties receivable	20	31	24	28	24
Non-contingent royalty receivable	–	–	–	18	7
Assets classified as held for sale	1,637	–	613	57	57
Other current assets	12	7	37	16	15
Total current assets	2,124	738	1,689	1,370	1,274

	As at 31 December			As at 30 June	As at 31 October
	2015	2016	2017	2018	2018
			A$ million		(unaudited)
Current liabilities					
Trade and other payables	292	469	758	783	653
Interest-bearing liabilities	11	20	17	17	14
Derivative financial instruments	1	–	–	–	–
Provisions	12	10	59	42	34
Non-contingent royalties payable	–	–	112	64	25
Liabilities directly associated with assets classified as held for sale	322	–	67	–	–
Total current liabilities	638	499	1,013	906	726
Net current assets	1,486	239	676	464	548

We had net current assets of A$1,486 million, A$239 million, A$676 million and A$464 million as at 31 December 2015, 2016 and 2017 and 30 June 2018, respectively. As at 31 October 2018, being the latest practicable date for the purposes of this statement, our unaudited net current assets were A$548 million.

Cash Flows

The table below sets forth our cash flows for the periods indicated:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Net cash (used in)/ generated from operating activities	(108)	(24)	408	282	712
Net cash (used in)/ generated from investing activities	(314)	(466)	(3,449)	(133)	228
Net cash generated from/(used in) financing activities	366	525	3,062	(14)	(698)
Net (decrease)/ increase in cash and cash equivalents	(56)	35	21	135	242

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
			A$ million		
Cash and cash equivalents at the beginning of the year	204	159	190	190	207
Effects of exchange rate changes on cash and cash equivalents	11	(4)	(4)	(8)	36
Transfer to assets held for sale	(5)	–	–	–	–
Cash and cash equivalents at the end of the year	154	190	207	317	485

Net cash (used in)/generated from operating activities

In the six months ended 30 June 2018, we had net cash generated from operating activities of A$712 million, including receipts from customers less payments to suppliers and employees of A$818 million, representing a strong operating performance. Net interest payments were A$74 million. Our profit after income tax of A$361 million included the following significant non-cash adjustments: (i) depreciation and amortisation of non-current assets of A$244 million, (ii) fair value losses recycled from hedge reserve of A$45 million, (iii) impairment expense of A$50 million on investments in WICET and (iv) income tax expense of A$178 million.

In 2017, we had net cash generated from operating activities of A$408 million, including receipts from customers less payments to suppliers and employees of A$683 million, representing a strong operating performance. Net interest payments were A$110 million and stamp duty paid on C&A amounted to A$148 million. Our profit after income tax of A$246 million included the following significant non-cash adjustments: (i) depreciation and amortisation of non-current assets of A$256 million, (ii) fair value losses recycled from hedge reserve of A$229 million, (iii) gain on acquisition of A$177 million, (iv) a reversal of impairment of mining tenements of A$100 million, (v) provision releases of A$87 million and (vi) income tax expense of A$89 million.

In 2016, we had net cash used in operating activities of A$24 million, including receipts from customers less payments to suppliers and employees of A$78 million representing a positive operating performance. Net interest payments were A$95 million. Our loss after income tax of A$227 million included the following significant non-cash adjustments: (i) depreciation and amortisation of non-current assets of A$133 million, (ii) fair value losses recycled from hedge reserve of A$133 million and (iii) income tax benefit of A$85 million.

In 2015, we had net cash used in operating activities of A$108 million including receipts from customers less payments to suppliers and employees of A$29 million representing a positive operating performance. Net interest payments were A$119 million. Our loss after income tax of A$291 million included non-cash adjustments for (i) depreciation and amortisation of non-current assets of A$200 million and (ii) income tax benefit of A$63 million.

Net cash used in investing activities

In the six months ended 30 June 2018, we had net cash used in investing activities of A$228 million, primarily due to proceeds from the Glencore Transaction of A$524 million, partially offset by consideration paid on the Warkworth Transaction of A$276 million and payments of property, plant and equipment of A$71 million, which were mainly in connection with Moolarben and MTW.

In 2017, we had net cash used in investing activities of A$3,449 million, primarily due to (i) payments for the acquisition of C&A of A$3,247 million (net of cash acquired) and (ii) payments for property, plant and equipment of A$299 million.

In 2016, we had net cash used in investing activities of A$466 million, primarily due to payments of property, plant and equipment of A$353 million, including the Moolarben expansion.

In 2015, we had net cash used in investing activities of A$314 million, primarily due to payments for property, plant and equipment of A$290 million, including the Moolarben expansion.

Net cash generated from financing activities

In the six months ended 30 June 2018, we had net cash outflow from financing activities of A$698 million, primarily due to repayment of interest-bearing liabilities of US$500 million of our secured bank loan.

In 2017, we had net cash generated from financing activities of A$3,062 million, primarily due to (i) proceeds from the issues of shares and other equity securities of A$3,125 million, which were raised to finance the acquisition of C&A and (ii) proceeds from interest-bearing liabilities of related entities of A$188 million relating to our draw down of credit facilities provided by Yanzhou, partially offset by (i) repayment of interest-bearing liabilities of A$196 million paying down US$150 million of our secured bank loan and (ii) a net repayment of borrowings from associate of A$63 million being the net repayment received from Watagan repaying a portion of the loan used to purchase interests in the Austar, Ashton and Donaldson mines from us.

In 2016, we had net cash generated from financing activities of A$525 million, primarily due to (i) repayment of borrowings from associate of A$623 million, which related to Watagan repaying a portion of the loan used to purchase interests in the Austar, Ashton and Donaldson mines from us and (ii) proceeds from interest-bearing liabilities of related entities of A$251 million, which related to our draw down of credit facilities provided by Yanzhou, partially offset by (i) repayment of interest-bearing liabilities of A$198 million and (ii) payment of subordinated capital notes distribution of A$100 million, which consisted of coupon payments on SCNs issued by our wholly-owned subsidiary, Yancoal SCN in 2014, for which we were the guarantor on a subordinated basis.

In 2015, we had net cash generated from financing activities of A$366 million, primarily due to proceeds from interest-bearing liabilities of related entities of A$402 million, which related to our draw down of credit facilities provided by Yanzhou.

Working Capital Sufficiency

After taking into consideration the financial resources available to us, including operating cash flows, revolving credit facilities and the estimated net proceeds of the Global Offering, in the absence of unforeseeable circumstances, the Directors confirm that we have sufficient working capital to satisfy 125% of our present liquidity and capital resource needs (including general, administrative and operating costs, property holding costs and the cost of any proposed exploration and/or development, as well as any interest and loan repayment costs in connection therewith) over the next 12 months from the date of this prospectus.

Our liquidity and capital resource needs over the next 12 months primarily include organic and inorganic growth opportunities, debt repayments and dividends. We expect to be able to finance these capital requirements with operating cash flows, interest-bearing liabilities and the expected proceeds from the Global Offering. Our ability to obtain additional funding beyond our anticipated cash needs for the next 12 months following the date of this prospectus, however, is subject to a variety of uncertainties, including our future results of operations, our future business plans, financial condition and cash flows and economic, political and other conditions in the markets where we and our customers and lenders operate.

INDEBTEDNESS

During the Track Record Period, we had indebtedness primarily in the form of interest-bearing loans from banks and related parties. The table below sets forth a breakdown of our overall indebtedness as at the dates indicated:

	As at 31 December			As at 30 June	As at 31 October
	2015	2016	2017	2018	2018
			A$ million		(unaudited)
Current indebtedness					
Secured bank loans	7	–	–	–	–
Secured lease liabilities	4	20	17	17	14
Non-current indebtedness					
Secured bank loans	3,751	3,593	3,117	2,622	2,562
Secured lease liabilities	27	47	38	34	31
Unsecured loans from related parties	943	1,290	1,527	1,611	1,504
Total indebtedness	4,732	4,950	4,699	4,284	4,111

The above table includes an amount of A$24 million, A$16 million and A$14 million as at 31 December 2017, 30 June 2018 and 31 October 2018, respectively, with respect to the fair value gain on the refinancing of secured bank loans recognised during 2017 on the adoption of IFRS 9. This amount will continue to unwind to the statement of profit and loss up to the date of maturity, at which time the full face value of the secured bank loans will be recognised. The adoption of IFRS 9 has not had, and is not expected to have, a significant impact on our financial position or performance.

The table below sets forth a maturity profile of our overall indebtedness as at the dates indicated, excluding the impact of the fair value gain noted above:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Indebtedness repayable within:				
Less than one year	11	20	17	17
One to two years	80	12	12	415
Two to five years	1,329	2,439	3,316	2,414
Five or more years	3,312	2,479	1,378	1,454
Total indebtedness	4,732	4,950	4,723	4,300

Secured Bank Loans

Syndicated Facility

Secured bank loans primarily represent a syndicated loan facility with a maximum credit limit of US$2,900 million that we executed in 2009 ("**Syndicated Facility**") with Bank of China Limited, Sydney Branch, China Development Bank Limited, Hong Kong Branch, and China Construction Bank Limited, Hong Kong Branch. The Syndicated Facility was fully drawn at inception. US$100 million was fully repaid to China Development Bank in 2012, US$100 million in 2013 and US$99 million in 2014. As at each of 31 December 2015 and 2016, the Syndicated Facility was drawn to US$2,600 million. Our balance as at 31 December 2017 included a repayment of US$150 million which reduced the facility balance to US$2,450 million. We made further repayments of US$450 million in May 2018 and US$50 million in June 2018, resulting in an outstanding balance of US$1,950 million as at 30 June 2018. We subsequently repaid another US$300 million in August 2018 using loans drawn down from a US$300 million term debt facility from certain banks which are party to the A$1,000 million bank guarantee facility from a syndicate of seven domestic and international banks. This resulted in an outstanding balance of US$1,650 million on the Syndicated Facility. We further repaid an additional US$75 million on 17 September 2018 and US$50 million on 17 October 2018 using excess cash flows generated from operations. Other fluctuations in the balance of the Syndicated Facility over the Track Record Period were primarily attributable to the strengthening of the Australian dollar against the US dollar over this period. The Syndicated Facility matures in installments, with approximately 45% due in 2020, 29% in 2021, and 26% due in 2022.

The Syndicated Facility is fully secured by a corporate guarantee provided by Yanzhou. Key financial covenants of the Syndicated Facility include:

(i) an interest coverage ratio of not less than 1.40 (which was adjusted from 1.15 following the C&A Acquisition);

(ii) a gearing ratio of not more than 0.75 (adjusted from 0.80 following the C&A Acquisition); and

(iii) consolidated net worth of the Group of not less than A$3 billion (adjusted from A$1.6 billion following the C&A Acquisition).

In addition, the Syndicated Facility requires us to maintain the following minimum deposit balance requirements with the syndicate lending banks:

(i) an aggregate daily average balance of not less than A$25 million, tested at the end of each month; and

(ii) an aggregate end of month balance of not less than A$50 million.

We did not have any breach of the financial covenants of the Syndicated Facility during the Track Record Period.

The effective interest rate on our loans drawn under the Syndicated Facility (all-in including a guarantee fee to Yanzhou and an extension fee) in 2015, 2016 and 2017 and the six months ended 30 June 2018 was 6.45%, 7.29%, 7.93% and 8.42%, respectively.

Other secured loans

Our secured bank loans during the Track Record Period also included:

(i) a bilateral loan facility of US$140 million with Bank of China Limited, Sydney Branch, which was fully drawn down as at 16 December 2015 and, on 31 December 2016, was fully repaid and restructured to a bank guarantee facility with the same limit. The effective interest rate (inclusive of a guarantee fee to Yanzhou and an extension fee to Bank of China) for 2015 and 2016 was 6.45% and 7.29%, respectively;

(ii) a working capital facility of A$50 million with Industrial and Commercial Bank of China Limited, Sydney Branch taken out in 2015 for working capital and capital expenditure purposes, which was matured and cancelled in March 2016. The facility was priced at base rate (LIBOR or BBSY) plus loan margin of 3.00% or 2.70% for US$ or A$ drawings, respectively, and an undrawn fee of 0.5%. No outstanding was drawn under the facility as at 31 December 2015 and 2016. The effective interest rate was 7.61% in 2015 and 7.27% in 2016, in each case including a guarantee fee to Yanzhou;

(iii) a bank guarantee facility of A$100 million with Industrial and Commercial Bank of China Limited, Sydney Branch taken out in 2014, which was cancelled in June 2017. The facility was fully drawn as at 31 December 2015 and 2016. In each of 2015 and 2016, there was an annual guarantee fee to Yanzhou and an issuance fee to Industrial and Commercial Bank of China; and

(iv) a chattel mortgage facility of US$21.7 million with Australia and New Zealand Banking Corporation Limited, of which A$5.6 million was drawn down as at 31 December 2015 and was fully repaid and cancelled as at 31 December 2016. The effective interest rate for 2015 and 2016 was 5.89% and 5.89%, respectively.

Secured Lease Liabilities

Our secured lease liabilities represent loans obtained under finance lease facilities entered with Komatsu, one of our mining equipment suppliers. These facilities enable us to purchase mining equipment from Komatsu with security over the equipment purchased. As at 31 December 2015, 2016 and 2017 and 30 June 2018, our finance lease facilities had an aggregate limit of A$50 million, A$100 million, A$100 million, A$100 million, respectively, of which we had drawn down A$31 million, A$67 million, A$55 million and A$51 million as at the same dates, respectively, at an effective interest rate of 5.22%, 5.13%, 5.10% and 5.00%.

Unsecured Loans from Related Parties

During the Track Record Period, we had two long-term unsecured loan facilities in place from Yanzhou, as follows:

(i) A facility with a credit limit of A$1,400 million used to fund working capital and capital expenditure needs, maturing in December 2024. As at 31 December 2015, 2016 and 2017 and 30 June 2018, our balance of amounts drawn down under this facility was A$684 million, A$942 million, A$1,066 million and A$1,125 million, respectively.

(ii) A facility with a credit limit of US$807 million used to finance coupon payments on SCNs issued by Yancoal SCN, in December 2014 for which we were the guarantor on a subordinated basis. This facility matures in December 2024. As at 31 December 2015, 2016 and 2017, our balance of amounts drawn down under this facility was A$100 million, A$188 million and A$312 million, respectively. On 31 January 2018, at the request of certain eligible holders of the SCNs, a portion of the SCNs were converted into equity of the Company while the outstanding SCNs were redeemed in full by Yancoal SCN on 31 January 2018. From this date, the facility limit was reduced to US$243 million, which remains the drawn down amount as at 30 June 2018.

Both credit facilities from Yanzhou are unsecured subordinated loans with a term of ten years (maturing in December 2024, at which time the principal is repayable), and have no covenants. The effective interest rate was 7.00% for each of 2015, 2016 and 2017 and the six months ended 30 June 2018.

In addition, we also have a US$550 million unsecured credit facility from Yancoal International Resources Development Co., Ltd. ("**Yancoal International**"), which is wholly owned by Yanzhou. The facility was fully drawn down in 2012 to fund the acquisition of Gloucester Coal Limited. See "*History and Corporate Structure* "for further details. We repaid US$434 million in December 2014, leaving a balance of US$116 million which was outstanding as at each of 31 December 2015, 2016 and 2017 and 30 June 2018, and is repayable in May 2022. The effective interest rate was 7.70% for each of 2015, 2016 and 2017 and the six months ended 30 June 2018.

Furthermore, we have received letters of support from Yanzhou under which Yanzhou, among other things, acknowledged the major acquisitions and other transactions that we have undertaken, including the C&A Acquisition, Glencore Transaction and Warkworth Transaction (and the financing needed in connection with certain transactions), and confirmed that it would provide ongoing financial support to us if needed to enable us to pay our debts as and when they fall due. Yanzhou may revoke such support by giving 24 months' notice to us. We have completed post-closing working

capital adjustments for the C&A Acquisition, Glencore Transaction and Warkworth Transaction, and expect to be able to settle the remaining consideration payable for the C&A Acquisition, which is attributable to non-contingent royalties' liabilities, with our cash on hand and without credit support from Yanzhou.

Subordinated Capital Notes

On 31 December 2014, Yancoal SCN, our wholly-owned subsidiary, issued 18,005,102 SCNs at US$100 each, raising a total of A$2.3 billion, which we used primarily to repay loans from Yanzhou and its subsidiaries and improve our capital structure. The SCNs were perpetual, subordinated (with respect to our secured bank loans and related party loans from Yancoal International of US$116 million), unsecured capital notes, guaranteed by the Company on a subordinated basis and each convertible into 1,000 ordinary shares of the Company and listed on the ASX. SCN holders were entitled to receive 7% per annum fixed rate distribution payments payable semi-annually in arrears. Distributions amounted to A$186 million, A$171 million and A$79 million in 2015, 2016 and 2017, respectively. On 31 August 2017, Yanzhou, which held the substantial majority of the SCNs, converted all its SCN holdings, resulting in us issuing 18,000,031,000 new ordinary shares to Yanzhou. A further 150,943 new ordinary shares were issued on conversion of 80 SCNs, and 3,015,976 new ordinary shares were issued in January 2018 on the conversion of 1,606 SCNs by other eligible holders. We subsequently redeemed all outstanding SCNs in February 2018 at the face value plus a final distribution. Yancoal SCN was then delisted from the ASX.

Bank Guarantee Facilities

We have obtained a number of bank guarantee facilities to provide guarantees in favour of certain counterparties, including port, rail, government departments and other operational functions, in respect of their activities involving us, Yanzhou, other related parties, and joint ventures. As at 31 December 2015, 2016 and 2017 and 30 June 2018, we had total bank guarantee facilities of A$522 million, A$486 million, A$1,000 million and A$1,000 million (plus an additional US$95 million as at both 31 December 2017 and 30 June 2018), respectively, of which A$458 million, A$441 million, A$1,041 million and A$894 million were utilised as at the same dates. These facilities consisted of the following:

- as at 31 December 2015, our bank guarantee facilities included (i) A$350 million from a syndicate of Australian banks, of which A$299 million was utilised, secured by the Yarrabee, Ashton and Moolarben mines, (ii) A$125 million from the Industrial and Commercial Bank of China, of which A$122 million was utilised, secured by a corporate guarantee of A$100 million from Yanzhou and A$2.5 million of cash collateral and (iii) A$47 million from the Bank of China, of which A$37 million was utilised, secured by a letter of comfort from Yanzhou;

- as at 31 December 2016, our bank guarantee facilities included (i) A$93 million from a syndicate of Australian banks, (ii) A$268 million from the Bank of China, of which A$228 million was utilised, secured by cash collateral of A$28 million, a corporate guarantee of US$140 million from Yanzhou and a letter of comfort for A$47 million from Yanzhou and (iii) A$125 million from the Industrial and Commercial Bank of China, of which A$121 million was utilised, secured primarily by a corporate guarantee of A$100 million from Yanzhou and A$2.5 million of cash collateral;

- as at 31 December 2017, our bank guarantee facilities included (i) A$1,000 million from a syndicate of seven domestic and international banks, of which A$935 million was utilised, secured by Yarrabee and Moolarben mine assets and C&A assets and (ii) US$95 million from the Bank of China, of which A$106 million was utilised, secured by corporate guarantees of A$100 million from Yanzhou and A$2.5 million of cash collateral; and

- as at 30 June 2018, our bank guarantee facilities included (i) A$1,000 million from a syndicate of seven domestic and international banks, of which A$793 million was utilised, secured by Yarrabee and Moolarben mine assets and C&A assets and (ii) US$95 million from the Bank of China, of which A$101 million was utilised, secured by corporate guarantees of US$95 million from Yanzhou and A$2.5 million of cash collateral. On 20 August 2018, we obtained a US$300 million term debt facility from certain of these banks, which we fully drew down on 23 August 2018 to repay a portion of the Syndicated Facility.

The syndicate bank guarantee facility as at 30 June 2018 includes the following key financial covenants that we are required to maintain, tested semi-annually:

(i) an interest coverage ratio of more than 5.0 times;

(ii) a finance debt to EBITDA ratio of less than 3.0 times; and

(iii) net tangible assets of more than A$1,500 million (adjusted from A$600 million following the C&A Acquisition).

We did not have any breach of the above covenants during the Track Record Period. The bank guarantee facilities from the Bank of China and ICBC did not have any financial covenants.

Indebtedness Statement

As at 31 October 2018, being the latest practicable date for the purpose of the indebtedness statement:

- the total balance of our interest-bearing liabilities on demand or due within one year was A$14 million;

- the total balance of our interest-bearing liabilities due after one year was A$4,097 million;

- we had nil unutilised credit facilities and unutilised bank guarantee facilities of approximately A$269 million, which were committed and without uncommon restriction on utilisation; and

- other than as disclosed in *"– Indebtedness"* and *"– Contingent Liabilities"*, and with respect to certain financing arrangements in relation to Watagan and WICET (see "*Risk Factors-We will be required to re-consolidate Watagan once we re-acquire control of it, which could result in adverse consequences to our financial condition and results of operations*" and "*Risk Factors – Our investments in, and obligations with respect to, the Wiggins Island Coal Export Terminal may be adversely impacted by, among other things, the insolvency of its other shareholders*", respectively, for further details) we had no other debt securities, borrowings, debts, mortgages, contingent liabilities or guarantees.

Since 30 June 2018, other than as disclosed above, there has been no material adverse change to our indebtedness.

RELATED PARTY TRANSACTIONS

During the Track Record Period, we had certain transactions with related parties, including the following:

- sales of goods and services to related parties (including primarily Noble Group (in 2015, 2016 and 2017), Watagan and Yancoal International) amounting to A$274 million, A$281 million, A$285 million and A$23 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively;

- purchases of goods and services from related parties (including primarily Watagan and Syntech Resources) amounting to A$9 million, A$79 million, A$200 million and A$61 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively (the increase was largely attributable to coal purchased from Watagan as produced at the Austar, Ashton and Donaldson mines);

- advances and loans, net of repayments, to related parties of less than A$1 million in 2015 and A$810 million in 2016 (primarily consisting of a loan to Watagan in connection with the transfer of interest in the Austar, Ashton and Donaldson mines) and repayments from related parties (net of advances and loans to related parties) of A$98 million in 2017 and A$47 million in the six months ended 30 June 2018;

- loans from related parties (including primarily Yanzhou and Yancoal International) of A$501 million, A$352 million, A$330 million and nil in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively;

- finance costs attributable to related parties of A$44 million, A$76 million, A$91 million and A$47 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, primarily consisting of interest accrued or paid on loans from Yanzhou and Yancoal International;

- finance income attributable to related parties of A$19 million, A$94 million, A$95 million and A$43 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, primarily consisting of interest income on loans to Watagan and Middlemount;

- other costs attributable to related parties of A$171 million, A$173 million, A$212 million and A$113 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, primarily consisting of corporate guarantee fees accrued or paid to Yanzhou and port charges paid to NCIG; and

- other income attributable to related parties of A$20 million, A$63 million, A$83 million and A$44 million in 2015, 2016 and 2017 and the six months ended 30 June 2018, respectively, primarily consisting of mining management and service fees from Watagan and royalty income from Middlemount.

See note 37 to the Accountants' Report of the Group in Appendix IA to this prospectus for further details.

CAPITAL EXPENDITURE

The table below sets forth, for the periods indicated, a breakdown of our capital expenditure during the Track Record Period, including transfers from assets under construction:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Plant and equipment	5	3	12	–
Mine development	47	14	21	10
Assets under construction	281	316	303	69
Leased plant and equipment	–	50	9	5
Total capital expenditure	333	383	345	84

Assets under construction generally relate to ongoing construction projects, such as the Moolarben expansion, whereby the capital expenditure is classified as assets under construction until the assets are "in use". At this time the spend is transferred out of assets under construction to the appropriate category. These reclassifications are shown in the table below.

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Plant and equipment	110	126	240	(102)
Mine development	186	92	308	138
Freehold land and buildings	8	1	27	5
Assets under construction	(304)	(219)	(575)	(41)
Net	–	–	–	–

We have financed our capital expenditure primarily through operating cash flows, increases in interest-bearing liabilities and repayments of the loan due from Watagan and may in the future use these sources as well as the proceeds from the Global Offering as we pursue acquisition opportunities.

COMMITMENTS

The table below sets forth, as at the dates indicated, our future minimum payments under non-cancellable commitments:

	As at 31 December			As at 30 June
	2015	2016	2017	2018
	A$ million			
Not later than 1 year				
Property, plant and equipment	15	139	33	36
Non-cancellable operating leases	5	25	38	26
Finance leases	11	24	19	19
Later than 1 year but not later than 5 years				
Non-cancellable operating leases	1	67	149	73
Finance leases	26	53	42	37
Later than 5 years	–	–	–	78
Total commitments	58	308	281	269

Our operating lease commitments include mining equipment, office space, and office equipment. Such leases typically run for periods of one month to five years with an option to renew at the expiry of the lease period.

Our finance lease commitments generally include mining equipment and other machinery. Such leases typically run for periods of approximately five years.

CONTINGENT LIABILITIES

As at the Latest Practicable Date, we had the following contingent liabilities:

(i) bank guarantees in favour of certain of counterparties, including port, rail, government departments and other operational functions, in respect of their activities involving us, Yanzhou, other related parties, and joint ventures. See "*– Indebtedness – Bank guarantee facilities*" for further details;

(ii) a letter of support to Middlemount, our incorporated joint venture, under which we agree to (a) not demand repayment of any loan from Middlemount except under certain conditions and (b) provide financial support to Middlemount in the form of shareholder loans in proportion to our share of the net assets of Middlemount in order for Middlemount to meet its debt obligations. See "*Business – Marketing and Sales Arrangements – Middlemount*" for further details;

(iii) various claims relating to personal injury and contractual obligations which we become party to in the ordinary course of business. See "*Business – Health, Safety and Environmental Matters*" for further details. Our insurance policies have largely covered the personal injury claims, and we do not expect the claims against us in any event to have a material impact on our financial position; and

(iv) certain disputes involving us and members of the Noble Group, for which the relevant proceedings are at an early stage. See "*Business – Legal Proceedings and Non-Compliance*" for further details.

KEY FINANCIAL RATIOS

The table below sets forth, as at the dates and for the periods indicated, certain of our key financial ratios:

	As at or for the year ended 31 December			As at or for the six months ended 30 June
	2015	2016	2017	2018
Return on assets[(1)]	(3.8)%	(2.9)%	2.5%	6.0%[(4)]
Return on equity[(2)]	(13.9)%	(14.9)%	7.7%	14.0%[(4)]
Gearing ratio[(3)]	2.80x	3.66x	0.93x	0.81x

Notes:

(1) Return on assets is calculated by dividing profit after income tax by average total assets and multiplying the resulting value by 100%. Average total assets equal total assets at the beginning of the period plus total assets as at the end of the period, divided by two.

(2) Return on equity is calculated by dividing profit after income tax by average total equity and multiplying the resulting value by 100%. Average total equity equals total equity at the beginning of the period plus total equity as at the end of the period, divided by two.

(3) Gearing ratio is calculated as gross debt divided by total equity at the end of the period. Gross debt consists of the total balance of interest-bearing liabilities as at the end of the period.

(4) On an annualised basis.

Return on Assets

Our return on assets ratio increased from (3.8)% in 2015 to (2.9)% in 2016, primarily due to a decrease in loss after income tax over this period, and further increased to 2.5% in 2017, primarily due to becoming profit-making over this period. Our return on assets ratio subsequently increased to 6.0% in the six months ended 30 June 2018 (on an annualised basis), primarily due to our increased profitability.

Return on Equity

Our return on equity ratio decreased from (13.9)% in 2015 to (14.9)% in 2016, primarily due to a decrease in average total equity over this period, partially offset by a decrease in loss after income tax. Our return on equity ratio then increased to 7.7% in 2017, primarily due to becoming profit-making over this period, partially offset by a significant increase in total average equity largely due to the C&A Acquisition. Our return on equity ratio subsequently increased to 14.0% in the six months ended 30 June 2018 (on an annualised basis), primarily due to our increased profitability.

Gearing Ratio

Our gearing ratio increased from 2.80x as at 31 December 2015 to 3.66x as at 31 December 2016, primarily due to a decrease in total equity. Our gearing ratio then decreased to 0.93x as at 31 December 2017, primarily due to a significant increase in total equity largely due to the C&A Acquisition. Our gearing ratio subsequently decreased to 0.81x as at 30 June 2018.

RECENT DEVELOPMENTS OF OUR BUSINESS SUBSEQUENT TO THE TRACK RECORD PERIOD

Since 30 June 2018, the following material changes have occurred:

(i) we have entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, for the Moolarben Acquisition. We intend to finance the Moolarben Acquisition with a portion of the expected proceeds from the Global Offering. See "*Future Plans and Use of Proceeds*" for further details; and

(ii) on 20 August 2018, we obtained a US$300 million term debt facility from certain banks which are party to our A$1,000 million bank guarantee facility from a syndicate of seven domestic and international banks. On 23 August 2018, we fully drew down the US$300 million under this facility. We used this amount to repay a portion of the Syndicated Facility, resulting in an outstanding balance on the Syndicated Facility of US$1,650 million. On 17 September 2018 and 17 October 2018, respectively, we further repaid US$150 million of our debt (US$75 million on the Syndicated Facility and US$75 million on our unsecured loans from related parties) and US$100 million of our debt (US$50 million on the Syndicated Facility and US$50 million on our unsecured loans from related parties) using excess cash flows generated from operations.

As far as the Directors are aware, other than as disclosed above, there have not been any material changes in our operations, nor in the general economic and market conditions in the regions or the industries in which we operate that materially and adversely affected our business operations or financial condition since 30 June 2018 and up to the date of this prospectus, and no material changes have occurred since the effective date of the Competent Person's Report.

QUALITATIVE AND QUANTITATIVE DISCLOSURES ON MARKET RISK

We are exposed to financial risks arising from our operations and the use of financial instruments. The key financial risks include credit risk, currency risk, interest rate risk and liquidity risk. The Board reviews and agrees policies and procedures for management of these risks.

Credit Risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to us. As at 31 December 2015, 2016 and 2017 and 30 June 2018, our maximum exposure to credit risk which will cause a financial loss to us due to failure to discharge an obligation by the counterparties and financial guarantees provided by us is arising from the carrying amount of the respective recognised financial assets as stated in the consolidated statement of financial position and the amount of contingent liabilities in relation to financial guarantee issued by us.

In order to minimise the credit risk, our management has delegated a team responsible for determination of credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, we review the recoverable amount of each individual trade debt at the end of the reporting period to ensure that adequate impairment losses are made for irrecoverable amounts. In this regard, our Directors consider that our credit risk is significantly reduced. We maintain our cash and cash equivalents with reputable banks. Therefore, Directors consider that the credit risk for such is minimal.

We generally grant customers with long-relationships credit terms not exceeding 90 days, depending on the situations of the individual customers. For small to medium sized new customers, we generally require them to pay for the products before delivery.

See note 34(b) to the Accountants' Report of the Group in Appendix IA to this prospectus for further details on our counterparties.

Currency Risk

Our sales and finance costs are denominated mainly in United States dollars, while operating costs are mainly denominated in the group's functional currency, the Australian dollar. Accordingly, there is a significant exposure to transactional foreign currency risk.

See note 34(b) to the Accountants' Report of the Group in Appendix IA to this prospectus for further details on our foreign currency exposure and a sensitivity analysis of the impact of hypothetical increases and decreases in the Australian dollar against relevant foreign currencies.

Interest Rate Risk

We are exposed to cash flow interest rate risk in relation to variable-rate bank balances, term deposits, restricted cash and variable rate borrowings. Our cash flow interest rate risk is mainly concentrated on the fluctuation of the interest rate arising from our A$ borrowings and the LIBOR arising from our US$ borrowings.

See note 34(b) to the Accountants' Report of the Group in Appendix IA to this prospectus for a sensitivity analysis of the impact of hypothetical increases and decreases in interest rates.

Liquidity Risk

In the management of the liquidity risk, we monitor and maintain a level of cash and cash equivalents deemed adequate by the management to finance our operations and mitigate the effects of fluctuations in cash flows. Our management monitors the utilisation of bank borrowings and ensures compliance with loan covenants.

See note 34(b) to the Accountants' Report of the Group in Appendix IA to this prospectus for further details on the remaining contractual maturity for our financial liabilities.

DIVIDENDS AND DIVIDEND POLICY

We did not declare or pay any dividends during the Track Record Period. On 15 August 2018, we declared a dividend of approximately A$130 million on our ordinary shares, which was paid on 21 September 2018. Subject in each case to applicable laws, the ongoing cash needs of the business, the statutory and common law duties of the Directors and shareholders' approval, the Directors may pay interim and/or final dividends, and in accordance with our Constitution must:

(i) subject to (ii) below, pay as interim and/or final dividends not less than 40% of net profit after tax (pre-abnormal items) in each financial year; and

(ii) if the Directors determine that it is necessary in order to prudently manage our financial position, pay as interim and/or final dividends not less than 25% of net profit after tax (pre-abnormal items) in any given financial year.

Our Australian legal advisers have advised that under Australian law, a company is able to pay dividends out of current year profits even though it has accumulated losses, and there is no restriction in our Constitution that would prevent current year profits from being paid out as dividends in this way. Accordingly, the Company's accumulated losses do not prevent it from being able to pay dividends, provided that current year profits are not used to offset prior period losses and the Company is otherwise able to satisfy the other legal requirements of paying a dividend under Australian law. As a result, the amount of any dividends to be declared or paid will depend on, among other things, our results of operations, cash flows, financial condition, operating and capital requirements and applicable laws and regulations.

DISTRIBUTABLE RESERVES

As at 30 June 2018, we did not have any distributable reserves as we did not have positive retained earnings as at such date.

LISTING EXPENSES

Total expenses (including estimated underwriting commissions) expected to be incurred in relation to the Listing are A$37.4 million (HK$214.5 million), of which approximately A$29.7 million (HK$170.3 million) is expected to be charged to the consolidated statement of profit or loss of the Group and approximately A$7.7 million (HK$44.2 million) is expected to be capitalised.

OFF-BALANCE SHEET ARRANGEMENTS

During the Track Record Period and as at the Latest Practicable Date, other than as disclosed in "– *Indebtedness*", we had no material off-balance sheet arrangements.

PRO FORMA FINANCIAL INFORMATION OF THE ENLARGED GROUP

The table below sets forth selected unaudited pro forma combined income statement data for the year ended 31 December 2017 and the six months ended 30 June 2018 as if the Pro Forma Transactions had been completed on 1 January 2017. Such pro forma financial information has been prepared using the procedures and adjustments as described in more detail in Appendix IIB to this prospectus, and should be read in conjunction with the related notes thereto.

		Pro forma adjustments[1] for		
	The audited Group for the six months ended 30 June 2018[2]	Acquisition of additional 28.9% interest in Warkworth	Disposal of 16.6% interest in HVO	Unaudited pro forma consolidated statement of profit or loss of the Group for the six months ended 30 June 2018
	A$ million			
Revenue	2,347	48	(89)	2,306
Other income	115	–	(78)	37
Changes in inventories of finished goods and work in progress	24	1	–	25
Raw materials and consumables used	(337)	(9)	18	(328)
Employee benefits	(254)	(5)	10	(249)
Depreciation and amortisation	(244)	(4)	–	(248)
Transportation	(274)	(3)	7	(270)
Contractual services and plant hire	(206)	(5)	11	(200)
Government royalties	(161)	(4)	7	(158)
Coal purchases	(182)	–	–	(182)
Other operating expenses	(170)	–	3	(167)
Finance costs	(152)	–	(1)	(153)
Share of profit of equity-accounted investees, net of tax	33	–	–	33
Profit before income tax	539	19	(112)	446
Income tax expenses	(178)	(6)	34	(150)
Profit for the period	361	13	(78)	296

	The audited Group for the year ended 31 December 2017	Audited C&A for the eight months ended 31 August 2017	Pro forma adjustments[1] for: Adjustment for acquisition accounting on C&A Acquisition, including 55.6% interest in Warkworth & 67.6% interest in HVO	Pro forma adjustments[1] for: Acquisition of additional 28.9% interest in Warkworth	Pro forma adjustments[1] for: Disposal of 16.6% interest in HVO	Unaudited pro forma consolidated statement of profit or loss of the Enlarged Group for the year ended 31 December 2017
			A$ million			
Revenue	2,601	1,424	46	261	(288)	4,044
Other income	325	26	–	–	78	429
Changes in inventories of finished goods and work in progress	7	(11)	–	3	(2)	(3)
Raw materials and consumables used	(349)	(274)	–	(50)	56	(617)
Employee benefits	(302)	(140)	–	(33)	27	(448)
Depreciation and amortisation	(256)	(78)	(97)	(27)	–	(458)
Transportation	(312)	(110)	26	(19)	20	(395)
Contractual services and plant hire	(274)	(169)	–	(26)	39	(430)
Government royalties	(173)	(111)	–	(21)	23	(282)
Coal purchases	(340)	–	–	–	–	(340)
Other operating expenses	(330)	(26)	–	(19)	7	(368)
Finance costs	(294)	(3)	(10)	–	1	(306)
Share of profit of equity-accounted investees, net of tax	32	(16)	–	–	–	16
Profit/(Loss) before income tax	335	512	(35)	69	(39)	842
Income tax expense/(benefit)	(89)	169	(320)	(20)	12	(248)
Profit/(Loss) for the year	246	681	(355)	49	(27)	594

Notes:

(1) See the Unaudited Pro Forma Consolidated Financial Information of the Enlarged Group in Appendix IIB to this prospectus for further details on the adjustments for the Pro Forma Transactions.

(2) Includes the financial results of C&A for the six months ended 30 June 2018.

Our pro forma combined income statement is not necessarily representative of our results of operations and changes in liquidity and capital resources as they would have appeared in our financial statements had the Pro Forma Transactions occurred during the year ended 31 December 2017 or the six months ended 30 June 2018.

Revenue

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual revenue in the six months ended 30 June 2018, our pro forma revenue in the six months ended 30 June 2018 would have slightly decreased by 1.7% to A$2,306 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual revenue in 2017, our pro forma revenue in 2017 would have increased by 55.5% to A$4,044 million, primarily due to the substantial revenue generated by C&A.

Other Income

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, our pro forma other income in the six months ended 30 June 2018 would have decreased by 67.8% to A$37 million compared to our actual other income in the six months ended 30 June 2018, primarily due to the derecognition of the A$78 million gain on disposal with respect to the Glencore Transaction included in the 2017 pro forma income statement.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual other income in 2017, our pro forma other income in 2017 would have increased by 32% to A$429 million, primarily due to a A$78 million gain on disposal with respect to the Glencore Transaction and A$26 million of other income recognised by C&A. The gain is subject to finalisation of the purchase price for the Glencore Transaction.

Raw Materials and Consumables Used

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual raw materials and consumables used in the six months ended 30 June 2018, our pro forma raw materials and consumables used in the six months ended 30 June 2018 would have decreased by 2.7% to A$328 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual raw materials and consumables used in 2017, our pro forma raw materials and consumables used in 2017 would have increased by 76.8% to A$617 million, primarily due to the significant scale of C&A's production operations.

Employee Benefits

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual employee benefits expenses in the six months ended 30 June 2018, our pro forma employee benefits expenses in the six months ended 30 June 2018 would have decreased by 2.0% to A$249 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual employee benefits expenses in 2017, our pro forma employee benefits expenses in 2017 would have increased by 48.3% to A$448 million, primarily due to the addition of C&A's headcount.

Depreciation and Amortisation

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual depreciation and amortisation expenses in the six months ended 30 June 2018, our pro forma depreciation and amortisation expenses would have increased by 1.6% to A$248 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual depreciation and amortisation expenses in 2017, our pro forma depreciation and amortisation expenses would have increased by 78.9% to A$458 million, primarily due to the addition of the depreciation of C&A's plant, property and equipment and the amortisation of mining tenements recognised by the Company as part of the C&A Acquisition.

Transportation

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual transportation expenses in the six months ended 30 June 2018, our pro forma transportation expenses in the six months ended 30 June 2018 would have slightly decreased by 1.5% to A$270 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual transportation expenses in 2017, our pro forma transportation expenses in 2017 would have increased by 26.6% to A$395 million, primarily due to C&A's substantial transportation needs in connection with its operations.

Contractual Services and Plant Hire

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual contractual services and plant hire in the six months ended 30 June 2018, our pro forma contractual services and plant hire expenses in the six months ended 30 June 2018 would have decreased by 2.9% to A$200 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual contractual services and plant hire in 2017, our pro forma contractual services and plant hire expenses in 2017 would have increased by 56.9% to A$430 million, primarily due to the addition of C&A's contractor headcount.

Government Royalties

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual government royalties in the six months ended 30 June 2018, our pro forma government royalties would have slightly decreased by 1.9% to A$158 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual government royalties in 2017, our pro forma government royalties expenses in 2017 would have increased by 63.0% to A$282 million, primarily due to the addition of royalties imposed on C&A's coal output.

Coal Purchases

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual coal purchases in 2017 and the six months ended 30 June 2018, our pro forma coal purchase costs in 2017 and the six months ended 30 June 2018 would not have changed as none of the entities acquired or disposed of under the Pro Forma Transactions purchased coal in 2017 or the six months ended 30 June 2018.

Other Operating Expenses

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual other operating expenses in the six months ended 30 June 2018, our pro forma other operating expenses in the six months ended 30 June 2018 would have slightly decreased by 1.8% to A$167 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual other operating expenses in 2017, our pro forma other operating expenses in 2017 would have increased by 11.5% to A$368 million, primarily due to the addition of C&A's other operating expenses and stamp duty incurred or expected to be incurred on the Warkworth and Moolarben acquisitions.

Finance Costs

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual finance costs in the six months ended 30 June 2018, our pro forma finance costs in the six months ended 30 June 2018 would have slightly increased by 0.7% to A$153 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual finance costs in 2017, our pro forma finance costs in 2017 would have increased by 4% to A$306 million, primarily due to the addition of C&A's finance costs.

Profit Before Income Tax

As a result of the aforementioned reasons, assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual profit before income tax in the six months ended 30 June 2018, our pro forma profit before income tax in the six months ended 30 June 2018 would have decreased by 17.3% to A$446 million.

As a result of the aforementioned reasons, assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual profit before income tax in 2017, our pro forma profit before income tax in 2017 would have increased by 151.3% to A$842 million.

Income Tax Expense

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual income tax expenses in the six months ended 30 June 2018, our pro forma income tax expense in the six months ended 30 June 2018 would have decreased by 15.7% to A$150 million.

Assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual income tax expenses in 2017, our pro forma income tax expense in 2017 would have increased by 178.7% to A$248 million, primarily due to the addition of C&A's income tax expenses.

Profit After Income Tax

As a result of the aforementioned reasons, assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual profit after income tax in the six months ended 30 June 2018, our pro forma profit after income tax in the six months ended 30 June 2018 would have decreased by 18.0% to A$296 million.

As a result of the aforementioned reasons, assuming that the Pro Forma Transactions had occurred on 1 January 2017, compared to our actual profit after income tax in 2017, our pro forma profit after income tax would have increased by 141.5% to A$594 million.

NO ADDITIONAL DISCLOSURE REQUIRED UNDER THE LISTING RULES

We confirm that, as at the Latest Practicable Date, we were not aware of any circumstances that would give rise to a disclosure requirement under Rules 13.13 to Rules 13.19 of the Listing Rules.

DIRECTORS' CONFIRMATION OF NO MATERIAL ADVERSE CHANGE

The Directors confirm that, having performed reasonable due diligence on the Group, there has been no material adverse change in our financial or trading position or prospects since 30 June 2018 and up to the date of this prospectus.

C&A is a subsidiary of the Company, and was acquired by the Company on and with effect from 1 September 2017. You should read the following discussion and analysis in conjunction with the discussion and analysis of the Company's consolidated financial statements in "Financial Information of the Group" and "Appendix IA – Accountants' Report of the Group", as well as the audited consolidated financial statements of C&A as at and for the years ended 31 December 2015 and 2016, the eight months ended 31 August 2017 and the four months ended 31 December 2017 set out in Appendix IB – Accountants' Report of C&A", as presented in accordance with section 4.05A of the Listing Rules. The audited consolidated financial statements of C&A have been prepared in accordance with IFRS, which may differ in material aspects from generally accepted accounting principles in other jurisdictions. Historical results are not indicative of future performance. You should note that the format and presentation of the historical financial statements of C&A differ in some respects from those of the Company; accordingly, comparability between the two is limited. The pro forma effects of the C&A Acquisition are set out in "Appendix IIB – Unaudited Pro Forma Financial Information of the Enlarged Group".

The following discussion contains forward-looking statements that involve risks, uncertainties and assumptions. We caution you that the business and financial performance of C&A is subject to substantial risks and uncertainties. The actual results could differ materially from those projected in the forward-looking statements. In evaluating the business of C&A, you should carefully consider the information provided in "Risk Factors", "Financial Information of the Group" and "Responsibility Statement and Forward-looking Statements".

OVERVIEW

C&A was one of the major coal mining companies in Australia, with a long history of coal mining operations across Australia dating back to its formation in 1960 as a merger between the Australian coal companies J & A Brown and Caledonian Collieries Limited. C&A was acquired by Rio Tinto in 1989. At the time of its acquisition by us, C&A held majority joint venture interests in three large-scale, high-quality coal mine operations, as described below.

On 1 September 2017, we completed the C&A Acquisition, for which the consideration was US$2.69 billion, comprising US$2.45 billion cash payable on completion, US$240 million in future non-contingent royalty payments over five years following completion, and a coal price-linked contingent royalty. On completion, we acquired:

(i) interests in two of Australia's leading tier-one large-scale, long-life and low-cost coal mines located in the Hunter Valley region of New South Wales, including:

  (a) a 67.6% interest in the HVO mine; and

  (b) an 80.0% interest in the Mt Thorley mine and a 55.6% interest in the Warkworth mine, which are located adjacent to each other and are operationally integrated as the MTW mine; and

(ii) a 36.5% interest in PWCS, which provides the export infrastructure for the acquired mines.

In addition, prior to its acquisition by the Company, C&A disposed of certain material operations. The disposals that occurred during the Track Record Period included the following:

(i) in February 2016, the sale of 32.4% of C&A's assets and liabilities associated with HVO to Mitsubishi Development in exchange for buying back Mitsubishi Development's interest in C&A;

(ii) in March 2016, the sale of C&A's 40% interest in Bengalla, a joint venture of C&A, to New Hope; and

(iii) in August 2016, the sale of C&A's Mount Pleasant thermal coal development project to MACH Energy.

The financial statements of C&A as set forth in this "*Financial Information of C&A*" section are presented with carve-out adjustments to reflect such disposals as if they had taken place on 1 January 2015. See note 36 to the Accountants' Report of C&A in Appendix IB to this prospectus for further details on the carve-out adjustments applied. Save for the contents of this note 36 on carve-out adjustments, the rest of Appendix IB presents the consolidated financial statements of C&A without the carve-out adjustments applied.

BASIS OF PREPARATION

For the purpose of preparing and presenting the consolidated financial information of C&A for the Track Record Period, C&A has consistently adopted all of the new and revised IFRS issued by the IASB which are effective for the financial year beginning 1 January 2018.

SIGNIFICANT FACTORS AFFECTING OUR RESULTS OF OPERATIONS AND FINANCIAL CONDITION

C&A is primarily engaged in coal production and sales, which is substantially similar to the Company's coal operations. Accordingly, the results of operations and financial condition of C&A are primarily affected by the same significant factors as those which affect us. See "*Financial Information of the Group – Significant Factors Affecting Our Results of Operations and Financial Condition*".

DESCRIPTION OF MAJOR LINE ITEMS IN CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND REVIEW OF HISTORICAL RESULTS OF OPERATIONS

The table below sets forth our consolidated statements of profit or loss for the periods indicated:

	Predecessor						Successor			
	Year ended 31 December				Eight months ended 31 August		Four months ended 31 December		Year ended 31 December	
	2015		2016		2017		2017		2017	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
	A$ million	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*	*A$ million*	*%*
Revenue	1,497	100.0	1,599	100.0	1,424	100.0	732	100.0	2,156	100.0
Other income	24	1.6	42	2.6	26	1.8	(5)	(0.7)	21	1.0
Changes in inventories of finished goods and work in progress	(18)	(1.2)	(11)	(0.7)	(11)	(0.7)	26	3.6	15	0.7
Raw material and consumables used	(379)	(25.3)	(341)	(21.3)	(274)	(19.2)	(141)	(19.3)	(415)	(19.2)
Employee benefits expense	(253)	(16.9)	(245)	(15.3)	(140)	(9.8)	(77)	(10.5)	(217)	(10.0)
External services	(186)	(12.4)	(181)	(11.3)	(169)	(11.9)	(80)	(10.9)	(249)	(11.5)
Selling and distribution	(305)	(20.4)	(289)	(18.1)	(221)	(15.6)	(98)	(13.3)	(319)	(14.9)
Administration	(82)	(5.5)	(84)	(5.3)	(25)	(1.6)	(35)	(4.8)	(60)	(2.8)
Net (loss)/gain on disposal of property, plant and equipment	(2)	(0.1)	10	0.6	–	–	–	–	–	–
Depreciation and amortisation expense	(131)	(8.7)	(122)	(7.6)	(78)	(5.4)	(39)	(5.3)	(117)	(5.4)
Coal purchases	(29)	(1.9)	(26)	(1.6)	–	–	(34)	(4.6)	(34)	(1.6)
Net foreign exchange gains	8	0.5	(2)	(0.1)	(1)	(0.1)	4	0.5	3	0.1
Finance costs	(14)	(0.9)	(6)	(0.4)	(3)	(0.2)	(1)	(0.1)	(4)	(0.2)
Share of profits of associates	7	0.5	2	0.1	(16)	(1.1)	(6)	(0.8)	(22)	(1.0)
Profit before income tax	137	9.2	346	21.6	512	37.5	246	33.6	758	35.1
Income tax (expense)/benefit	(45)	(2.9)	(100)	(6.3)	169	11.9	(79)	(10.8)	90	(4.2)
Profit for the year	92	6.3	246	15.4	681	47.8	167	22.8	848	39.3

Revenue

C&A presents revenue in its consolidated statements of profit or loss as revenue from continuing operations, which primarily includes revenue generated from sales of coal directly produced by C&A, and to a significantly lesser extent, from sales of coal purchased by C&A and sea freight revenue.

Revenue by geographic region

C&A had a geographically diverse customer base, with sales throughout the Asia-Pacific region and elsewhere. The table below sets forth, for 2017, a breakdown of C&A's sales revenue by jurisdiction, as determined based on the jurisdiction in which the customer is located[(1)]:

	Predecessor		Successor			
	Eight months ended 31 August		Four months ended 31 December		Year ended 31 December	
	2017		2017		2017	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
	A$ million	*%*	*A$ million*	*%*	*A$ million*	*%*
Japan	554	39.3	282	39.0	836	39.2
South Korea	212	15.0	66	9.1	278	13.0
Taiwan	130	9.2	70	9.7	200	9.3
Thailand	130	9.2	85	11.7	215	10.1
Australia	128	9.1	58	8.0	186	8.7
Singapore	121	8.6	55	7.6	176	8.2
China	18	1.2	72	9.9	90	4.2
Others[(2)]	118	8.4	36	5.0	154	7.2
Total sales revenue	1,411	100.0	724	100.0	2,135	100.0
Interest income	5		1		6	
Others	8		7		15	
Total revenue	1,424		732		2,156	

Notes:

(1) See note 6(c) to the Accountants' Report of C&A in Appendix IB to this prospectus for a breakdown of C&A's revenue by geography during the Track Record Period as shown on a non-carve out basis.

(2) Includes Switzerland and the US.

During 2017, comprising 8 months of C&A ownership and 4 months of the Company's ownership, C&A's largest jurisdictions by revenue were Japan, South Korea, Taiwan, Australia and Thailand. Sales to all jurisdictions except China remained largely consistent over 2017. Sales to China increased in the four-month period, which was driven by a temporary increase in high ash content coal suitable for the Chinese market.

Segment revenue

C&A categorised its operating segments primarily by each individual operating mine. The table below sets forth, for the periods indicated, a breakdown of C&A's segment revenue:

	Predecessor			Successor
	Year ended 31 December		Eight months ended 31 August	Four months ended 31 December
	2015	2016	2017	2017
	A$ million			
Segment:				
Hunter Valley Operations	784	856	792	383
Mount Thorley Warkworth	692	728	623	321
Other	21	15	8	28
Total revenue	1,497	1,599	1,424	732

The segment revenue split during the Track Record Period was broadly consistent, with HVO contributing between 52% and 56%, and MTW between 43% and 47%, of C&A's total revenue. Other segment revenue included (i) interest income, (ii) management fee income in connection with management services provided to both HVO and MTW and (iii) coal handling services income.

Other Income

C&A's other income during the Track Record Period primarily included gains on the disposal of land and other non-operating assets.

Raw Materials and Consumables Used

C&A's raw materials and consumables used primarily includes diesel, consumables, maintenance, explosives, tyres, electricity and other general consumables. Raw materials and consumables used decreased by 10.0% from A$379 million in 2015 to A$341 million in 2016, primarily due to lower diesel prices. C&A's raw materials and consumables used in 2017 increased by 21.7% to A$415 million, primarily due to higher diesel prices and maintenance costs.

Employee Benefits Expense

C&A's employee benefits expenses primarily represent employee salaries and other benefits. Employee benefits expenses decreased by 3.2% from A$253 million in 2015 to A$245 million in 2016, primarily due to labour productivity initiatives implemented which had the effect of reducing employee headcount at C&A's mines. C&A's employee benefits expenses in 2017 decreased by a further 11.4% to A$217 million, primarily due to vacancies being filled by contractors with minimal overall headcount change.

External Services

C&A's external services expenses represent the cost of external labour contractors, business and operations consultants, certain plant hires and other external service providers. External services expenses decreased by 2.7% from A$186 million in 2015 to A$181 million in 2016, primarily due to a reduced need for labour contractors at C&A's mines. C&A's external services expenses then increased by 37.6% in 2017 to A$249 million, primarily due to the reclassification of certain hire costs from administration expenses, the hiring of additional trucks at HVO and the decision to fill vacancies with contractors.

Selling and Distribution

C&A's selling and distribution expenses represent rail and port charges, royalties and other costs incurred in connection with the sale and distribution of coal. Selling and distribution expenses decreased by 5.2% from A$305 million in 2015 to A$289 million in 2016, primarily due to reduced port rates at PWCS. C&A's selling and distribution expenses then increased by 10.4% in 2017 to A$319 million, primarily due to the impact of increased royalties driven by higher coal prices and sales volumes.

Administration

C&A's administration expenses represent costs incurred in connection with administrative functions at mine sites, such as rehabilitation costs, as well as corporate functions such as management salaries and benefits and information technology. Administration expenses increased by 2.4% from A$82 million in 2015 to A$84 million in 2016, primarily due to an increase in certain administrative charges at HVO. C&A's administration expenses then decreased by 28.6% in 2017 to A$60 million, primarily due to the reclassification of certain hire costs to external services.

Depreciation and Amortisation

C&A's depreciation and amortisation expenses relate to property, plant and equipment and operational mining properties. Depreciation and amortisation expenses decreased by 6.9% from A$131 million in 2015 to A$122 million in 2016, primarily due to an upward revision of HVO coal reserves. C&A's depreciation and amortisation expenses further decreased by 4.1% in 2017 to A$117 million, primarily due to the impact of reduced capital expenditure by C&A prior to the acquisition.

Profit Before Tax

As a result of the aforementioned reasons, C&A's profit before income tax increased by 152.6% from A$137 million in 2015 to A$346 million in 2016, then further increased by 119.1% to A$758 million in 2017.

Income Tax Expense

C&A's income tax expense increased by 122.2% from A$45 million in 2015 to A$100 million in 2016, while the effective tax rate decreased from 32.8% to 28.9%, which was largely in line with the Australian statutory tax rate of 30%. C&A then recognised an income tax benefit of A$90 million in 2017 with the effective tax rate decreasing to 11.9%, primarily due to the recognition of a significant deferred tax asset resulting from the push down of our acquisition tax balances. See "– *Description of Major Line Items in Our Consolidated Statements of Financial Position – Deferred Tax Assets*" for further details.

Profit for the Year

As a result of the aforementioned reasons, C&A's profit for the year increased by 167.4% from A$92 million in 2015 to A$246 million in 2016. C&A's profit for the year further increased by 244.7% in 2017 to A$848 million.

Non-IFRS Financial Measures

EBITDA was a key measure used by C&A to assess the performance of its individual segments and make decisions on the allocation of resources. EBITDA is not a standard measure under IFRS. As presented by C&A, EBITDA represents profit before income tax as adjusted for depreciation and amortisation, interest income and finance costs.

While EBITDA provides an additional financial measure for investors to assess our operating performance, the use of EBITDA has certain limitations because they do not reflect all items of income and expense that affect C&A's operations. In addition, EBITDA not reflect changes in working capital, capital expenditure or other investing and financing activities and therefore should not be considered a measure of liquidity.

As a measure of C&A's operating performance, we believe that the most directly comparable IFRS measure to EBITDA is profit before income tax. The table below sets forth, for the periods indicated, a reconciliation of EBITDA for C&A with profit before income tax under IFRS:

	Year ended 31 December		Eight months ended 31 August	Four months ended 31 December	Year ended 31 December
	2015	2016	2017	2017	2017
			A$ million		
Profit before income tax	137	346	512	246	758
Adjustments for:					
Depreciation and amortisation	131	122	78	39	117
Interest income	(6)	(17)	(5)	(1)	(6)
Finance costs	14	6	3	1	4
EBITDA	276	457	588	285	873

In 2015, 2016 and 2017, C&A's EBITDA margin (calculated as EBITDA divided by revenue and multiplied by 100%) was 18.4%, 28.6% and 40.5%, respectively.

EBITDA should not be considered in isolation or construed as a substitute for analysis of IFRS financial measures. In addition, because EBITDA may not be calculated in the same manner by all companies, C&A's EBITDA may not be comparable to the same or similarly titled measures presented by other companies.

DESCRIPTION OF MAJOR LINE ITEMS IN OUR CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

Property, Plant and Equipment

C&A's property, plant and equipment primarily includes plant and equipment, freehold land and buildings and operational mining properties. The balance of C&A's property, plant and equipment was A$849 million, A$762 million and A$627 million as at 31 December 2015, 2016 and 2017, respectively. The decrease across the Track Record Period was primarily due to a reduced level of capital expenditure by C&A relative to the depreciation charge. See note 16 to the Accountants' Report of C&A in Appendix IB to this prospectus for further details.

Inventories

C&A's inventories primarily consist of (i) stores, which are mainly production supplies and spare parts used in C&A's operations, (ii) finished goods, which are mainly coal stocks stored or in transit for delivery and (iii) work in progress, which are mainly run-of-mine coal awaiting processing. The balance of C&A's inventories was A$69 million, A$61 million and A$71 million as at 31 December 2015, 2016 and 2017 respectively. The decrease as at 31 December 2016 compared to 31 December 2015 was primarily due to an initiative to transition stores to consignment rather than direct ownership by C&A. The increase as at 31 December 2017 compared to 31 December 2016 was primarily due to the timing of year-end sales.

Trade and Other Receivables

C&A's trade receivables primarily relate to the sale of coal, and are generally due within 30 days. Other receivables primarily consist of fuel tax rebates, goods and services tax receivables and other miscellaneous receivables. C&A's receivables also included amounts due from related parties, which were receivables attributable to C&A's joint venture partners. The table below sets forth a breakdown of C&A's trade and other receivables as at the dates indicated:

	Predecessor		Successor
	As at 31 December		As at 31 December
	2015	2016	2017
		A$ million	
Trade receivables	54	177	112
Amount due from related parties	18	54	328
Other receivables	31	43	111
Prepayments	3	2	3
Total trade and other receivables	105	276	554

C&A's trade receivables substantially increased from A$54 million as at 31 December 2015 to A$177 million as at 31 December 2016 and then decreased to A$112 million as at 31 December 2017, primarily due to the impact of changing prices and timing of receipts. The significant increase in amount due from related parties from 31 December 2016 to 31 December 2017 resulted from cash being paid up from C&A to the Company via intercompany accounts. The increase in other receivables for the same period included an increase in goods and services tax receivable.

Investments Accounted for Using Equity Method

C&A's investments accounted for using equity method primarily represent investments in associates, namely PWCS, in which C&A held a 36.5% interest during the Track Record Period at a carrying amount of A$216 million, A$206 million and A$145 million as at 31 December 2015, 2016 and 2017, respectively. The decrease at 31 December 2017 resulted from recognition of an impairment charge by PWCS with respect to its Terminal 4 expansion asset.

Intangible Assets

C&A's intangible assets primarily represent mining reserves, net of amortisation, impairment and disposals. C&A's balance of intangible assets amounted to A$163 million, A$154 million and A$145 million as at 31 December 2015, 2016 and 2017, respectively.

Deferred Tax Assets

C&A's deferred tax assets primarily consist of temporary differences between commercial and tax reporting attributable to rehabilitation and closure provision and employee benefits. As at 31 December 2016, C&A's deferred tax assets were also attributable to property, plant and equipment and intangible assets. C&A's deferred tax assets amounted to A$132 million, A$155 million and A$454 million, respectively. The significant increase as at 31 December 2017 was due to the C&A Acquisition creating an uplifted tax base. The uplifted tax base was pushed down to the entity level as a legal matter, but the accounting uplift remains at the consolidated Group level, and thus there is no overall impact at the Group level.

Trade and Other Payables

C&A's trade payables primarily relate to operating supplies and services used in production processes, and are generally settled within 45 days. C&A's other payables primarily consist of royalty payables, payroll tax payables, accruals and payable clearings. C&A's payables also included amounts due to related parties, which were payables attributable to C&A's joint venture partners. The table below sets forth, as at the dates indicated, a breakdown of C&A's trade and other payables:

	Predecessor		Successor
	As at 31 December		As at 31 December
	2015	2016	2017
		A$ million	
Trade payables	186	290	257
Amount due to related parties	13	17	6
Intercompany payable in respect of income tax	–	13	75
Other payables	11	26	46
Total trade and other payables	210	346	384

C&A's trade payables increased by 64.8% from A$210 million as at 31 December 2015 to A$346 million as at 31 December 2016, primarily due to working capital initiatives to extend credit periods on our trade payables and remained at a similar level as at 31 December 2017. The increase in intercompany payables in respect of income tax as at 31 December 2017 was due to tax sharing arrangements whereby C&A did not pay tax on its profits due to the Group's carried forward tax losses. This has no overall impact at the Group level.

Provisions

C&A's provisions represent obligations for which a reliable estimate of the amount of such obligation can be made. During the Track Record Period, the largest components of C&A's provisions were those for rehabilitation costs and mine closures. C&A's balance of provisions amounted to A$181 million, A$251 million and A$191 million as at 31 December 2015, 2016 and 2017, respectively.

LIQUIDITY AND CAPITAL RESOURCES

Net Current Assets

The table below sets forth, for the dates indicated, a breakdown of C&A's current assets and current liabilities:

	Predecessor		Successor	
	As at 31 December		As at 31 December	As at 30 April
	2015	2016	2017	2018
	A$ million			(unaudited)
Current assets				
Cash and cash equivalents	209	312	33	125
Trade and other receivables	105	276	554	616
Inventories	69	61	71	99
Assets classified as held for sale	–	–	132	130
Total current assets	383	649	790	970
Current liabilities				
Trade and other payables	210	346	384	546
Bank overdraft	1	–	–	–
Provisions	45	118	15	11
Current tax liabilities	–	4	–	–
Liabilities classified as held for sale	–	–	53	32
Total current liabilities	256	468	452	589
Net current assets	127	181	338	381

C&A had net current assets of A$127 million, A$181 million and A$338 million as at 31 December 2015, 2016 and 2017, respectively. As at 30 April 2018, C&A had net current assets of A$381 million.

Cash Flows

The table below sets forth C&A's cash flows for the periods indicated:

	Year ended 31 December		Eight months ended 31 August	Four months ended 31 December
	2015	**2016**	**2017**	**2017**
	A$ million			
Net cash generated from operating activities	412	517	427	171
Net cash used in investing activities	(41)	(31)	(6)	(289)
Net cash used in financing activities	(394)	(381)	(582)	–
Net (decrease)/ increase in cash and cash equivalents	(23)	104	(161)	(118)
Cash and cash equivalents at the beginning of the year	231	208	312	152
Cash and cash equivalents at the end of the year	208	312	152	33

Net cash generated from operating activities

In the four months ended 31 December 2017, C&A had a net operating cash inflow of A$171 million, primarily due to receipts from customers of A$653 million for sales of thermal and metallurgical coal, partially offset by payments to suppliers and employees of A$486 million for supplies and services used in the coal mining production processes.

In the eight months ended 31 August 2017, C&A had a net operating cash inflow of A$427 million, primarily due to receipts from customers of A$1,335 million for sales of thermal and metallurgical coal, partially offset by payments to suppliers and employees of A$680 million for supplies and services used in the coal mining production processes and an income tax payment of A$232 million.

In 2016, C&A had a net operating cash inflow of A$517 million, primarily due to receipts from customers of A$1,459 million for sales of thermal and metallurgical coal, partially offset by payments to suppliers and employees of A$890 million for supplies and services used in the coal mining production processes and an income tax payment of A$83 million.

In 2015, C&A had a net operating cash inflow of A$412 million, primarily due to receipts from customers of A$1,540 million for sales of thermal and metallurgical coal, partially offset by payments to suppliers and employees of A$1,076 million for supplies and services used in the coal mining production processes and an income tax payment of A$61 million.

Net cash used in investing activities

In the four months ended 31 December 2017, C&A's net cash used in investing activities was A$289 million, primarily due to purchases of property, plant and equipment of A$26 million and A$272 million of advances to related parties representing cash paid up to the Group parent entity.

In the eight months ended 31 August 2017, C&A's net cash used in investing activities was A$6 million, primarily due to purchases of property, plant and equipment of A$33 million, partially offset by proceeds from the sale of property, plant and equipment of A$20 million.

In 2016, C&A's net cash used in investing activities was A$31 million, primarily due to purchases of property, plant and equipment of A$40 million, partially offset by proceeds from the sale of property, plant and equipment of A$9 million.

In 2015, C&A's net cash used in investing activities was A$41 million, primarily due to purchases of property, plant and equipment of A$43 million, partially offset by proceeds from the sale of property, plant and equipment of A$2 million.

Net cash used in financing activities

In the four months ended 31 December 2017, C&A did not have any cash flow from financing activities.

In the eight months ended 31 August 2017, C&A's net cash used in financing activities was A$582 million due to a dividend payment to C&A shareholders prior to the disposal.

In 2016, C&A's net cash used in financing activities was A$381 million, primarily due to a capital return to shareholders of A$380 million.

In 2015, C&A's net cash used in financing activities was A$394 million, primarily due to repayment of shareholder loans of A$293 million and dividend payments to shareholders of A$101 million.

INDEBTEDNESS

As at 31 December 2015 and 2016, 31 August 2017, 31 December 2017 and 30 April 2018, C&A did not have any bank or other borrowings when presenting its financial statements on a carve-out basis.

C&A had obtained a number of bank guarantees in favour of certain counterparties, including government departments and rail and port operators, in respect of C&A's operations. As at 31 December 2015, 2016 and 2017, the balance of C&A's bank guarantees amounted to A$365 million, A$319 million and A$332 million, respectively.

RELATED PARTY TRANSACTIONS

During the Track Record Period, C&A had certain transactions with related parties, including the following:

- Amounts due from related parties of A$18 million, A$54 million and A$328 million as at 31 December 2015, 2016 and 2017, respectively, which were attributable to C&A's joint venture partners, non-interesting bearing and settled on 30-day terms;

- Amounts due to related parties of A$13 million, A$17 million and A$6 million as at 31 December 2015, 2016 and 2017, respectively, which were attributable to C&A's joint venture partners, non-interesting bearing and settled on 30-day terms; and

- Cash deposits with Rio Tinto Finance Limited.

CAPITAL EXPENDITURE

C&A incurred capital expenditure of A$43 million, A$41 million and A$59 million in 2015, 2016 and 2017, respectively. The capital expenditure was classified as assets under construction in the year incurred before subsequently being reclassified primarily to plant and equipment.

OFF-BALANCE SHEET ARRANGEMENTS

During the Track Record Period, C&A had no material off-balance sheet arrangements.

SHARE CAPITAL

Under the Australia Corporations Act, Australian registered companies do not have an authorised capital, and there is no concept of a "par value" in respect of issued shares. The following is a description of the issued share capital of the Company as at the date of this prospectus and immediately following the completion of the Global Offering:

	Number of Shares
Issued and to be issued, fully paid or credited as fully paid	
Shares in issue as at the date of this prospectus	1,256,071,756
Shares to be issued pursuant to the Global Offering (assuming the Over-allotment Option is not exercised)	59,441,900
Total	1,315,513,656

Following the completion of the Global Offering, the Company will issue up to 8,225,509 Shares to existing Shareholders (or other persons to whom existing Shareholders have renounced their entitlements) who elect to take up their entitlements under the retail tranche of the Australian Entitlement Offer (see "– *The Global Offering and the Australian Entitlement Offer – The Australian Entitlement Offer*" below for further details). Following the completion of the retail tranche of the Australian Entitlement Offer, the issued capital of the Company will comprise up to 1,332,655,365 Shares, assuming the Over-allotment Option is exercised in full.

ASSUMPTIONS

The above table assumes that the Global Offering becomes unconditional.

RANKING

The Offer Shares are ordinary shares in the share capital of the Company and will rank equally in all respects with all the Shares in issue or to be issued as set out in the above table, and will qualify for all dividends and other distributions declared, made or paid by the Company following the completion of the Global Offering.

THE GLOBAL OFFERING AND THE AUSTRALIAN ENTITLEMENT OFFER

The Global Offering

The Global Offering will comprise an offering of initially 59,441,900 Offer Shares as follows:

(a) the Hong Kong Public Offering of initially 5,944,200 Offer Shares (subject to reallocation) in Hong Kong; and

(b) the International Offering of initially 53,497,700 Offer Shares (subject to reallocation and the Over-allotment Option) to QIBs in the United States as well as institutional and professional investors and other investors in Hong Kong and other jurisdictions outside the United States.

For further details of the structure of the Global Offering, see *"Structure of the Global Offering"*.

The Offer Shares to be offered pursuant to the Global Offering (other than any Shares which may be issued pursuant to the Over-allotment Option) will comprise the Shares which the Company will offer pursuant to an Australian Entitlement Offer and which are renounced by the Major Shareholders, as further described below.

The Shares to be issued pursuant to any exercise of the Over-Allotment Option will be issued by the Company pursuant to its general power under the ASX Listing Rules to issue Shares up to 15% of its issued share capital, and will constitute up to 0.71% of the Company's issued share capital as at the Latest Practicable Date.

The Australian Entitlement Offer

In connection with the Global Offering, the Company will undertake an accelerated renounceable entitlement offer (or rights offer) of its Shares to the existing Shareholders of the Company (i.e. the Australian Entitlement Offer) which is expected to be announced on Friday, 30 November 2018. The Australian Entitlement Offer is made in compliance with the ASX Listing Rules.

Pursuant to the Australian Entitlement Offer, the Company will issue up to 67,667,409 Shares (representing an offer ratio of 0.05387 new Shares for each existing Share held) at the same price as the final Offer Price for the Global Offering. The Australian Entitlement Offer will be launched shortly after the Offer Price under the Global Offering has been determined. The Offer Shares to be offered pursuant to the Global Offering (other than any Shares which may be issued pursuant to the Over-allotment Option) will form part of the Shares offered pursuant to the Australian Entitlement Offer, as further explained below.

The Australian Entitlement Offer will consist of two tranches as follows:

(a) **institutional tranche:** this will comprise the offer of rights to subscribe for 59,441,900 Shares to the Company's major shareholders, being Yanzhou, CSIL and Cinda (the "**Major Shareholders**"), which hold in aggregate approximately 87.8% of the Shares as at the Latest Practicable Date. The institutional tranche will be conducted immediately following the launch of the Australian Entitlement Offer and settlement of the institutional tranche will take place on the Listing Date; and

(b) **retail tranche:** this will comprise the offer of rights to subscribe for 8,225,509 Shares to the Company's existing Shareholders (other than the Major Shareholders), which hold in aggregate approximately 12.2% of the Shares as at the Latest Practicable Date. The retail tranche will be open for a period of 8 business days commencing from the business day after the Listing Date.

The Major Shareholders have agreed to renounce their rights to participate in the institutional tranche of the Australian Entitlement Offer in respect of an aggregate of 59,441,900 Shares, representing approximately 87.8% of the Shares to be offered pursuant to the Australian Entitlement Offer. Those Shares which are renounced by the Major Shareholders will comprise the Offer Shares which will be offered to investors in the Global Offering.

The remaining approximately 12.2% of the Shares to be offered pursuant to the Australian Entitlement Offer (i.e. 8,225,509 Shares) will not form part of the Global Offering and will be made available in the retail tranche of the Australian Entitlement Offer. Existing Shareholders of the Company (other than the Major Shareholders) may take up their rights or renounce them privately in the retail tranche of the Australian Entitlement Offer. The Shares relating to any unexercised rights at the close of the retail tranche of the Australian Entitlement Offer will be offered in an institutional bookbuild to be conducted in Australia during a business day that is within 4 business days after the close of the retail tranche of the Australian Entitlement Offer. Any proceeds received in excess of the offer price for the Australian Entitlement Offer (net of any expenses and withholdings as required by law) will be returned to the renouncing Shareholders. There is no guarantee that the renounced entitlements will be sold or that a premium will be achieved from any such sale.

The Australian Entitlement Offer is not underwritten (other than to the extent that the Shares of the Major Shareholders are included in the Global Offering in the manner described above). Therefore, the number of Shares to be issued by the Company upon completion of the Australian Entitlement Offer will depend on the extent of the rights being taken up by the existing Shareholders of the Company (or by their assignees) and may not necessarily result in all the Shares offered under the Australian Entitlement Offer being issued.

In connection with the Australian Entitlement Offer, the Company has sought and ASIC has granted a modification of the Australia Corporations Act to permit existing Shareholders of the Company (other than the Major Shareholders) with a registered address in Australia or New Zealand to pay for Shares offered under the retail tranche of the Australian Entitlement Offer in either Australian Dollars or US Dollars.

The Shares to be issued pursuant to any exercise of the Over-Allotment Option will be issued by the Company pursuant to its general power under the ASX Listing Rules to issue shares up to 15% of its issued share capital, and will constitute up to 0.71% of the Company's issued share capital at the date of this prospectus.

EQUITY INCENTIVE PLAN

The Company has approved the Equity Incentive Plan. Under the Equity Incentive Plan, the Company has granted awards of Shares to certain persons prior to the Listing Date. The principal terms of the Equity Incentive Plan are summarised in *"Appendix VII – Statutory and General Information".*

So far as is known to any Director or chief executive of the Company as at the Latest Practicable Date, immediately following the completion of the Global Offering (assuming the Over-allotment Option is not exercised and without taking into account any Shares which may be taken up by existing Shareholders of the Company under the Australian Entitlement Offer), the following persons (other than a Director or chief executive of the Company) will have an interest and/or short position (as applicable) in the Shares or underlying Shares which would fall to be disclosed to the Company and the Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO, once the Shares are listed on the Stock Exchange:

INTERESTS AND LONG POSITIONS IN SHARES

Name of Shareholder	Capacity	Number of Shares Held or Interested	Approximate Percentage (%)
Yanzhou	Beneficial interest	822,157,715	62.50
Yankuang[(1)]	Interest in controlled entity	822,157,715	62.50
Cinda International HGB Investment (UK) Limited[(2)]	Beneficial interest	209,800,011	15.95
China Agriculture Investment Limited	Interest in controlled entity	209,800,011	15.95
International High Grade Fund B, L.P.	Interest in controlled entity	209,800,011	15.95
Cinda International GP Management Limited	Interest in controlled entity	209,800,011	15.95
China Cinda (HK) Asset Management Co., Ltd	Interest in controlled entity	209,800,011	15.95
Cinda Strategic (BVI) Limited	Interest in controlled entity	209,800,011	15.95
Cinda International Holdings Limited	Interest in controlled entity	209,800,011	15.95
China Cinda (HK) Holdings Company Limited	Interest in controlled entity	209,800,011	15.95
China Cinda Asset Management Co., Ltd.[(2)]	Interest in controlled entity	209,800,011	15.95
Glencore Coal Pty Ltd	Beneficial interest	84,497,858	6.42
Glencore Holdings Pty Limited[(3)]	Interest in controlled entity	84,497,858	6.42
Glencore plc[(3)]	Interest in controlled entity	84,497,858	6.42
CSIL[(4)]	Beneficial interest	71,428,572	5.43
Shandong Lucion Investment Holdings Group Co., Ltd[(4)]	Interest in controlled entity	71,428,572	5.43

Notes:

(1) Yankuang is deemed to be interested in the 822,157,715 Shares which Yanzhou is interested in as beneficial owner as it is entitled to exercise or control the exercise of more than one-third of the voting power at general meetings of Yanzhou.

(2) Cinda International HGB Investment (UK) Limited, an indirect wholly owned subsidiary of China Cinda Asset Management Co., Ltd., is interested in 209,800,011 Shares which are held by J P Morgan Nominees Australia Limited as nominee. China Cinda Asset Management Co, Ltd., China Cinda (HK) Holdings Company Limited, Cinda International Holdings Limited, Cinda Strategic (BVI) Limited, China Cinda (HK) Asset Management Co., Ltd, Cinda International GP Management Limited, International High Grade Fund B, L.P. and China Agriculture Investment Limited are each deemed to be interested in the 209,800,011 Shares which Cinda International HGB Investment (UK) Limited is interested in as beneficial owner.

(3) Glencore plc and Glencore Holdings Pty Limited are deemed to be interested in the 84,497,858 Shares which Glencore Coal Pty Ltd is interested in as beneficial owner. Glencore plc wholly owns Glencore Holdings Pty Limited which in turn wholly owns Glencore Coal Pty Ltd.

(4) CSIL, a wholly owned subsidiary of Shandong Lucion Investment Holdings Group Co., Ltd, is interested in 71,428,572 Shares which are held by HSBC Custody Nominees (Australia) Limited – A/C 2 as nominee.

OVERVIEW

As at the Latest Practicable Date, Yankuang was, directly and indirectly, interested in approximately 51.81% of the shares in Yanzhou and Yanzhou was interested in approximately 65.45% of the Shares in the Company. Immediately following the completion of the Global Offering, (i) Yanzhou will be interested in approximately 62.5% of the Shares in issue (assuming the Over-allotment Option is not exercised), (ii) the Company will remain as a non-wholly owned subsidiary of Yankuang and Yanzhou and (iii) Yankuang and Yanzhou will be the controlling shareholders of the Company. Please refer to "*History and Corporate Structure*" for the simplified corporate structure of the Group.

BACKGROUND OF THE CONTROLLING SHAREHOLDERS

The Yankuang Group

Yankuang was established in the PRC in 1996 and is the controlling shareholder of Yanzhou. It is principally engaged in the production and sale of coal, coal chemicals and aluminium, power generation, machinery manufacturing and financial investments.

The Yanzhou Group

Yanzhou was established in the PRC in 1997 and is the controlling shareholder of the Company. It is principally engaged in the production of coal and coal chemicals, manufacturing of mechanical and electrical equipment and power and heat generation. Yanzhou has been listed on the Shanghai Stock Exchange and the Stock Exchange since 1998.

INDEPENDENCE OF THE GROUP FROM THE CONTROLLING SHAREHOLDERS

The Directors are of the view that the Group is able to carry on its business independently from the Controlling Shareholders following the completion of the Global Offering for the following reasons.

(a) Clear Delineation of Business

Geographical location of assets

The Group

All mines in which the Group has interests and operates are located in New South Wales and Queensland in Australia. In particular, the flagship mines of the Group, being HVO (which is operated as an unincorporated joint venture with Glencore), MTW and Moolarben, which in aggregate accounted for approximately 88.7% of total coal sales (on an attributable basis) in 2017 by the Group from the mines in which the Group has interests and operates, on a pro-forma basis (as if the C&A Acquisition, the Warkworth Transaction and the Glencore Transaction had been completed on 1 January 2017), are located in New South Wales.

The Yankuang Group

All mining assets of the Yankuang Group are located in the Shaanxi and Guizhou Provinces and Xinjiang Autonomous Region in the PRC. The Yankuang Group does not have any interests in mines in Australia other than through its interests in the Yanzhou Group and the Group. There is no overlap in the geographical location of the mining assets of the Yankuang Group and the Group.

The Yanzhou Group

The substantial majority of Yanzhou's mining assets are located in the Shandong and Shanxi Provinces and the Inner Mongolia Autonomous Region in the PRC.

The mining assets of Yanzhou located outside of the PRC, other than through its interest in the Group, are managed and operated by the Company. These mining assets of Yanzhou comprise (i) the Cameby Downs mine located in Queensland, Australia, which includes exploration projects not currently in production and (ii) the Premier mine located in Western Australia (the "**Managed Mines**"). Pursuant to a long term management services agreement, the Company is responsible for, among others, HR, treasury and the operations, exploration and development of the Managed Mines. See "*Business – Our Mining Operations – Managed Mines*" and "*Connected Transactions – 3. Provision of Management Services by the Company*".

Based on the foregoing and in particular, taking into consideration the management arrangement in respect of the Managed Mines, the geographical locations of mine assets of the Group are clearly delineated from the Yankuang Group and/or the Yanzhou Group.

Geographical location of markets of sales

The Group

The customers of the Group are located throughout the Asia-Pacific region, with China, South Korea, Singapore and Japan comprising the largest jurisdictions by revenue during the Track Record Period. The major customers of the Group are power utilities and steel mills. With respect to the PRC market, customers of the Company are mainly located in coastal regions, including Guangdong Province, Guangxi Province, Zhejiang Province and Jiangsu Province, as the cost of sourcing coal from domestic markets by customers with plants located in coastal regions is greater than that from seaborne market.

The Yankuang Group

Primarily due to market demand, logistic constraints and transportation costs, all coal produced by Yankuang's mines in the PRC are sold to customers located in the PRC, including customers in local provinces and Yankuang Group's chemical products production plants.

The Yanzhou Group

All coal produced by Yanzhou's mines in the PRC are sold to customers located in the PRC, which are primarily power plants, metallurgy and chemical plants, primarily located in inland areas of the PRC due to market demand, logistic constraints and

transportation costs. As the Managed Mines are managed and operated by the Company, sales of coal produced by the Managed Mines are arranged by the Company's marketing and logistics personnel. As at the Latest Practicable Date, other than coal produced by the Managed Mines, Yanzhou was not engaged in coal export business.

Based on the foregoing, the geographical locations of markets of sales of the Group are clearly delineated with that of the Yankuang Group and/or the Yanzhou Group.

Business size

In 2015, 2016 and 2017 and the six months ended 30 June 2018, the revenue from the sale of coal produced by Yanzhou's mines located in the PRC was approximately RMB13,252 million, RMB17,216 million, RMB25,593 million and RMB14,076 million, representing approximately 64.5%, 72.4%, 66.6% and 55.7% of its total revenue from the sale of self-produced coal, respectively.

In 2015, 2016 and 2017 and the six months ended 30 June 2018, the revenue from the sale of coal produced by the Managed Mines was RMB1,836 million, RMB1,745 million, RMB2,395 million and RMB1,129 million, representing an insignificant percentage in terms of the total revenue from the sales of self-produced coal of Yanzhou, being approximately 8.9%, 7.3%, 6.2% and 4.5%, respectively.

In 2015, 2016 and 2017 and the six months ended 30 June 2018, the revenue from the sales of coal produced by the Group's mines, all of which are located in Australia, was approximately A$1,074 million, A$967 million, A$2,204 million and A$2,075 million, respectively.

Based on the above, the coal production and sale business of the Managed Mines represent a relatively small proportion of Yanzhou's coal production and sales business, and is relatively small in comparison to the Group's coal production and sales business.

For the reasons set out above, the Directors are therefore of the view that there is clear delineation of business of the Group from the businesses of the Controlling Shareholders.

(b) Operational Independence

The Group holds all the relevant licenses, qualifications and permits required for conducting the Group's business independently of the Controlling Shareholders. The Group has its own organisational structure comprising various departments that function and make decisions independently from the Controlling Shareholders. The Group maintains a set of internal control procedures and has adopted corporate governance practices that satisfy the applicable legal and regulatory requirements. The Group is able to formulate and execute operational decisions independently.

The Group from time to time may sell coal to the Yanzhou Group. Such transactions were and will be conducted in the ordinary and usual course of business of the Group, on an arm's length basis and on normal commercial terms or better to the Group. The reason for the purchase of the coal by the Yanzhou Group is for their own trading purposes but may sometimes enter into purchase transactions for back-to-back on sale to end customers. For the years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018, the revenue generated from the sales of coal to the Yanzhou Group was approximately US$12.6 million, US$30.6 million, US$5.1 million and US$104.5 million, respectively, representing approximately only 1.3%, 3.4%, 0.3% and 3.3% of the total revenue of the Group, respectively. See "*Connected Transactions*".

The Directors are of the view that the connected transaction entered into with the Yanzhou Group as described above will not have any material impact on the Group's ability to operate independently and the Group's operations are independent from the Controlling Shareholders.

(c) Financial Independence

As at 30 June 2018, except for the guarantee provided by Yankuang in respect of the obligations of Watagan (a wholly owned subsidiary of the Company) under a loan facility agreement between the Company and Watagan, of which, A$730 million remained drawn-down, there are no loans or guarantees which are provided by the Yankuang Group to or for the benefit of the Group. See "*Connected Transaction – Exempt Continuing Connected Transactions*" for further details.

As at 30 June 2018, the Yanzhou Group had also provided to the Group (a) loan facilities with an aggregate drawn-down principal amount of A$1,611 million and (b) guarantees in respect of loans provided by several financial institutions with an aggregate outstanding principal amount of US$1,950 million. See "*Connected Transactions – A. Exempt Continuing Connected Transactions*" for further details of these loan facilities and guarantees. All such loan facilities and guarantees are on arm's length and normal commercial terms and no security over the Group's assets has been given by the Group to the Yanzhou Group for the provision of such loan facilities and guarantees to the Group. On completion of the Global Offering, assuming an Offer Price of HK$24.66 (being the mid-point of the Offer Price Range) and before any exercise of the Over-allotment Option, approximately HK$600.7 million of the outstanding principal amount of (i) the loans in respect of which guarantees have been provided by the Yanzhou Group or (ii) unsecured loans from related parties will be repaid using the net proceeds of the Global Offering.

Since 30 June 2018, the Company has not drawn down or utilised any of the loan facilities or guarantees mentioned above and has no intention to further draw down on such loan facilities or guarantees before the Listing.

The Group has obtained financing from third party sources on a standalone basis without any credit support from the Yanzhou Group or the Yankuang Group or any of their respective associates. In 2017, the Company obtained a bank guarantee facility from several financial institutions in the amount of A$1 billion. In addition, in June 2018, the Company obtained an offer letter from a financial institution to provide a loan facility in the aggregate amount of US$3 billion and a bank guarantee facility of A$1 billion on arm's length and normal commercial terms. Furthermore, the Company has obtained an offer letter in September 2018 from a financial institution to provide an incremental term loan facility for the amount of US$700 million on arm's length and normal commercial terms. The facilities under the offer letters obtained in June 2018 and September 2018 have not been utilised by the Company as at the Latest Practicable Date. Each of the above facilities and offer letters were obtained without any credit support from the Yanzhou Group or the Yankuang Group or any of their respective associates.

The Directors are therefore of the view that the Group is able to operate financially independently from the Controlling Shareholders.

(d) Independence of Directors and Management

The Board of Directors consists of 11 Directors, comprising one Executive Director, six Non-executive Directors and four Independent Non-executive Directors. Of the 11 Directors, five Non-executive Directors currently hold positions in the Controlling Shareholders, details of which are set out below:

Name of Director	Material positions with the Controlling Shareholders as at the Latest Practicable Date
Baocai ZHANG	director, member of Party's standing committee and general counsel of Yankuang
Cunliang LAI	deputy general manager of Yankuang
Xiangqian WU	director and general manager of Yanzhou
Fuqi WANG	chief engineer of Yanzhou
Qingchun ZHAO	chief financial officer and director of Yanzhou

The Directors are of the view that the Board and the senior management of the Group are able to function independently of the Controlling Shareholders for the following reasons:

(i) more than half of the members of the Board (comprising the Executive Director (being Mr. Fucun WANG), one Non-executive Director (being Mr. Xing FENG) and all of the Independent Non-executive Directors are independent of, and do not have any directorships and/or other roles with, the Controlling Shareholders and/or their respective close associates;

(ii) none of the members of the senior management of the Group, who are responsible for the day-to-day management of the Group's business, holds any directorship and/or other roles with the Controlling Shareholders; and

(iii) any Director with an interest in the relevant matters (including matters relating to the transactions between the Group and the Controlling Shareholders) will abstain from voting in respect of those matters. Only Directors who do not have any ongoing roles with the Controlling Shareholders and/or their respective close associates (as the case may be) will vote and decide on relevant matters relating to the transactions between the Group and the Controlling Shareholders and an independent board committee, comprising Independent Non-executive Directors only, will be established as and when required to consider and approve any connected transactions of the Group in accordance with the Company's internal corporate governance policies and/or the Listing Rules.

(e) Independence of Administrative Capability

All essential administrative functions (such as finance and accounting, administration and operations, information technology, human resources and compliance functions) are carried out by the Group without the support of the Controlling Shareholders. Accordingly, the Directors are of the view that the Group is administratively independent from the Controlling Shareholders.

DIRECTORS' INTEREST IN COMPETING BUSINESS

Except for (i) Mr. Baocai ZHANG, who is a Non-executive Director and also a director of Yankuang and (ii) Mr. Xiangqian WU and Mr. Qingchun ZHAO, who are Non-executive Directors and also the directors of Yanzhou, none of the Directors is interested in any business apart from the Group's business which competes with or is likely to compete, either directly or indirectly, with the Group's business.

OVERVIEW

Prior to the Listing, the Group has entered into certain transactions with parties who will, upon the Listing, become connected persons of the Company. Details of the continuing connected transactions of the Company following the Listing are set out below.

A. Exempt Continuing Connected Transactions

Following the Listing, the following transactions will be regarded as continuing connected transactions exempt from the reporting, announcement, annual review and independent shareholders' approval requirements under Chapter 14A of the Listing Rules.

1. Loans from Yanzhou and/or Its Subsidiaries

(a) Description of the Transaction

The Company (as borrower) entered into a coupon payment loan agreement with Yanzhou (as lender) on 22 December 2014 in relation to a US$807 million (subject to adjustment) unsecured and subordinated loan for the purposes of payment of the coupon on the subordinated capital notes issued by the Company for the first 5 years post their issuance. As all outstanding subordinated capital notes have been redeemed and/or converted as of January 2018, this loan cannot be further drawn down. As at the Latest Practicable Date, approximately US$234 million principal amount of the loan remained drawn-down.

The Company (as borrower) entered into a debt support loan agreement (as amended and restated) with Yanzhou and four subsidiaries of Yanzhou (as lenders) on 31 December 2014 in relation to an A$1.4 billion unsecured and subordinated loan, of which, A$1,125 million remained drawn-down as at the Latest Practicable Date.

The above loans were obtained in the ordinary and usual course of business and on normal commercial terms or better to the Group and for which security over the assets of the Group is not provided by the Company as the borrower.

(b) Listing Rules Implications

The loans described above constitute financial assistance provided by connected persons for the benefit of the Group on normal commercial terms (or better to the Group) where no security over the assets of the Group is granted and would, upon the Listing, be exempt from the reporting, announcement, annual review and independent shareholders' approval requirements pursuant to Rule 14A.90 of the Listing Rules.

2. Guarantees Provided by Yankuang and Yanzhou in respect of the Loan Obligation of the Group

(a) Description of the Transaction

The Company (as borrower) entered into a syndicated facility agreement (as amended and restated) with Bank of China Limited, Sydney Branch (as the "**Agent**") and a syndicate of banks led by the Agent on 19 October 2009 in relation to the Syndicated Facility, of which, US$1,525 million provided by Bank of China Limited Sydney Branch and China Construction Bank Corporation Sydney branch remained drawn-down as at the Latest Practicable Date. Yanzhou has guaranteed the Company's obligations under such loan agreement. See "*Financial information of the Group – Secured Bank Loans – Syndicated Facility*".

As part of the transfer of interest in the Ashton, Austar and Donaldson mines to Watagan on 31 March 2016, Watagan, an unconsolidated wholly-owned subsidiary of the Company (as the borrower) and the Company (as the lender) entered into a loan facility agreement on 17 February 2016 in relation to an A$1.36 billion loan facility bearing interest at the bank bill swap bid rate plus 7.06% with a maturity date of 1 April 2025, of which A$798 million remained drawn-down as at the Latest Practicable Date. Yankuang has guaranteed Watagan's obligations under such loan facility agreement.

The above guarantees in respect of the Group's loan obligations are in the ordinary and usual course of business and on normal commercial terms or better to the Group and for which security over the assets of the Group has not been provided by the Company and/or Watagan as the borrower.

(b) Listing Rules Implications

The guarantees described above constitute financial assistance provided by connected persons for the benefit of the Group, are on normal commercial terms (or better to the Group) where no security over the assets of the Group has been granted and would, upon the Listing, be exempt from the reporting, announcement, annual review and independent shareholders' approval requirements pursuant to Rule 14A.90 of the Listing Rules.

3. Marketing services received from Yancoal International Trading

(a) Description of the Transaction

The Company entered into a seller's helper agreement (the "**Seller's Helper Agreement**") with Yancoal International Trading Co., Limited ("**Yancoal International Trading**"), a wholly-owned subsidiary of Yanzhou, in November 2017, pursuant to which Yancoal International Trading has agreed to assist the Company with all activities deemed necessary or desirable by the Company for the marketing and sale of coal to customers and will receive a commission from the Company for any sales of coal completed as a direct result of facilitation by Yancoal International Trading. The Seller's Helper Agreement is for a term of three years unless terminated by either party in accordance with the term of such agreement.

(b) Listing Rules Implications

The transaction described above is entered into in the ordinary and usual course of business the Company, on normal commercial terms where each of the applicable percentage ratios in respect of such transaction will, as the Company currently expects, be less than 0.1% on an annual basis, and would, upon the Listing, be exempt from the reporting, announcement, annual review and independent shareholders' approval requirements pursuant to Rule 14A.76 of the Listing Rules.

4. Management Services in relation to the HVO JV

(a) Description of the Transaction

As part of the Glencore Transaction, details of which are set out in "*Business – Acquisitions and Disposals – Glencore Transaction*", Coal & Allied Operations Pty Ltd ("**CNAO**"), a wholly-owned subsidiary of the Company, Anotero Pty Ltd ("**Anotero**"), a wholly-owned subsidiary of Glencore, and HV Operations Pty Ltd ("**HV Ops**"), which is 51% owned by CNAO and 49% owned by Anotero, entered into a management agreement in relation to the HVO on 4 May 2018 (the "**HVO Management Agreement**"), pursuant to which HV Ops has agreed to conduct and manage the HVO JV and the HVO JV activities in accordance with the terms of the HVO Management Agreement and the joint venture agreement in relation to the HVO (the "**HVO Joint Venture Agreement**"). The HVO JV is an unincorporated joint venture constituted by CNAO and Anotero, with CNAO and Anotero having 51% and 49% of the participating interest of the HVO JV, respectively.

As Anotero holds more than 10% of the interest in HV Ops and has more than 10% participating interest in the HVO JV, both are subsidiaries of the Company under the Listing Rules, Anotero will be a connected person of the Company immediately upon Listing by virtue of being a substantial shareholder of the subsidiaries of the Company.

Pursuant to the HVO Management Agreement, HV Ops is not entitled to and will not charge the HVO JV or CNAO or Anotero any management fee or similar fee in respect of the roles and duties it performs under the HVO Management Agreement, but will perform its obligation on a full cost recovery basis and will be paid by CNAO and Anotero in proportion to their respective participating interests in the HVO JV.

(b) Listing Rules Implications

The transaction described above is between the Group and a connected person at the subsidiary level on normal commercial terms where each of the applicable percentage ratios in respect of such transaction will, as the Company currently expects, be less than 1% on an annual basis, and would, upon the Listing, be exempt from the reporting, announcement, annual review and independent shareholders' approval requirements pursuant to Rule 14A.76 of the Listing Rules.

5. Provision of Services by Glencore Coal in relation to the HVO JV

(a) Description of the Existing Hunter Valley Operations Services Agreement

As part of the Glencore Transaction, the participants of the HVO JV have agreed that, to best achieve efficiencies, the day-to-day performance of certain support obligations of HV Ops under the HVO Management Agreement should be delegated partially or wholly to Glencore Coal Assets Australia Pty Ltd ("**Glencore Coal**"), through the provision by Glencore Coal of a range of support services utilising their existing capacity and experience. Accordingly, HV Ops and HVO Coal Sales Pty Ltd (the "**SalesCo**"), both 51%-owned subsidiaries of the Company, entered into a service agreement with Glencore Coal, as Service Provider, on 4 May 2018 (the "**HVO Services Agreement**"). Glencore Coal is a wholly-owned subsidiary of Glencore. Pursuant to the HVO Services Agreement, Glencore Coal has agreed to provide (i) support services, which include, among others, providing services to enable the HVO JV partners to perform their respective obligations and maintaining the HVO in good standing, procurement, treasury services, IT services and legal services and (ii) coal sale services, which include, among others, sales documentation and revenue collection, management of transportation activities. Glencore Coal will perform its obligations under the HVO Services Agreement on a full cost recovery basis.

In addition to the HVO Services Agreement and as part of the Glencore Transaction, Glencore International AG ("**Glencore International**"), a wholly-owned subsidiary of Glencore PLC, also agreed to provide to the SalesCo (i) marketing services pursuant to a marketing agency agreement dated 4 May 2018 between Glencore International and the SalesCo and (ii) contract management services pursuant to a HVO legacy customer contracts – administration and coal supply agreement dated 4 May 2018 among Glencore International, the SalesCo and other subsidiaries of the Company. Glencore International did not charge any fees for the services provided under the two agreements described above.

(b) Listing Rules Implications

The transaction under the HVO Services Agreement is between the Group and a connected person at the subsidiary level on normal commercial terms where each of the applicable percentage ratios in respect of such transaction will, as the Company currently expects, be less than 1% on an annual basis, and would, upon the Listing, be exempt from the reporting, announcement, annual review and independent shareholders' approval requirements pursuant to Rule 14A.76 of the Listing Rules.

6. Management and Marketing Services in relation to the Moolarben JV

(a) Description of the Transaction

As part of the joint venture arrangement in relation to Moolarben, details of which are set out in "*Business – Joint Venture Agreements – Moolarben*", a joint venture management agreement (the "**Moolarben Management Agreement**") was entered into among Moolarben Coal Mines Pty Ltd ("**MCM**", a wholly owned subsidiary of the Company), Sojitz Moolarben Resources Pty Limited ("**Sojitz**") and Moolarben Coal Operations Pty Ltd ("**MCO**", a wholly owned subsidiary of the Company) on 21 September 2007, pursuant to which, MCO was appointed as the manager to carry out all operations as the sole and exclusive agent for and on behalf of and for the account of the participants of the Moolarben JV. In addition, on 20 February 2008, a coal marketing agreement (the "**Moolarben Marketing Agreement**") was entered into among MCM, Sojitz, Moolarben Coal Sales Pty Ltd ("**MCS**", a wholly owned subsidiary of the Company) and other participants of the Moolarben JV, pursuant to which, MCS was appointed as the marketing manager, as agent for the joint venture participants, to be responsible for the promotion, marketing, sale and distribution of all coal for the account of the participants of the Moolarben JV.

As Sojitz is interested in 10% participating interest in the Moolarben JV, which is a subsidiary of the Company under the Listing Rules, Moolarben will be a connected person of the Company immediately upon Listing by virtue of being a substantial shareholder of the subsidiary of the Company.

Pursuant to the Moolarben Management Agreement, MCO may charge reasonable head office costs to the participants of the Moolarben JV, recover all its actual costs or expenses incurred for performing its duties and receive a management fee of 2% of the value of all coal sold. Pursuant to the Moolarben Marketing Agreement, MCS will perform its obligation on a full cost recovery basis. The relevant fees and expenses will be paid by the participants of the Moolarben JV, including Sojitz, in proportion to their respective participating interests in the Moolarben JV.

(b) Listing Rules Implications

The transaction described above is between the Group and a connected person at the subsidiary level on normal commercial terms where each of the applicable percentage ratios in respect of such transaction will, as the Company currently expects, be less than 1% on an annual basis, and would, upon the Listing, be exempt from the reporting, announcement, annual review and independent shareholders' approval requirements pursuant to Rule 14A.76 of the Listing Rules.

B. Non-Exempt Continuing Connected Transactions

1. Sale of Coal by the Group

(a) Description of the Transaction

From time to time, Yanzhou and/or its subsidiaries (excluding the Group) may purchase coal from the Group primarily for their own trading purposes.

The Company entered into a framework coal sales agreement with Yanzhou (the "**Yanzhou Framework Coal Sales Agreement**") on 8 October 2018 to govern all existing and future sale of coal by the Group to Yanzhou and/or its subsidiaries (excluding the Group). The Yanzhou Framework Coal Sales Agreement provides that all transactions in relation to the sale of coal by the Group to Yanzhou and/or its subsidiaries (excluding the Group) must be (i) in the ordinary and usual course of business of the Group, (ii) on an arm's length basis, (iii) on normal commercial terms with the sale price being determined with reference to market indices, adjusted for coal characteristics and an optional analysis to ensure the price is negotiated on an arm's length basis and (iv) in compliance with, amongst other things, the Listing Rules and applicable laws.

The Yanzhou Framework Coal Sales Agreement expires on 31 December 2020 and is automatically renewable for successive periods of three years thereafter, subject to compliance with the then applicable provisions of the Listing Rules, unless terminated earlier by not less than three months' prior notice or otherwise in accordance with the terms of the Yanzhou Framework Coal Sales Agreement.

(b) Historical Transaction Amounts

The aggregate annual transaction amount received by the Group from Yanzhou and/or its subsidiaries (excluding the Group) for the sale of coal for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately US$12.6 million, US$30.6 million, US$5.1 million and US$104.5 million, respectively.

The variation in the historical transaction amounts over the last three years is a result of the ad-hoc nature of contracts, price movements, spot volume variations and quality limitations imposed on imports into PRC. In 2017, the Company only entered into one transaction with Yanzhou in the second half of 2017 due to the competitiveness in the market. However, as part of a strategy to increase sales into China, in January 2018, the Company entered into an annual coal sales agreement with a subsidiary of Yanzhou for a contracted 2.0 million tonnes per annum supply and it is expected that this business will be carried out on a continuing basis.

(c) Caps on Future Transaction Amounts

The maximum annual transaction amount to be received by the Group from Yanzhou and/or its subsidiaries (excluding the Group) for the three years ending 31 December 2018, 2019 and 2020 will not exceed US$250.0 million, US$250.0 million and US$250.0 million, respectively.

These caps were calculated by reference to (i) the actual transaction amount for the six months ended 30 June 2018 which was US$104.5 million and the contracted 2.0 million tonnes per annum. Considering the business requirement of Yanzhou, the Company expects to maintain such sales volume in future years, (ii) the expected additional spot demand for coal from Yanzhou and/or its subsidiaries (excluding the Group) over the next three years and (iii) the estimated sale price for the coal the Company typically charges.

(d) Listing Rules Implications

As the highest applicable percentage ratio in respect of each of the caps is, on an annual basis, more than 5%, such continuing connected transaction will, upon the Listing, be subject to the reporting, announcement, independent shareholders' approval and annual review requirements under Chapter 14A of the Listing Rules.

2. Purchase of Coal by the Group

(a) Description of the Transaction

The Group has purchased and may, from time to time, purchase coal from Yanzhou and/or its subsidiaries, in particular Australian based subsidiaries of Yanzhou holding mines which are managed by the Group, for back-to-back on sale to end customers in order to fulfil customer requirements and maintain customer relationships.

The Company entered into a framework coal purchase agreement with Yanzhou (the "**Framework Coal Purchase Agreement**") on 8 October 2018 to govern all existing and future purchases of coal by the Group from Yanzhou and/or its subsidiaries (excluding the Group). The Framework Coal Purchase Agreement provides that all transactions in relation to the purchase of coal by the Group from Yanzhou and/or its subsidiaries (excluding the Group) must be (i) in the ordinary and usual course of business of the Group, (ii) on an arm's length basis, (iii) on normal commercial terms with the sale price being determined with reference to industry index prices and coal quality characteristics under the respective contracts and (iv) in compliance with, amongst other things, the Listing Rules and applicable laws.

The Framework Coal Purchase Agreement expires on 31 December 2020 and is automatically renewable for successive periods of three years thereafter, subject to compliance with the then applicable provisions of the Listing Rules, unless terminated earlier by not less than three months' prior notice or otherwise in accordance with the terms of the Framework Coal Purchase Agreement.

(b) Historical Transaction Amounts

The aggregate annual transaction amount paid by the Group to Yanzhou and/or its subsidiaries (excluding the Group) for the purchase of coal for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately US$5.0 million, US$22.6 million, US$29.7 million and US$21.1 million, respectively.

The increase in 2017 was due to the success in securing new markets for Yanzhou via the Company's sales channel. The transaction volume for the first half of 2018 represents an increase of 1% as compared to that for the corresponding period of 2017. It is expected to further expand the sales in 2018 and maintain these in the future years.

(c) Caps on Future Transaction Amounts

The maximum annual transaction amount to be paid by the Group to Yanzhou and/or its subsidiaries (excluding the Group) for the three years ending 31 December 2018, 2019 and 2020 will not exceed US$65.0 million, US$65.0 million and US$65.0 million, respectively.

These caps were calculated by reference to (i) the current transaction amounts in 2018, (ii) the expected increase in demand for coal by the Group from the Yanzhou Group over the next three years as a result of, among other things, the success in securing new markets for Yanzhou, which was evidenced by the substantial increase in transaction amount for the first half of 2018, (iii) the estimated purchase volume of 0.5 million tonnes for the second half of 2018 as at the Latest Practicable Date based on contracted sales and spot opportunities that may exist. Considering the strengthened relationship with customers, the Company expects to further increase the volume of back-to-back sales in future years through leveraging the sales channel of the Company and (iv) the estimated purchase price of coal.

(d) Listing Rules Implications

As the highest applicable percentage ratio in respect of each of the caps is, on an annual basis, more than 0.1% but less than 5%, such continuing connected transaction will, upon the Listing, be subject to the reporting, announcement and annual review requirements, but exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

3. Provision of Management Services by the Company

(a) Description of the Existing Management and Transitional Services Agreement

As one of the conditions imposed by the Foreign Investment Review Board of the Australian Government in relation to the merger of the Company with Gloucester in 2012, a management and transitional services agreement (the "**Management and Transitional Services Agreement**") was entered into between the Company and the following entities (the "**Existing Recipients**"), comprising (i) Yanzhou, (ii) Yancoal Technology Development Holdings Pty Ltd, (iii) Premier Coal Holdings Pty Ltd, (iv) Athena Holdings Pty Ltd, (v) Tonford Holdings Pty Ltd, (vi) Wilpeena Holdings Pty Ltd and (vii) Yancoal Energy Pty Limited, in 2012, pursuant to which the Company has agreed to provide to the Existing Recipients each Services (as described below) in respect of certain assets owned by the Existing Recipients.

On 7 December 2016, a deed of variation, accession and termination agreement of the Management and Transitional Services Agreement was entered into among the Existing Recipients, Yankuang Resources Pty Ltd ("**Yankuang Resources**"), Yankuang (Australia) Metal Mining Pty Ltd. ("**Yankuang (Australia) Metal Mining**", together with Yankuang Resources and the Existing Recipients, the "**Recipients**") and the Company, pursuant to which Yankuang Resources and Yankuang (Australia) Metal Mining will become parties to the Management and Transitional Services Agreement and be entitled to all rights and benefits of an Existing Recipient under the Management and Transitional Services Agreement. Yankuang Resources and Yankuang (Australia) Metal Mining are both wholly-owned subsidiaries of Yankuang.

See "*Business – Our Mining Operations – Managed Mines*" for further details. Details of the terms of the Management and Transitional Services Agreement are set out below.

(I) Services

The Services provided to each Recipient and each of their respective subsidiaries (excluding the Group and Yanzhou) include (i) General Corporate services, which comprise HR services, treasury services, financial accounting/reporting services, compliance services, marketing and logistic services, corporate communications services, government and industry relations services, business development services and other general corporate services, (ii) Operations Services, which comprise carrying out exploration programs, preparing business plans, monitoring and reporting on environmental issues, using all reasonable endeavours to meet business KPIs, preparing plans of operations as may be required by laws and other operational services and (iii) IT Services, which comprise the granting of the permission to use the Company's hardware or software and the provision of IT support services.

During the term, each party may request that the Company provide an additional service or the Company may change or modify the provision of an existing service by notifying the parties in writing. Following receipt of the notice, representatives of each party must promptly meet to discuss in good faith the proposed new services or modified services.

(II) Services Fees

The services charges for provisions of the Services will be at cost plus a 5% margin, except for any third party charges attributable to the provision of the relevant services which will be charged at cost.

The cost base upon which 5% margin is to be applied are to be determined on the basis of management's reasonable estimate of such costs at the commencement of each calendar year having regard to certain principles, including (i) in respect of coal-mining operations, the total budgeted corporate administration costs of the Company and the budgeted proportion of overall product tonnes of the relevant mining operation, (ii) in respect of non-coal mining businesses, the estimated management hours and the hourly rate for such work and (iii) in respect of disbursement, full recovery of any hard disbursements incurred by the Company.

At the end of each financial year (or such other times as the parties may agree), the parties will undertake a reconciliation of the fees charged during that financial year against the actual cost and services provided. The Company will refund the excess charges or the Recipients will pay the shortfall charges to the Company, in each case, within 14 days of determination of the fee adjustment required.

(III) Payment of the Services Fees

The Company will invoice the Recipients quarterly in arrears for services provided and the Recipients must pay to the Company within 30 days after the receipt of the invoice.

(IV) Termination of the Services

The Company must provide to the Recipients the Services until the Services are terminated in accordance with the term of the Management and Transitional Services Agreement. The Services can be terminated in the following circumstances:

(i) A Recipient may terminate any Services it receives without cause by giving not less than 30 days' notice to the Company. The Company may terminate any Services it provides without cause by giving not less than 12 months' notice to the Recipients (provided that any such notice must not be given before 31 December 2016).

(ii) If any asset in respect of which the Services are provided ceases to be controlled by Yanzhou and/or its subsidiaries, any Recipient or the Company may terminate the Services in relation to such asset by giving no less than 30 days' notice to the other parties.

(iii) In respect of one Recipient, the Company or the Recipient may terminate the Management and Transitional Services Agreement, if the other party materially breaches any of its terms and such breach is incapable of remedy or such breach is capable of remedy but that party fails to remedy that breach within 30 days of written notice to do so.

(iv) In addition, if an insolvency event occurs, in relation to the Company, each Recipient may elect by notice in writing to terminate the Management and Transitional Services Agreement as it relates to that Recipient, or in relation to a Recipient, the Company may elect by notice in writing to terminate the Management and Transitional Services Agreement as it relates to that Recipient.

Considering (i) the reason for entering into the Management and Transitional Services Agreement, which was a condition imposed by the Foreign Investment Review Board of the Australian Government in relation to the merger with Gloucester by the Company for purpose of ensuring the continued support to operations owned by Yanzhou (in particular the Premier mine and Cameby Downs mine) (ii) the types of services to be provided and (iii) the nature of such transactions, which are to be carried out on a continuing basis, it was commercially agreed that the Management and Transitional Services Agreement, which provides detailed pricing policies and events for termination, be entered into for an unspecified term so as to ensure continuous and uninterrupted support.

The Joint Sponsors are of the view that, based on the due diligence they have conducted and taking into consideration (i) the reasons for entering into the Management and Transitional Services Agreement as set out above, (ii) the nature and types of the Services provided and (iii) the termination rights each party has under the Management and Transitional Services Agreement, it is reasonable for the Management and Transitional Services Agreement to be for a duration of more than three years and it is normal business practice for agreements of this type to be of such duration.

(b) Historical Transaction Amounts

The aggregate services fees charged by the Group from the Recipients for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately A$10.6 million, A$9.7 million, A$8.1 million and A$4.0 million, respectively.

(c) Caps on Future Transaction Amounts

Notwithstanding that the term of the Management and Transitional Services Agreement may exceed three years, the Company has set the annual caps for the transactions under the Management and Transitional Services Agreement for a term of three years and will re-comply with the applicable requirements of the Listing Rules after the expiry of the initial three years.

The maximum annual transaction amount to be charged by the Group from the Recipients for the three years ending 31 December 2018, 2019 and 2020 will not exceed A$15 million, A$15 million and A$15 million, respectively.

These caps were calculated by reference to (i) the historical transaction amount, (ii) the expected increase in the administration costs and hourly rates which are consistent with the expected increase in market rates and (iii) the expected demand for services by the Recipients over the next three years, including an increased level of exploration drilling.

(d) Listing Rules Implications

As the highest applicable percentage ratio in respect of each of the caps is, on an annual basis, more than 0.1% but less than 5%, such continuing connected transaction will, upon the Listing, be subject to the reporting, announcement and annual review requirements, but exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

4. Loan Facility Provided by the Company

(a) Description of the Transaction

Premier Coal Holdings Pty Ltd, an indirect wholly-owned subsidiary of Yanzhou ("**Premier Coal**") (as the borrower), entered into a loan agreement with the Company (as lender) on 15 June 2016 in relation to an A$50 million uncommitted revolving loan with a fixed interest rate of 7% per annum (the "**Premier Coal Loan Agreement**"). Pursuant to the Premier Coal Loan Agreement, the Company may terminate or cancel the facility at any time and draws already advanced to Premier Coal prior to the termination or cancellation are required to be repaid immediately. The termination date will be the date 12 months after the date of the Premier Coal Loan Agreement, subject to automatic extension on a rolling 12 months basis, or any earlier date on which the facility is terminated or cancelled in full or on which all the money owing becomes due and payable.

As at the Latest Practicable Date, no amount remained drawn down under the Premier Coal Loan Agreement.

(b) Reasons and benefits

The Company has the headroom to provide the proposed facility under the Premier Coal Loan Agreement. If the relevant funds are not utilised for a loan facility proposed, the funds would remain in deposit accounts which have interest rate only between 0.3% to 1%. It is therefore most cost effective for the funds to be loaned to Premier Coal and to be earning interest at a fixed interest rate of 7%. The 7% yield on a short term fund placement to Premier Coal on the terms of the Premier Coal Loan Agreement is better than other third party loans or financing structures available to the Company.

In addition, the Premier Coal Loan Agreement has been drafted to give maximum flexibility to the Company. As the facility is uncommitted loan facility, the Company can decline a request for funds if it does not believe that it has the capacity at the time to provide the funds. Further, as the Company can demand repayment of drawn down funds at any time, the Company maintains the flexibility to use the funds at any time if the Company determines that it requires the loan funds for its own purposes.

Having considered the reasons and benefits as set out above, the Company considers the entering into of the Premier Coal Loan Agreement is in the interests of the Company and the Shareholders as a whole.

(c) Historical Transaction Amounts

The maximum daily drawn-down principal of the loan under the Premier Coal Loan Agreement (including the interest accrued thereon) for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately nil, A$46.6 million, A$45.8 million and A$29.3 million, respectively.

(d) Caps on Future Transaction Amounts

The maximum daily drawn-down principal of the loan under the Premier Coal Loan Agreement (including the interest accrued thereon) for the three years ending 31 December 2018, 2019 and 2020 will not exceed A$53.5 million, A$53.5 million and A$53.5 million, respectively.

The annual caps represent the facility limit under the Premier Coal Loan Agreement and the maximum interest to be received.

(e) Listing Rules Implications

As the highest applicable percentage ratio for the continuing connected transaction under the Premier Coal Loan Agreement is, on an annual basis, more than 0.1% but less than 5%, such continuing connected transaction will, upon the Listing, be subject to the reporting, announcement and annual review requirements, but exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

5. Bank Guarantees Provided in favour of Yanzhou's Subsidiaries

(a) Description of the Transaction

In addition to the Syndicated Facility, details of which are set out in "*Financial information of the Group – Secured Bank Loans – Syndicated Facility*", Yancoal Resources Limited ("**Yancoal Resources**"), a wholly-owned subsidiary of the Company, entered into a syndicated facility agreement (as most recently amended on 31 August 2017) (the "**Local Banks Secured Syndicated Facility Agreement**") with financiers who are independent third party commercial banks, on 11 October 2005, pursuant to which the financiers have agreed to grant to the borrowers, being Yancoal Resources and any new borrowers as agreed by the financiers, a dollar contingent liability facility (which may also be drawn in US$), under which, the financiers will issue credit support documents, including bank guarantee and letter of credit, in the name of the borrowers. Subject to amendment and restatement from time to time, the Local Banks Secured Syndicated Facility Agreement is for a term of three years.

As set out in "*Business – Our Mining Operations – Managed Mines*", the Company manages certain mines on behalf of Yanzhou. In the ordinary and usual course of business, the subsidiaries of Yanzhou holding the managed mines may require credit support documents issued by commercial banks for their respective business operations. Given the relevant commercial banks can issue credit support documents pursuant to existing facility agreements generally within 5 business days after receiving a request, which is a much shorter period of time and simpler process as compared to those required by other commercial banks to issue credit support documents without an existing facility agreement and the relationship between the Company and the managed mines, as an integral part of the management services rendered by the Company in support of the operation of the managed mines, the subsidiaries of Yanzhou holding the managed mines will use the overall bank guarantee facilities, including the Syndicated Facility and the facility under the Local Banks Secured Syndicated Facility Agreement, and pay the Company bank guarantee fees, which are equal to the fees to be paid by the Company to the commercial banks.

Having considered the reasons set out above and that the Company also receives management fees from those subsidiaries of Yanzhou in relation to the managed mines, the Company considers that the using of the overall bank guarantee facilities by the subsidiaries of Yanzhou holding managed mines is in the interest of the Company and the Shareholders as a whole.

(b) Historical Transaction Amounts

The aggregate maximum daily outstanding principal amount and the bank guarantee fees received under the credit support documents issued by commercial banks in favour of the subsidiaries of Yanzhou (excluding the Group) for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately A$121 million, A$117 million, A$114 million and A$114 million, respectively.

(c) Caps on Future Transaction Amounts

The aggregate maximum daily outstanding principal and the bank guarantee fees to be received under the credit support documents issued by commercial banks in favour of the subsidiaries of Yanzhou (excluding the Group) for the three years ending 31 December 2018, 2019 and 2020 will not exceed A$123.4 million, A$128.6 million and A$133.7 million, respectively.

These caps were calculated by reference to the historical transaction amounts as well as the future demand for bank support documents by the subsidiaries of Yanzhou holding the managed mines.

(d) Listing Rules Implications

As the highest applicable percentage ratio in respect of each of the caps under the arrangement described above, on an annual basis, is more than 0.1% but less than 5%, such continuing connected transaction will, upon the Listing, be subject to the reporting, announcement and annual review requirements, but exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

6. Purchase of Coal by Glencore

(a) Description of the Transaction

From time to time, Glencore and/or its associates may purchase coal from the Group for on sale to end customers, in order to maintain customer relationships or to meet specific customer requirements.

The Company entered into a framework coal sales agreement with Glencore (the "**Glencore Framework Coal Sales Agreement**") on 29 June 2018 to govern all existing and future sales of coal by the Group to Glencore and/or its subsidiaries and/or related entities. The Glencore Framework Coal Sales Agreement provides that all transactions in relation to the sale of coal by the Group to Glencore and/or its subsidiaries and/or related entities must be (i) in the ordinary and usual course of business of the Group, (ii) on an arm's length basis, (iii) on normal commercial terms with the sale price being determined with reference to the prevailing market price for the relevant type of coal and (iv) in compliance with, amongst other things, the Listing Rules and applicable laws. The Company will take into account relevant industry benchmarks and indices when determining the market price.

The Glencore Framework Coal Sales Agreement expires on 31 December 2020 and is automatically renewable for successive periods of three years thereafter, subject to compliance with the then applicable provisions of the Listing Rules, unless terminated earlier by not less than three months' prior notice or otherwise in accordance with the terms of the Glencore Framework Coal Sales Agreement.

(b) Historical Transaction Amounts

The aggregate annual transaction amount received by the Group from Glencore and/or its associates for the sale of coal for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately nil, nil, A$143 million and A$140.7 million, respectively.

(c) Caps on Future Transaction Amounts

The maximum annual transaction amount to be received by the Group from Glencore and/or its subsidiaries and/or its related entities for the three years ending 31 December 2020 will not exceed US$350 million, US$350 million and US$350 million, respectively.

These caps were calculated by reference to (i) the historical transaction amounts, in particular, sales revenue of A$140.7 million for the six months ended 30 June 2018. There was no sale of coal made to Glencore during the first half of 2017, (ii) the expected demand for coal from Glencore and/or its subsidiaries and/or its related entities. Based on further spot opportunities that may exist, the Company expects that Glencore and/or its subsidiaries and/or its related entities may purchase an estimated 0.4 million tonnes of coal for the second half of 2018 and (iii) the estimated sale price of coal.

(d) Listing Rules Implications

As the continuing connected transaction under the Glencore Framework Coal Sales Agreement is between the Group and a connected person at the subsidiary level, on normal commercial terms or better, the Directors have approved the transaction and the independent non-executive Directors have given the confirmation required under Rule 14A.101 of the Listing Rules in section D below, the continuing connected transaction is only subject to reporting, announcement and annual review requirements, but is exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

7. Purchase of Coal by Sojitz

(a) Description of the Transaction

From time to time, Sojitz Moolarben Resources Pty Ltd ("**Sojitz**") and/or its subsidiaries may purchase coal from the Group primarily for their own trading purposes and for sale to end customers, typically into Japan. Specifically, Moolarben Coal Sales Pty Ltd has entered into a coal supply contract for a term of three years with Sojitz Corporation in March 2016 for onward supply of coal to a major industrial user in Japan. This contract is likely to be renewed and it is expected that this business will be ongoing. Sojitz is a substantial shareholder of the Moolarben joint venture, a subsidiary of the Company under the Listing Rules.

The coal sales agreement between the Company and Sojitz (the "**Sojitz Coal Sales Agreement**") dated 6 August 2018 governs all existing and future sales of coal by the Group to Sojitz and/or its subsidiaries. The Sojitz Coal Sales Agreement provides that all transactions in relation to the sale of coal by the Group to Sojitz and/or its subsidiaries must be (i) in the ordinary and usual course of business of the Group, (ii) on an arm's length basis, (iii) on normal commercial terms with the sale price being determined with reference to market indices, coal quality and an optional analysis to ensure the price is negotiated on an arm's length basis and (iv) in compliance with, amongst other things, the Listing Rules and applicable laws.

The Sojitz Coal Sales Agreement expires on 31 December 2020 and is automatically renewable for successive periods of one year thereafter, subject to compliance with the then applicable provisions of the Listing Rules, unless terminated earlier by not less than three months' prior notice or otherwise in accordance with the terms of the Sojitz Coal Sales Agreement.

(b) Historical Transaction Amounts

The aggregate annual transaction amount received by the Group from Sojitz and/or its subsidiaries for the sale of coal for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately US$20.1 million, US$29.1 million, US$21.0 million and US$27.0 million, respectively.

The transaction volume for the first half of 2018 represents an increase of 122% as compared to that for the corresponding period of 2017.

(c) Caps on Future Transaction Amounts

The maximum annual transaction amount to be received by the Group from Sojitz and/or its subsidiaries for the three years ending 31 December 2018, 2019 and 2020 will not exceed US$100 million, US$100 million and US$100 million, respectively.

These caps were calculated by reference to (i) the current known 2018 transaction amounts, including Sojitz's recent success in selling to new industrial customers in Japan, (ii) the expected demand for coal from Sojitz and/or its subsidiaries over the next three years, taking into consideration the substantial increase in transaction amount for the first half of 2018, (iii) the estimated sale price for the coal the Company typically charges and (iv) the estimated sales volume of 0.5 million tonnes for the second half of 2018 as at the Latest Practicable Date based on the delivery of contracted sales and spot opportunities that may exist. Considering the strengthened relationship with customers, the Company expects to maintain or further expand the sales in future years.

(d) Listing Rules Implications

As the continuing connected transaction under the Sojitz Coal Sales Agreement is between the Group and a connected person at the subsidiary level, on normal commercial terms or better, the Directors have approved the transaction and the independent non-executive Directors have given the confirmation required under Rule 14A.101 of the Listing Rules in section D below, the continuing connected transaction is only subject to reporting, announcement and annual review requirements, but is exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

8. Sales of Coal by the Group to POSCO and/or its Associates

(a) Description of the Transaction

From time to time, POSCO Australia Pty Ltd (previously known as Pohang Steel Australia Pty Ltd) ("**POSCO**") and/or its associates may purchase coal from the Group for their own utilisation in the manufacturing of steel or generation of electricity. POSCO is a substantial shareholder of the subsidiaries of the Company under the Listing Rules.

The Group has entered into five coal sales agreements with POSCO group companies that govern the sale of coal by the Group to POSCO and/or its associates on 21 December 2017 (the "**POSCO Coal Sales Agreements**"). The POSCO Coal Sales Agreements provide that all transactions in relation to the sale of coal by the Group to POSCO and/or its associates must be (i) in the ordinary and usual course of business of the Group, (ii) on an arm's length basis, (iii) on normal commercial terms with the sale price being negotiated between the parties on an arm's length market related basis relative to market benchmarks and reflecting coal quality, and (iv) in compliance with, amongst other things, the Listing Rules and applicable laws. The Group has been supplying POSCO and/or its associates for several years under annual contracts which are renewed annually, but where volume and price is re-negotiated annually.

(b) Historical Transaction Amounts

The aggregate annual transaction amount received by the Group from POSCO and/or its associates for the sales of coal for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately US$213 million, US$156 million, US$260 million and US$168.9 million, respectively.

The transaction volume for the first half of 2018 represents an increase of 45% as compared to that for the corresponding period of 2017.

(c) Caps on Future Transaction Amounts

The maximum annual transaction amount to be received by the Group from POSCO and/or its associates for the year ending 31 December 2018 will not exceed US$780 million. As the POSCO Coal Sales Agreements are renewed annually, the Company has set the annual cap for the transactions under the POSCO Coal Sales Agreements for a term of one year and will re-comply with the applicable requirements of the Listing Rules when the relevant agreements are renewed.

This cap was calculated by reference to (i) the currently known 2018 transaction amounts, (ii) the expected demand for coal from POSCO and/or its associates for the year ending 31 December 2018, (iii) the estimated sale price for the coal the Company typically charges and (iv) in particular, the estimated sales volume of 1.5 million tonnes for the second half of 2018 as at the Latest Practicable Date based on the delivery of contracted sales and spot opportunities that may exist.

(d) Listing Rules Implications

As the continuing connected transactions under the POSCO Coal Sales Agreements are between the Group and a connected person at the subsidiary level, on normal commercial terms or better, the Directors have approved the transactions and the independent non-executive Directors have given the confirmation required under Rule 14A.101 of the Listing Rules in section D below, the continuing connected transactions are only subject to reporting, announcement and annual review requirements, but are exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

9 Purchase of Coal from Glencore

(a) Description of the Transaction

From time to time, the Group may purchase coal from Glencore and/or its associates for on sale to end customers, in order to maintain customer relationships or to meet specific customer requirements.

The Company entered into a framework coal purchase agreement with Glencore (the "**Glencore Framework Coal Purchase Agreement**") on 6 August 2018 to govern all existing and future purchase of coal by the Group from Glencore and/or its subsidiaries. The Glencore Framework Coal Purchase Agreement provides that all transactions in relation to the purchase of coal by the Group from Glencore and/or its associates must be (i) in the ordinary and usual course of business of the Group, (ii) on an arm's length basis, (iii) on normal commercial terms with the sale price being determined with reference to the prevailing market price for the relevant type of coal and (iv) in compliance with, amongst other things, the Listing Rules and applicable laws. The Company will take into account relevant industry benchmarks and indices when determining the market price.

The Glencore Framework Coal Purchase Agreement expires on 31 December 2020 and is automatically renewable for successive periods of three years thereafter, subject to compliance with the then applicable provisions of the Listing Rules, unless terminated earlier by not less than three months' prior notice or otherwise in accordance with the terms of the Glencore Framework Coal Purchase Agreement.

(b) Historical Transaction Amounts

The aggregate annual transaction amount paid by the Group to Glencore and/or its subsidiaries for the purchase of coal for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately US$1.0 million, nil, US$6.8 million, and US$16.8 million, respectively.

The transaction volume for the first half of 2018 represents an increase of 366% as compared to that for the corresponding period of 2017.

(c) Caps on Future Transaction Amounts

The maximum annual transaction amount to be paid by the Group to Glencore and/or its subsidiaries for the three years ending 31 December 2020 will not exceed US$350 million, US$350 million and US$350 million, respectively.

These caps were calculated by reference to (i) the historical transaction amounts, (ii) the expected demand for coal from the Group, (iii) the estimated sale price of coal by reference to the average selling price of the coal of the Company and (iv) the estimated 2 million tonnes for the second half of 2018 based on the delivery of contracted purchases and spot opportunities that may exist. Considering the strengthened relationship with customers, the Company expects to maintain such purchase volume in future years.

(d) Listing Rules Implications

As the continuing connected transaction under the Glencore Framework Coal Purchase Agreement is between the Group and a connected person at the subsidiary level, on normal commercial terms or better, the Directors have approved the transaction and the independent non-executive Directors have given the confirmation required under Rule 14A.101 of the Listing Rules in section D below, the continuing connected transaction is only subject to reporting, announcement and annual review requirements, but is exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

10. Purchase of Coal from Anotero

(a) Description of the Existing Sales Contract – Hunter Valley Operations Joint Venture

As part of the Glencore Transaction, CNAO, a wholly-owned subsidiary of the Company, the SalesCo and Anotero entered into a sales contract – Hunter Valley Operations Joint Venture on 4 May 2018 (the "**HVO Sales Agreement**"). The relevant mining and exploration licences of HVO are held directly by CNAO and Anotero as tenants in common in proportion to their respective participating interest in the HVO JV. Pursuant to the HVO Sales Agreement.

(i) each of CNAO and Anotero agrees to sell all of its entitled portion of finished coal product in saleable form that is produced by the tenements held by the HVO JV to the SalesCo only and the SalesCo agrees to purchase each of CNAO's and Anotero's entitled portion of coal product;

(ii) the amount payable to each of CNAO and Anotero by the SalesCo shall be the total amount received by the SalesCo for that portion of product under each sales contract entered into between the SalesCo and its customers; and

(iii) payment by the SalesCo to CNAO and Anotero shall be no later than 3 business days after receipt by the SalesCo of payment from its customers.

The HVO Sales Agreement shall commence on the date of the HVO Sales Agreement and terminate upon the termination of the joint venture agreement in relation to the HVO JV in accordance with its terms.

The Joint Sponsors are of the view that, based on the due diligence they have conducted and taking into consideration (i) the reason for entering into the HVO Sales Agreement and the business objective of the SalesCo, which is to facilitate the sale of coal produced by the HVO JV given the HVO JV, which is an unincorporated joint venture, does not have the legal capacity to enter into sales agreements itself, (ii) the substance of the transaction under the HVO Sales Agreement, which is an arrangement of making the coal attributable to the relevant participants available to the SalesCo for its on-sale, (iii) the fact that the SalesCo is not operated for profit as it does not retain any sales revenue received by it and does not receive any fees from the participants for the sales function carried out by it and (iv) the fact that the HVO Sales Agreement was negotiated on an arms-length basis before Glencore and Anotero became connected persons of the Company, it is reasonable for the HVO Sales Agreement to be for a duration of more than three years and it is normal business practice for agreements of this type to be of such duration.

(b) Historical Transaction Amounts

As the HVO Sales Agreement was entered into on 4 May 2018, there was no historical transaction amount for the three years ended 31 December 2015, 2016 and 2017. The amount of revenue distributed by the SalesCo to Anotero during the period from 4 May 2018 to 30 June 2018 amounted to approximately US$134.4 million.

(c) Estimated Maximum Annual Transaction Amounts

Notwithstanding that the term of the HVO Sales Agreement may exceed three years, the Company has set the estimated maximum annual transaction amounts for the transactions under the HVO Sales Agreement for a term of three years and will re-comply with the applicable requirements of the Listing Rules after the expiry of the initial three years.

The maximum annual transaction amount to be distributed by the SalesCo to Anotero for the three years ending 31 December 2018, 2019 and 2020 will not exceed US$750 million, US$750 million and US$750 million, respectively.

The estimated maximum annual transaction amounts are determined mainly based on the expected amount and price of coal to be sold.

(d) Listing Rules Implications

As disclosed in "*– 4. Management Services in relation to the HVO JV*" and "*– 5. Provision of Services by Glencore Coal in relation to the HVO*" of this section, the SalesCo is a subsidiary of the Company under the Listing Rules and Anotero is a connected person of the Company immediately following the Listing. Accordingly, the transaction between the SalesCo and Anotero constitutes a continuing connected transaction of the Company under the Listing Rules.

As the continuing connected transaction under the HVO Sales Agreement is between the Group and a connected person at the subsidiary level, on normal commercial terms or better, the Directors have approved the transaction and the independent non-executive Directors have given the confirmation required under Rule 14A.101 of the Listing Rules in Section D below, the continuing connected transaction is only subject to reporting, announcement and annual review requirements, but is exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

11. Purchase of Coal from POSCO

(a) Description of the Existing Sales Contract – Mount Thorley Joint Venture

The participants of the unincorporated joint venture in relation to Mt Thorley (the "**MT JV**") namely POSCO and Mount Thorley Operations Pty Ltd (previously known as R. W. Miller & Co. Pty Limited) ("**MT Operations**"), a wholly-owned subsidiary of the Company holding the relevant mining and

exploration licences of Mount Thorley on behalf of the MT JV, entered into a sales contract with Miller Pohang Coal Co. Pty Limited (the "**MT SalesCo**") on 10 November 1981 (the "**MT Sales Agreement**"), respectively.

MT SalesCo is a company jointly controlled by MT Operations and POSCO with MT Operations and POSCO holding 80% and 20% of its interest, respectively. Both the MT SalesCo and the MT JV are subsidiaries of the Company under the Listing Rules. As POSCO holds more than 10% of the interest in the MT SalesCo and has more than 10% participating interest in the MT JV, POSCO will be a connected person of the Company immediately following the Listing by being a substantial shareholder of the subsidiaries of the Company. Accordingly, the transaction between the MT SalesCo and POSCO constitutes a continuing connected transaction of the Company under the Listing Rules.

Pursuant to the MT Sales Agreement:

(i) each of POSCO and MT Operations agrees to sell all of its entitled portion of finished coal product in saleable form that is produced by the tenements held by the MT JV to the MT SalesCo only and the MT SalesCo agrees to purchase each of POSCO's and MT Operations' entitled portion of coal product;

(ii) the amount payable to each of POSCO and MT Operations shall be the total amount received by the MT SalesCo for that portion of product under each sales contract entered into between the MT SalesCo and its customers; and

(iii) payment by the MT SalesCo to POSCO and MT Operations shall be no later than 7 days after receipt by the MT SalesCo of payment from its customers.

The MT Sales Agreement was entered into on 10 November 1981 and will last during the economic life of the Mount Thorley coal mine.

The Joint Sponsors are of the view that, based on the due diligence they have conducted and taking into consideration (i) the reason for entering into the MT Sales Agreement and the business objective of the MT SalesCo, which is to facilitate the sale of coal produced by the MT JV given the MT JV, which is an unincorporated joint venture, does not have the legal capacity to enter into sales agreements itself, (ii) the substance of the transaction under the MT Sales Agreement, which is an arrangement of making the coal attributable to the relevant participants available to the MT SalesCo for its on-sale, (iii) the fact that the MT SalesCo is not operated for profit as it does not retain any sales revenue received by it and does not receive any fees from the participants for the sales function carried out by it and (iv) the fact that the MT Sales Agreement was negotiated on an arms-length basis before POSCO became a connected person of the Company, it is reasonable for the MT Sales Agreement to be for a duration of more than three years and it is normal business practice for agreements of this type to be of such duration.

(b) Historical Transaction Amounts

The interest in the Mount Thorley was acquired by the Company as part of the C&A Acquisition. See "*Business – Acquisitions and Disposals – C&A Acquisition*". Accordingly, the transactions prior to the completion of the acquisition are not connected transactions of the Group. For reference, the aggregate annual transaction amount distributed by the MT SalesCo to POSCO for the three years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 were approximately US$61.1 million, US$64.0 million, US$85.4 million and US$44.8 million, respectively.

(c) Estimated Maximum Annual Transaction Amounts

Notwithstanding that the term of the MT Sales Agreement may exceed three years, the Company has set the estimated maximum annual transaction amounts for the transactions under the MT Sales Agreement for a term of three years and will re-comply with the applicable requirements of the Listing Rules after the expiry of the initial three years.

The maximum annual transaction amount to be distributed by the MT SalesCo to POSCO for the three years ending 31 December 2018, 2019 and 2020 will not exceed US$90 million, US$90 million and US$90 million, respectively.

The estimated maximum annual transaction amounts are determined mainly based on the expected amount and price of the coal to be sold.

(d) Listing Rules Implications

As the continuing connected transaction under the MT Sales Agreement is between the Group and a connected person at the subsidiary level, on normal commercial terms or better, the Directors have approved the transaction and the independent non-executive Directors have given the confirmation required under Rule 14A.101 of the Listing Rules in Section D below, the continuing connected transaction is only subject to reporting, announcement and annual review requirements, but is exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

C. Waiver Application For Non-Exempt Continuing Connected Transactions

As the non-exempt continuing connected transactions described in this section will be carried out on a continuing basis and will extend over a period of time, the Directors consider that strict compliance with the reporting, announcement and/or independent shareholders' approval requirements under the Listing Rules would be impracticable and unduly burdensome and would impose unnecessary administrative costs upon the Company. Accordingly, the Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the reporting, announcement and/or independent shareholders' approval requirements in relation to the non-exempt continuing connected transactions described in this section.

The Company will, however, comply at all times with the other applicable provisions under Chapter 14A of the Listing Rules in respect of these non-exempt continuing connected transactions.

D. Confirmation From The Directors And The Joint Sponsors

The Directors (including the independent non-executive Directors) are of the view that the non-exempt continuing connected transactions described in this section have been and will be entered into in the ordinary and usual course of business of the Group (other than the financial assistance in relation to the loan facility provided by the Company and the bank guarantee arrangement as described in paragraphs 4 and 5 of "– *B. Non-Exempt Continuing Connected Transactions*" above), on normal commercial terms or better, that are fair and reasonable and in the interests of the Group and the Shareholders as a whole, and that the proposed annual caps for the non-exempt continuing connected transactions described in this section are fair and reasonable, and in the interests of the Group and the Shareholders as a whole.

The Joint Sponsors have reviewed the relevant information and historical figures prepared and provided by the Company relating to the non-exempt continuing connected transactions described in this section, and have obtained confirmations from the Company. Based on the Joint Sponsors' due diligence, the Joint Sponsors are of the view that the non-exempt continuing connected transactions described in this section have been and will be entered into in the ordinary and usual course of business of the Group (other than the financial assistance in relation to the loan facility provided by the Company and the bank guarantee arrangement as described in paragraphs 4 and 5 of "– *B. Non-Exempt Continuing Connected Transactions*" above), on normal commercial terms or better, that are fair and reasonable and in the interests of the Group and the Shareholders as a whole, and that the proposed annual caps for the non-exempt continuing connected transactions described in this section are fair and reasonable, and in the interests of the Group and the Shareholders as a whole.

BOARD OF DIRECTORS

The Board of Directors consists of 11 Directors, comprising one Executive Director, six Non-executive Directors and four Independent Non-executive Directors. Brief information of the Directors is set out below:

Name	Age	Position	Date of Appointment	Date of Joining the Group	Principal Responsibilities
Baocai ZHANG (張寶才)	51	Chair of the Board, Non-executive Director	8 June 2018	26 June 2012	Responsible for the high level oversight of the Board, the management and operations of the Group
Fucun WANG (王福存)	55	Co-Vice Chair, Executive Director and Chair of the Executive Committee	8 June 2018	8 June 2018	Responsible for the formulation of the strategic direction of the Group and the day-to-day management of the Group
Cunliang LAI (來存良)	58	Non-executive Director	20 January 2014	18 November 2004	Responsible for the high level oversight of the management and operations of the Group
Xiangqian WU (吳向前)	52	Non-executive Director	28 April 2017	28 April 2017	Responsible for the high level oversight of the management and operations of the Group
Fuqi WANG (王富奇)	54	Non-executive Director	23 April 2015	23 April 2015	Responsible for the high level oversight of the management and operations of the Group
Qingchun ZHAO (趙青春)	50	Non-executive Director	28 April 2017	28 April 2017	Responsible for the high level oversight of the management and operations of the Group

Name	Age	Position	Date of Appointment	Date of Joining the Group	Principal Responsibilities
Xing FENG (馮星)	44	Non-executive Director	15 December 2017	15 December 2017	Responsible for the high level oversight of the management and operations of the Group
Gregory James FLETCHER	61	Co-Vice Chair and Independent Non-executive Director	26 June 2012	26 June 2012	Giving strategic advice and guidance on the business and operations of the Group and ensuring the interests of all Shareholders, in particular minority Shareholders, are considered
Geoffrey William RABY	65	Independent Non-executive Director	26 June 2012	26 June 2012	Giving strategic advice and guidance on the business and operations of the Group and ensuring the interests of all Shareholders, in particular minority Shareholders, are considered
David James MOULT	61	Independent Non-executive Director	30 January 2018	30 January 2018	Giving strategic advice and guidance on the business and operations of the Group and ensuring the interests of all Shareholders, in particular minority Shareholders, are considered

Name	Age	Position	Date of Appointment	Date of Joining the Group	Principal Responsibilities
Helen Jane GILLIES	54	Independent Non-executive Director	30 January 2018	30 January 2018	Giving strategic advice and guidance on the business and operations of the Group and ensuring the interests of all Shareholders, in particular minority Shareholders, are considered

Chair of the Board and Non-executive Director

Baocai ZHANG (張寶才), aged 51, was appointed as a Non-executive Director of the Company and Chair of the Board on 8 June 2018. Mr. Zhang also acted as a Non-executive Director of the Company from June 2012 to January 2014, Executive Director and Co-Vice Chair of the Board from January 2014 to June 2018 and the Chair of the Executive Committee of the Company from January 2014 to June 2018.

Mr. Zhang joined the predecessor of Yanzhou in July 1989 as an accountant and served as the director of the planning and finance department of Yanzhou from June 2002 to September 2006, a director of Yanzhou from September 2006 to June 2016 and the board secretary of Yanzhou from September 2006 to March 2016, and the deputy general manager of Yanzhou from March 2011 to March 2016, respectively. Mr. Zhang has also been a director and a member of Party's standing committee of Yankuang since October 2015 and the general counsel of Yankuang since February 2018.

Mr. Zhang graduated with an Executive Master of Business Administration degree from Nankai University (南開大學) in China in June 2006. He has been a senior accountant recognised by Shandong Province Bureau of Personnel since December 2000.

In his roles as the Chair of the Board and Chair of the Strategy and Development Committee (the "**SDC**"), Mr. Zhang's responsibilities include (i) leading the Board and ensuring the efficient organisation and conduct of the Board's functions, (ii) reviewing key issues and performance trends of the Group's operations together with the Chief Executive Officer and the Chair of the Executive Committee, (iii) representing the Group in the wider community in which the Group operates, (iv) participating in the capital management and business development of the Company, (v) overseeing the annual performance assessment of the four standing committees of the Board; and (vi) leading and overseeing the SDC and the Board in the oversight and review of the Group's strategy initiatives. In these roles, Mr. Zhang is involved in and oversees key decisions and strategies of the Company as would any non-executive chairman.

Executive Director

Fucun WANG (王福存), aged 55, was appointed as an Executive Director and Co-Vice Chair of the Board on 8 June 2018. Mr. Wang has also been the Chair of the executive committee, a committee delegated by the Board for the day to day management of the Company's affairs (the "**Executive Committee**"), since 8 June 2018.

Mr. Wang started his career in July 1983 when he joined a subsidiary mining company of Yankuang and joined the headquarters of Yankuang in May 1986. Mr. Wang successively served as the deputy director of planning department, the deputy director and director of the department of planning and development of Yankuang from June 2002 to January 2016. He acted as the deputy chief economist and the head of the investment and development department of Yankuang from January 2016 to May 2018 and the director of the strategic planning and decision centre from February 2017 to May 2018.

Mr. Wang completed his post-graduate degree in Economic Management from Shandong Provincial Communist Party Collage (中共山東省委黨校) in China in June 2009, and an Executive Master of Business Administration degree from Hebei Industrial University (河北工業大學) in China in June 2014, respectively. He has been a senior statistician recognised by Human Resources and Social Security Bureau of Shandong Province since May 2014.

Non-executive Directors

Cunliang LAI (來存良), aged 58, was appointed as a Non-executive Director of the Company on 20 January 2014.

Mr. Lai joined the predecessor of Yanzhou in 1980 as a technician and served as the head of Xinglongzhuang Coal Mine of Yanzhou from 2000 to 2005. He acted as the deputy general manager of Yanzhou from 2005 to 2014 and has been the deputy general manager of Yankuang since October 2010. He was an executive Director of the Company from November 2004 to January 2014 and was appointed as the Co-Vice Chair of the Board from January 2014 to June 2018 and the Chair of the Executive Committee of the Company from June 2012 to January 2014.

Mr. Lai graduated with an Executive Master of Business Administration degree from Nankai University (南開大學) in China in June 2006, and a doctorate degree in engineering from Coal Science Research Institute in China in July 2008, respectively. He has been a senior mining engineer and an engineering applications researcher recognised by the Engineering Technology Review Committee of Shandong Province since December 2011 and January 2012, respectively.

Xiangqian WU (吳向前), aged 52, was appointed as a Non-executive Director of the Company on 28 April 2017.

Mr. Wu joined the predecessor of Yanzhou in July 1988 as an assistant engineer and served as the the deputy head of Jining No. 3 Coal Mine of Yanzhou from July 2003 to May 2004, the chief engineer of Jining No. 3 Coal Mine of Yanzhou from May 2004 to March 2006, the deputy head of Jining No. 3 Coal Mine of Yanzhou from May 2004 to August 2006, the head of Jining No. 3 Coal Mine of Yanzhou from August 2006 to April 2014, respectively. He was the chairman and general manager of Yanzhou Ordos Neng Hua Co., Ltd. and chairman of Inner Mongolia Haosheng Coal Mining Co., Ltd. from April 2014 to January 2016. Mr. Wu has been a director and the general manager of Yanzhou since May 2014 and January 2016, respectively.

Mr. Wu graduated with a Bachelor of Engineering degree in mine construction from Shandong College of Mining (山東礦業學院) in China in July 1988, a Master degree in mining engineering from Shandong University of Science and Technology (山東科技大學) in China in December 2002, and a doctorate degree in mining engineering from China University of Mining and Technology (中國礦業大學) in China in June 2012, respectively. He has been an engineering technology application researcher recognised by the Engineering and Technology senior Committee of Shandong Province since August 2009.

Fuqi WANG (王富奇), aged 54, was appointed as a Non-executive Director of the Company on 23 April 2015.

Mr. Wang joined the predecessor of Yanzhou in July 1985 as an assistant engineer and served as the the chief engineer of production and technology division of Yankuang Group from January 2000 to June 2002, the director of the production and technique department of Yanzhou from June 2002 to July 2003, and the deputy chief engineer and director of production and technique department of Yanzhou from July 2003 to March 2014, respectively. He has been the chief engineer of Yanzhou since March 2014.

Mr. Wang graduated with a Master degree in engineering from Northeastern University (東北大學) in China in September 2003, and an Executive Master of Business Administration degree from Nankai University (南開大學) in China in June 2006, respectively. He has been an engineering technology application researcher recognised by the Engineering and Technology Review Committee of Shandong Province since February 2006.

Qingchun ZHAO (趙青春), aged 50, was appointed as a Non-executive Director of the Company on 28 April 2017.

Mr. Zhao joined the predecessor of Yanzhou in July 1989 as an accountant and held various positions in Yanzhou, including the director of the planning and finance department, the vice chief financial officer and the director of the finance department, from 2006 to 2014, respectively. He served as the general manager assistant and the director of the finance management department of Yanzhou from March 2014 to January 2016 and has been the chief financial officer and a director of Yanzhou since January 2016 and June 2016, respectively.

Mr. Zhao has been a director of Shanghai Interim Futures Co., Ltd. (NEEQ:871467) and Qilu Bank Co., Ltd. (NEEQ:832666) since August 2016 and February 2016, respectively.

Mr. Zhao graduated with an Executive Master of Business Administration degree from Nankai University (南開大學) in China in June 2006. He has been a senior accountant recognised by the Department of Finance and Department of Human Resources and Social Security of Shandong Province since January 2018.

Xing FENG (馮星), aged 44, was appointed as a Non-executive Director of the Company on 15 December 2017.

Mr. Feng has been the assistant general manager of China Cinda Asset Management Co., Ltd. (中國信達資產管理有限公司) (stock code: 1359.HK) since March 2017, where he is responsible for implementing the department's development strategy plan, involvement in business review and leading the implementation of the investment plan. He has also been the managing director of Cinda Capital Management Company Limited since January 2018.

Mr. Feng graduated with a Bachelor of Engineering degree in Electric Engineering and Automation from Tsinghua University (清華大學) in China in July 1997.

Independent Non-executive Directors

Gregory James FLETCHER, aged 61, was appointed as the Co-Vice Chair on 1 March 2018 and an Independent Non-executive Director of the Company on 26 June 2012.

Mr. Fletcher has been a director and the chairman of the audit and risk committee of Saunders International Limited (ASX:SND) since July 2015 and a director of SMEG Australia Pty Ltd since August 2011. Prior to joining the Group, Mr. Fletcher served as a director of Gloucester (which merged with the Company in June 2012) from June 2009 to June 2012, and a director of WDS Limited (ASX:WDS) from July 2010 to November 2015. Mr. Fletcher has been Chair and/or a member of the audit and risk committee of a number of NSW public sector entities since 2009, and was a member of the audit and risk committee of the Audit Office of New South Wales, a statutory authority in Australia, for the 2010 to 2017 financial years. Mr. Fletcher was a partner of Deloitte Australia from July 1993 to May 2009, during which he undertook external audits and provided internal audit and risk management services to a number of public companies.

Mr. Fletcher was a director of Yancoal SCN from November 2014 to August 2018, during which he assumed an independent role on the board of Yancoal SCN. His roles and responsibilities as a director of Yancoal SCN were non-executive in nature and similar to those of his role as an Independent Non-executive Director of the Company.

Mr. Fletcher graduated with a Bachelor of Commerce degree in accounting, finance and systems from the University of New South Wales in Australia in April 1979. He has been a member of the Institute of Chartered Accountants in Australia since August 1985.

Geoffrey William RABY, aged 65, was appointed as an Independent Non-executive Director of the Company on 26 June 2012.

Dr. Raby was formerly Australia's Ambassador to the People's Republic of China from February 2007 to August 2011. Prior to then he was a Deputy Secretary in the Department of Foreign Affairs and Trade (DFAT) from November 2002 to November 2006.

Dr. Raby has extensive experience in international affairs and trade and has held a number of independent non-executive director positions with ASX listed companies, including Oceana Gold Corporation Limited (ASX: OGC) and iSentia Group Limited (ASX: ISD) since August 2011 and May 2014, respectively. Dr. Raby was appointed Chairman of Wiseway Group Limited (ASX: WWG) on 30 August 2018, which listed on the ASX on 30 October 2018. Dr. Raby served as a director of Fortescue Metals Group Limited (ASX: FMG) from August 2011 to December 2016, a director of SmartTrans Holdings Limited (ASX: SMA) from August 2011 to April 2016 and a director of YPB Group Limited (ASX: YPB) from July 2014 to May 2017, respectively.

Dr. Raby graduated from La Trobe University in Australia with a Bachelor of Economics degree in May 1978, a Masters of Economics degree in May 1981 and a Doctor of Philosophy in Economics in May 1991.

David James MOULT, aged 61, was appointed as an Independent Non-executive Director of the Company on 30 January 2018.

Prior to joining the Group, Mr. Moult served as the managing director and chief executive officer of Centennial Coal Company Limited (ASX:CEY) from July 2011 to April 2017, then a non-executive director of Centennial Coal from May 2017 until January 2018. He previously held the position of chief operating officer with Centennial Coal from January 1998 until June 2011. He was a global marketing manager, vice president and general manager of Joy Mining Machinery in the United States from January 1996 to July 1997 and Australia from July 1997 to December 1997.

Mr. Moult is currently a director of Coal Services Pty Limited, Coal Mines Insurance Pty Ltd and Mines Rescue Pty Ltd, respectively since January 2015. He was previously a director of the Australian Coal Association Low Emissions Technologies Limited Board (ACALET) from June 2011 to January 2018, a director of The Minerals Council of Australia from October 2015 to April 2017 and a director of the NSW Minerals Council from April 2012 to November 2017.

Mr. Moult graduated with a Higher National Diploma in Mining through completing an approved Sandwich course in Mining at Trent Polytechnic (now Nottingham Trent University) in the United Kingdom in November 1978, and a Master of Business Administration degree from the Nottingham Business School of the Nottingham Trent University in the United Kingdom in November 1993, respectively. He has been a Chartered Mining Engineer in the United Kingdom since May 1979, a fellow of Australasian Institute of Mining and Metallurgy since May 1998, a fellow of Institute of Materials, Minerals and Mining since January 1991, an European Engineer of European Federation of National Engineering Associations since July 1992 and a member of the Australia Institute of Company Directors since April 2008.

Helen Jane GILLIES, aged 54, was appointed as an Independent Non-executive Director of the Company on 30 January 2018.

Ms. Gillies has been a non-executive director of Bankstown Airport Limited and Camden Airport Limited since September 2017, a non-executive director of Monadelphous Group Limited (ASX: MND) since September 2016, and a non-executive director of Red Flag Group (Holdings) Limited since 2016. Previously, she served as a director of Sinclair Knight Merz Management Pty Limited from October 2002 to September 2008 and Sinclair Knight Merz Management Pty Limited from September 2010 to December 2013, the general manager (risk) and general counsel of Sinclair Knight Merz from 1995 to 2013, and a non-executive director of Civil Aviation Safety Authority in Australia from 2009 to 2014.

Ms. Gillies graduated with a Bachelor of Commerce degree and a Bachelor of Law degree (with Honours) from the University of Queensland in Australia in August 1985 and May 1987, respectively. She also received a Master of Business Administration degree from the University of Sydney in Australia in May 1998 and a Master of Construction Law degree from the University of Melbourne in Australia in August 2004. Ms. Gillies also completed the Advanced Management Programme held at INSEAD, France in July 2011 and was awarded a Certificate in Corporate Governance by INSEAD in September 2014. Ms. Gillies has been a fellow of the Australian Institute of Company Directors since January 2017, a solicitor of the Supreme Court of Queensland since January 1989 and a solicitor of the Supreme Court of New South Wales since February 1995.

Save as disclosed above in "– *Board of Directors"* above and *"Appendix VII – Statutory and General Information*", each Director had not held any other directorships in listed companies during the three years immediately prior to the Latest Practicable Date and there is no other information in respect of the Directors to be disclosed pursuant to Rule 13.51(2) of the Listing Rules and there is no other matter that needs to be brought to the attention of the Shareholders.

SENIOR MANAGEMENT OF THE GROUP

The Executive Director (also being the Chair of the Executive Committee) the Chair of the Board (also being a Non-executive Director), and members of the senior management of the Group are responsible for the day-to-day management of our business. Certain information relating to the Executive Director and the Chair of the Board is set out in "– *Board of Directors"* above.

In addition to the Executive Director (also being the Chair of the Executive Committee) and the Chair of the Board (also being a Non-executive Director), the members of the senior management of the Group include the following:

Name	Age	Position in the Group	Roles and Responsibilities	Date of Appointment as Senior Management	Date of Joining the Group
Reinhold SCHMIDT	52	Chief Executive Officer	Responsible for the overall and day-to-day management and development of the Group	26 August 2013	26 August 2013
Lei ZHANG (張磊)	46	Chief Financial Officer	Responsible for the financial operation, financing and investment activities of the Group	31 March 2014	31 March 2014

Reinhold SCHMIDT, aged 52, was appointed as the Chief Executive Officer of the Company on 26 August 2013.

Mr. Schmidt has over 20 years' experience in the mining industry. Prior to joining the Group, he served as the executive general manager of Wandoan Project for Xstrata Coal Pty Ltd from February 2008 to February 2009 and the chief operating officer there from March 2009 to June 2013. He was also formerly the chief operating officer of the Colombian coal assets of Glencore International.

Mr. Schmidt graduated with a Bachelor degree in Engineering (Mining) (cum laude) from the University of Pretoria in South Africa in March 1989, a Master of Engineering (Mining Engineering) degree and Master of Science in Engineering (Mineral Economics) degree from the University of Witwatersrand, Johannesburg, South Africa in June 1991 and December 1991, respectively.

Dr. Lei ZHANG (張磊), aged 46, was appointed as the Chief Financial Officer of the Company on 31 March 2014.

Prior to joining the Group, Dr. Zhang served as the senior vice president and managing director of SK Great China private equity fund & principal investment from February 2013 to March 2014, general manager of mergers and acquisitions and commercial finance at Shell Far East from July 2012 to March 2013, executive director and chief financial officer of Chinalco Mining Corp. International from September 2010 to June 2012, vice president from September 2010 and chief financial officer of Chinalco Overseas Holdings from September 2010 to June 2012, and was with Siemens from April 1997 to September 2010 including serving as vice president of Siemens Ltd. China and cluster chief financial officer of Siemens Real Estate North East Asia from September 2008 to September 2010.

Dr. Zhang graduated with a Doctor of Economics from Graduate School of Chinese Academy of Social Sciences in Beijing, China in June 2010, and a Master of Business Administration degree from Peking University in China in June 2005, respectively. Dr. Zhang is a qualified Public Accountant and China Inter-bank Market Dealer and also holds a China Bond Custody Qualifying Certificate.

The business address of the members of the senior management is Level 18, Darling Park 2, 201 Sussex Street, Sydney, NSW 2000, Australia.

COMPANY SECRETARY

Laura Ling ZHANG (張凌), aged 41, was appointed as the Company Secretary of the Company on 6 September 2005.

Ms. Zhang is one of the founding executives of the Company and has been the Company Secretary and Executive General Manager, Legal and Compliance of the Company since September 2005 and July 2014 respectively. She oversees the Company's corporate governance, group legal issues, corporate compliance and shareholder communications.

Ms. Zhang graduated with a Bachelor of Arts degree in English education from Qufu Normal University in China in July 1999 and a Master of Arts degree in English language and literature from China University of Mining and Technology in China in July 2004. Ms. Zhang was until recently a Fellow of the Governance Institute of Australia (formerly known as Chartered Secretaries Australia) and since June 2018, is a fellow member of the Hong Kong Institute of Chartered Secretaries. Ms. Zhang is a member of the Australian Institute of Company Directors and is currently studying the EMBA at The University of New South Wales.

BOARD COMMITTEES

The Board has established the audit and risk management committee, the nomination and remuneration committee, the health, safety and environment committee and the strategy and development committee.

Audit and Risk Management Committee

The Company has established the audit and risk management committee in compliance with Rule 3.21 of the Listing Rules and the Corporate Governance Code as set out in Appendix 14 to the Listing Rules. The primary duties of the audit and risk management committee are to oversee the financial reporting, internal control structure, risk management systems and the internal and external audit functions of the Company, review the financial information of the Company and consider issues relating to the external auditors and their appointment.

The audit and risk management committee consists of four Directors. The chair of the audit and risk management committee is Mr. Gregory James FLETCHER, an Independent Non-Executive Director, who holds the appropriate professional qualifications as required under Rules 3.10(2) and 3.21 of the Listing Rules. The members of the audit and risk management committee are:

Gregory James FLETCHER (*Chair*)
Qingchun ZHAO
David James MOULT
Helen Jane GILLIES

Nomination and Remuneration Committee

The Company has established the nomination and remuneration committee of the Board in compliance with Rule 3.25 of the Listing Rules and the Corporate Governance Code as set out in Appendix 14 to the Listing Rules. The primary duties of the nomination and remuneration committee are to review the size and composition of the Board, assess the independence of the Independent Non-executive Directors, make recommendations to the Board on the appointment and re-appointment of Directors, succession planning for Directors, make recommendations to the Board on the Company's policy and structure for all remuneration of Directors and senior management and on the establishment of a formal and transparent procedure for developing policy on such remuneration.

The nomination and remuneration committee consists of five Directors. The members of the nomination and remuneration committee are:

Helen Jane GILLIES (*Chair*)
Baocai ZHANG
Xiangqian WU
Gregory James FLETCHER
David James MOULT

Health, Safety and Environment Committee

The Company has established the health, safety and environment committee of the Board. The primary duties of the health, safety and environment committee are to monitor the Company's compliance with the approved health, safety and environment ("**HSE**") policies and applicable HSE legislation, consider and adopt HSE policies, review the HSE policies and recommend changes to such policies and assessing whether the Company has any material exposure to environmental and social sustainability risks.

The health, safety and environment committee consists of four Directors. The members of the health, safety and environment committee are:

David James MOULT (*Chair*)
Fucun WANG
Fuqi WANG
Geoffrey William RABY

Strategy and Development Committee

The Company has established the Strategy and Development Committee of the Board. The primary duties of the Strategy and Development Committee are to assist the Board in its oversight and review of the Group's strategy initiatives, including merger and acquisition proposals, major capital markets transactions, significant investment opportunity and the disposal of significant assets.

The Strategy and Development consists of five Directors. The members of the Strategy and Development Committee are:

Baocai ZHANG (*Chair*)
Qingchun ZHAO
Fuqi WANG
Xing FENG
Geoffrey William RABY

DIRECTORS' REMUNERATION AND REMUNERATION OF FIVE HIGHEST PAID INDIVIDUALS

For 2015, 2016, 2017 and the six months ended 30 June 2018, the aggregate amount of the fees, salaries, housing allowances, other allowances, benefits in kind (including contributions to pension schemes) and bonuses paid by the Group to the Directors were approximately A$1.7 million, A$1.5 million, A$3.2 million and A$0.7 million, respectively.

Under the current arrangements, the aggregate remuneration and benefits in kind payable to the Directors for 2018 are estimated to be approximately A$1.9 million.

For 2015, 2016, 2017 and the six months ended 30 June 2018, one of the five highest paid individuals was a Director. The aggregate amount of the fees, salaries, housing allowances, other allowances, benefits in kind (including contributions to pension schemes) and bonuses paid by the Group to the four remaining highest paid individuals were approximately A$6.2 million, A$6.5 million, A$10.8 million and A$1.9 million, respectively.

Save for A$21,954 which was paid to Mr. Fucun Wang, an Executive Director, as a signing bonus in July 2018, during the Track Record Period, no remuneration was paid to the Directors or the five highest paid individuals as an inducement to join or upon joining the Group. No compensation was paid to, or receivable by, the Directors or past directors of the Company or the five highest paid individuals for the loss of office as director of any member of the Group or of any other office in connection with the management of the affairs of any member of the Group. Save for the Non-executive Directors who did not receive any fees and Mr. Baocai Zhang (who was an Executive Director during the Track Record Period until his re-designation as a Non-executive Director on 8 June 2018) who waived his long term incentive plan entitlements, none of the Directors had waived any remuneration and/or emoluments during the Track Record Period.

Information on the letters of appointment entered into between the Company and the Directors is set out in "*Appendix VII – Statutory and General Information*".

COMPLIANCE ADVISER

The Company has appointed Somerley Capital Limited as its compliance adviser pursuant to Rule 3A.19 of the Listing Rules to provide advisory services to the Company. In compliance with Rule 3A.23 of the Listing Rules, the Company must consult with, and if necessary, seek advice from, the compliance adviser on a timely basis in the following circumstances:

(a) before the publication of any regulatory announcement, circular or financial report;

(b) where a transaction, which might be a notifiable or connected transaction, is contemplated;

(c) where the Company proposes to use the proceeds of the Global Offering in a manner different from that detailed in this prospectus or where the Group's business activities, developments or results of operation deviate from any forecast, estimate or other information in this prospectus; and

(d) where the Stock Exchange makes an inquiry regarding unusual movements in the price or trading volume of the Shares, the possible development of a false market in the Shares or any other matters.

The term of the appointment of the compliance adviser will commence on the Listing Date and will end on the date on which the Company distributes its annual report in respect of its financial results for the first full financial year commencing after the Listing Date.

FUTURE PLANS

See "*Business – Our Business Strategies*" for a detailed description of our future plans and strategies.

USE OF PROCEEDS

The net proceeds from the Global Offering which the Company will receive, after deducting the underwriting commissions and the estimated expenses in relation to the Global Offering and assuming the Over-allotment Option is not exercised, will be:

- approximately HK$1,183 million, assuming an Offer Price of HK$23.48 (being the Minimum Offer Price);

- approximately HK$1,251 million, assuming an Offer Price of HK$24.66 (being the mid-point of the Offer Price Range); or

- approximately HK$1,320 million, assuming an Offer Price of HK$25.84 (being the Maximum Offer Price).

The Company intends to use the net proceeds of HK$1,251 million, assuming an Offer Price of HK$24.66 (being the mid-point of the Offer Price Range), from the Global Offering as follows:

- approximately HK$600.7 million (or approximately 48% of the net proceeds) will be used to repay outstanding indebtedness of the Group under the Syndicated Facility and, potentially, unsecured loans from related parties. The Syndicated Facility has an interest rate of LIBOR plus 2.8% to 3.1% plus Yanzhou guarantee fees and the unsecured loans from the related parties have an interest rate of 7%. The Syndicated Facility matures in instalments and the unsecured loans from the related parties are due between 2022 and 2024. In each case, the loans have been utilised primarily to finance our capital expenditure and working capital requirements. (See "*Financial Information of the Group – Indebtedness*" for further details);

- approximately HK$375.4 million (or approximately 30% of the net proceeds) will be used to finance potential acquisitions (as at the Latest Practicable Date, the Company has not identified any targets to be acquired). In deciding whether to invest in or acquire a particular asset or business, we consider multiple key factors, including, among others (i) strategic value-accretion, (ii) the return on investment and (iii) future growth potential and the level of synergies created by the investment;

- approximately HK$150.2 million (or approximately 12% of the net proceeds) will be used to finance the acquisition of an additional 4% interest in the unincorporated Moolarben joint venture (see "*Financial Information of the Group – Acquisitions, Disposals and Deconsolidation – Moolarben Acquisition*" for further details); and

- approximately HK$125.1 million (or approximately 10% of the net proceeds) will be used for working capital and general corporate purposes.

In the event that the Offer Price is fixed at a higher or lower level compared to the mid-point of the Offer Price Range, the net proceeds from the Global Offering will be allocated to the above purposes on a *pro rata* basis, except that if the proceeds to be allocated to the Moolarben Acquisition exceed the purchase price, the difference will be reallocated to repay outstanding indebtedness of the Group under the Syndicated Facility and, potentially, unsecured loans from related parties.

If the Over-allotment Option is exercised in full, the additional net proceeds which the Company will receive, after deducting the underwriting commissions and the estimated expenses in relation to the Global Offering, will be:

- approximately HK$204 million, assuming an Offer Price of HK$23.48 (being the Minimum Offer Price);

- approximately HK$214 million, assuming an Offer Price of HK$24.66 (being the mid-point of the Offer Price Range); or

- approximately HK$225 million, assuming an Offer Price of HK$25.84 (being the Maximum Offer Price).

In each case, such net proceeds from the Global Offering (with or without the exercise of the Over-allotment Option) will be allocated to the purposes described above on a *pro rata* basis, except that if the proceeds to be allocated to the Moolarben Acquisition exceed the purchase price, the difference will be reallocated to repay outstanding indebtedness of the Group under the Syndicated Facility and, potentially, unsecured loans from related parties.

Pending the deployment of the net proceeds from the Global Offering as described above, the Company intends to deposit such net proceeds into short-term interest bearing deposits and/or money market instruments.

CORNERSTONE INVESTMENT

As part of the International Offering, the Company has entered into a cornerstone investment agreement with Shaanxi Coal and Chemical Industry Group Co., Ltd. (the "**Cornerstone Investor**"), details of which are set out below.

The Cornerstone Investor has agreed to subscribe at the Offer Price for such number of Offer Shares (rounded down to the nearest whole board lot of 100 Shares) that may be subscribed for with an aggregate amount of approximately US$40,000,000 (HK$313,180,000).

		Approximate % of total number of Offer Shares		Approximate % of total Shares in issue immediately following the completion of the Global Offering	
Offer Price	Aggregate number of Shares to be subscribed by the Cornerstone Investor (rounded down to nearest whole board lot of 100 Shares)	Assuming the Over-allotment Option is not exercised	Assuming the Over-allotment Option is exercised in full	Assuming the Over-allotment Option is not exercised	Assuming the Over-allotment Option is exercised in full
HK$23.48 (Minimum Offer Price)	13,338,100	22.44%	19.51%	1.01%	1.01%
HK$24.66 (Mid-point of Offer Price Range)	12,699,900	21.37%	18.58%	0.97%	0.96%
HK$25.84 (Maximum Offer Price)	12,119,900	20.39%	17.73%	0.92%	0.92%

The Offer Shares to be delivered to the Cornerstone Investor pursuant to the cornerstone investment agreement will rank *pari passu* with all other Shares then in issue and to be listed on the Stock Exchange and will count towards the public float of the Shares.

The Offer Shares to be delivered to the Cornerstone Investor will not be affected by any reallocation of the Offer Shares between the International Offering and the Hong Kong Public Offering or any exercise of the Over-allotment Option, as further described in "*Structure of the Global Offering*".

The Cornerstone Investor is an independent third party, is not a connected person of the Company and is not an existing Shareholder. Immediately following the completion of the Global Offering, the Cornerstone Investor will not become a substantial shareholder of the Company.

The Cornerstone Investor (a) will not have any representation on the Board immediately following the completion of the Global Offering, (b) will not subscribe for any Offer Shares pursuant to the Global Offering, other than pursuant to the cornerstone investment agreement and (c) do not have any preferential rights compared with other public Shareholders in its cornerstone investment agreement.

The following information on the Cornerstone Investor was provided to the Company by the Cornerstone Investor.

Shaanxi Coal and Chemical Industry Group Co., Ltd. is a large-scale state-owned energy and chemical enterprise that has been reorganised and developed by the Shaanxi Provincial Committee of the CPC and the Provincial Government of Shaanxi. It is ultimately owned by Shaanxi SASAC. Since its establishment in 2004, the group has formed two major businesses of "coal mining and coal chemical industry", along with the multi-complementary and coordinated industrial structure of "coal-fired power generation, iron and steel smelting, machinery manufacturing, construction, railway investment, science and technology, finance, and modern services". The group is headquartered in Xi'an, Shaanxi Province, and has nearly 120,000 employees with total assets of CNY470 billion.

Shaanxi Coal and Chemical Industry Group Co., Ltd. has agreed to subscribe for the Investor Shares through a subsidiary that is a qualified domestic institutional investor.

CONDITIONS PRECEDENT

The obligation of the Cornerstone Investor to subscribe, and the obligation of the Company to issue and deliver, the Offer Shares pursuant to the cornerstone investment agreement is conditional upon the following:

(a) the Underwriting Agreements being entered into and having become unconditional (in accordance with their respective original terms or as subsequently waived or varied by agreement of the parties thereto) by no later than the time and date as specified in the Underwriting Agreements or as subsequently waived or varied by agreement of the parties thereto;

(b) neither of the Underwriting Agreements having been terminated;

(c) no laws having been enacted or promulgated by any governmental authority which prohibits the consummation of the transactions contemplated in the Global Offering or the subscription of the Offer Shares under the cornerstone investment agreement and there being no order or injunction of a court of competent jurisdiction in effect which precludes or prohibits the consummation of such transactions;

(d) the Listing Committee of the Stock Exchange granting the listing of, and permission to deal in, the Shares and such approval or permission not having been revoked prior to the commencement of dealings in the Shares on the Stock Exchange; and

(e) the representations, warranties, undertakings and confirmations of the Cornerstone Investor in the cornerstone investment agreement remaining true and accurate in all material respects and there being no material breach of the cornerstone investment agreement on the part of the Cornerstone Investor.

Further, the Cornerstone Investor's obligation to subscribe for, and the obligations of the Company to issue and deliver, the Offer Shares pursuant to the cornerstone investment agreement are not binding until either:

(a) the Cornerstone Investor (or the Company) has received a written notice under *Foreign Acquisitions and Takeovers Act 1975* (Commonwealth of Australia ("**FATA**") from the Treasurer of the Commonwealth of Australia (The "**Treasurer**") (or the Treasurer's delegate) stating that, or to the effect that, the government of the Commonwealth of Australia does not object to the transaction contemplated by the cornerstone investment agreement; or

(b) following the Cornerstone Investor (or the Company) giving notice of the proposed investment into the Offer Shares pursuant to the cornerstone investment agreement to the Treasurer under FATA, the Treasurer ceases to be empowered to make any order under Part 3 of FATA.

The above condition cannot be waived.

RESTRICTIONS ON DISPOSAL OF SHARES BY THE CORNERSTONE INVESTOR

The Cornerstone Investor has agreed that without the prior written consent of Morgan Stanley, it will not, whether directly or indirectly, at any time during the period of six months following the Listing Date, dispose of (as defined in the cornerstone investment agreement) any of the Shares subscribed for by it pursuant to the cornerstone investment agreement and any other securities of the Company which are derived therefrom (the "**Relevant Shares**") or any interest in any company or entity holding any of the Relevant Shares.

The Cornerstone Investor may transfer the Relevant Shares in certain limited circumstances as set out in the cornerstone investment agreement, such as a transfer to a wholly-owned subsidiary of such Cornerstone Investor (provided that prior to such transfer, such wholly-owned subsidiary undertakes to be bound by the Cornerstone Investor's obligations under the cornerstone investment agreement and be subject to the restrictions on disposal of Relevant Shares imposed on the Cornerstone Investor), accepting a takeover bid that has been made for 100% of the Shares in the Company and in circumstances where at least 50% of the Shares held by non-locked up Shareholders have also accepted that takeover bid or having its Shares in the Company acquired by a bidder following a scheme of arrangement in relation to the Company.

In preparation of the Global Offering, the Company has sought the following waivers from strict compliance with the relevant provisions of the Listing Rules and/or the Companies (WUMP) Ordinance:

	Relevant Rules	Subject Matter
1.	2.07C(4)(a)	Submission of announcements to the Stock Exchange and disclosure of inside information
2.	4.03	Qualifications of reporting accountants
3.	4.29	Pro forma financial information
4.	Paragraph 32 of the Third Schedule to C(WUMP)O	Financial Information of Moolarben
5.	8.08(1)	Public float
6.	8.12	Management presence
7.	9.09(b)	Dealing in Shares by core connected persons during a listing application process
8.	10.04 and Paragraph 5(2) of Appendix 6	Restrictions on existing Shareholders to subscribe for Shares
9.	10.07(1)	Restriction on disposal of Shares by Controlling Shareholders
10.	Chapter 14A	Non-exempt continuing connected transactions
11.	19.10(6)	Requirement to make relevant statutes or regulations available for inspection
12.	Appendix 3	Certain Articles in the Company's Constitution

1. WAIVER IN RELATION TO SUBMISSION OF ANNOUNCEMENTS TO THE STOCK EXCHANGE AND DISCLOSURE OF INSIDE INFORMATION

Rule 2.07C(4)(a) of the Listing Rules provides that announcements and notices must not be published on the Stock Exchange's website between 8:30 a.m. and 12:00 noon and between 12:30 p.m. and 4:30 p.m. on a normal business day in Hong Kong. The Company is listed on the ASX. Under the ASX Listing Rules, once an ASX-listed issuer is or becomes aware of any information concerning it that a reasonable person would expect to have a material effect on the price or value of the issuer's securities (the "**ASX Price Sensitive Information**"), the issuer must immediately (i.e. promptly and without delay) announce that information on the ASX. The ASX Price Sensitive Information will, in general, also be inside information under the Listing Rules. Announcements on the ASX can be submitted at any time, and are processed and released between 7:30 a.m. and 7:30 p.m. (8:30 p.m. during daylight saving time in the summer) (Sydney time) on each ASX trading day, with announcements submitted outside of such periods queued for release on the morning of the following trading day beginning at 7:30 a.m.. As the Company is required under the ASX Listing Rules to announce ASX Price Sensitive Information immediately, compliance with the ASX Listing Rules could require an announcement of inside information to be made by the Company outside the permitted periods for submitting announcements to the Stock Exchange under Rule 2.07C(4)(a) of the Listing Rules.

Accordingly, the Company has applied for, and the Stock Exchange has granted, a waiver of strict compliance with the requirements under Rule 2.07C(4)(a) of the Listing Rules such that the Company is allowed to submit to the Stock Exchange any announcement which is required to be made under the ASX Listing Rules between 8:30 a.m. and 4:30 p.m. on a normal business day in Hong Kong simultaneously with the submission to the ASX of the same announcement pursuant to the ASX Listing Rules, without any suspension of dealings or trading halt in the Company's securities.

The waiver has been granted subject to the following conditions:

(a) The Company discloses in the prospectus the grant of the waiver setting out relevant details including a clear indication of the impact of the waiver on the Hong Kong investing public following any announcement made under the waiver, i.e. that one effect of the waiver for investors in Hong Kong is that trading in the Shares will continue even if the Company releases an announcement containing inside information during normal trading hours in Hong Kong, and as a result, investors in Hong Kong should consider whether any inside information has been released during trading hours in Hong Kong prior to making an investment decision regarding the Shares;

(b) The Company informs the Stock Exchange in the first instance in the event of any material change being made to the ASX Listing Rules on disclosure of ASX Price Sensitive Information as such information may be of material relevance to an assessment of the ongoing appropriateness of the waiver. The Stock Exchange will evaluate the impact of any of these changes and indicate to the Company whether or not we intend to amend or revoke the waiver;

(c) The Company will comply with the relevant provisions in the event of changes to the Hong Kong regulatory regime and the rules in relation to disclosure of inside information and electronic disclosure unless the Stock Exchange agrees to amend the waiver or grant a new waiver in the circumstances prevailing;

(d) The Company notifies, and at the same time, submits electronic copies of the English and Chinese version of announcements to the Stock Exchange at least 10 minutes in advance of the expected time of release; and

(e) The waiver will not apply to announcements published in discharge of the disclosure obligations under the Listing Rules for notifiable and/or connected transactions.

2. WAIVER IN RELATION TO THE QUALIFICATIONS OF REPORTING ACCOUNTANTS

Rule 4.03 of the Listing Rules provides that all accountants' reports must normally be prepared by certified public accountants who are qualified under the Professional Accountants Ordinance ("**PAO**") for appointment as auditors of a company and who are independent both of the issuer and of any other company concerned to the same extent as that required of an auditor under the Companies Ordinance and in accordance with the requirements on independence issued by the Hong Kong Institute of Certified Public Accountants. Rule 4.05A of the Listing Rules provides that where a new applicant acquires any material subsidiary during the Track Record Period and such an acquisition if made by a listed issuer would have been classified at the date of application as a very substantial acquisition, it must disclose pre-acquisition financial information on that material subsidiary from the commencement of the Track Record Period to the date of acquisition. Pre-acquisition financial information on the material subsidiary must normally be drawn up in conformity with accounting policies adopted by the new applicant and be disclosed in the form of a note to the accountants' report or in a separate accountants' report.

The Company acquired C&A on 1 September 2017. The C&A Acquisition, if made by a listed issuer, would have constituted a very substantial acquisition (as defined by the Listing Rules). The C&A Acquisition constituted a very substantial acquisition of Yanzhou, a Controlling Shareholder of the Company. A circular to the shareholders of Yanzhou was issued on 2 June 2017 (the "**Yanzhou Circular**"). C&A was incorporated in Australia under the Australian Corporations Act. The accounting records of the C&A Group are maintained under the Australian equivalent of the International Financial Reporting Standards of the Australian Accounting Standards Board.

The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with Rule 4.03 of the Listing Rules to permit the Company to appoint ShineWing Australia as the reporting accountants for the purpose of issuing the accountants' report of the C&A Group included in the prospectus on the following grounds and conditions:

(a) ShineWing Australia was appointed as the reporting accountants for the purpose of issuing the accountants' report of the C&A Group included in the Yanzhou Circular, which included the historical financial information of the C&A Group for the three years ended 31 December 2016. In view of the foregoing, it would be more cost and time effective to engage ShineWing Australia to issue the accountants' report of the C&A Group in accordance with IFRS which will cover the three years ended 31 December 2017;

(b) ShineWing Australia is a member firm of ShineWing International, an accounting practice with an international name and reputation;

(c) ShineWing Australia is registered under the applicable laws of Australia and is a member of the Chartered Accountants Australia and New Zealand, which is a member of the International Federation of Accountants ("**IFAC**"), a global organisation for the accountancy profession. ShineWing Australia is subject to the independent oversight of the Australian Securities and Investment Commission, a regulatory body of Australia which is a signatory to the IOSCO Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information;

(d) ShineWing Australia is independent from the Group and the C&A Group under the statements on independence issued by the IFAC; and

(e) ShineWing Australia will be named as an expert in the prospectus and will be liable under Companies (WUMP) Ordinance in the same way as reporting accountants qualified under the PAO.

3. WAIVER IN RELATION TO PRO FORMA FINANCIAL INFORMATION

Rule 4.29(1) of the Listing Rules provides that, where an issuer includes pro forma financial information in any document, the pro forma financial information must provide investors with information about the impact of the transaction which is the subject of the document. Rule 4.29(6)(b) of the Listing Rules provides that any adjustments made in relation to any pro forma statement must be directly attributable to the transaction concerned and not relating to future events or decisions.

Given the significance of the C&A Acquisition, Warkworth Transaction and Glencore Transaction (together, the "**Pro Forma Transactions**") to the Group, the prospectus includes a pro forma income statement for the financial year ended 31 December 2017 showing the pro forma results of operations of the Group had the Pro Forma Transactions been completed on 1 January 2017 and a pro forma income statement for the six months ended 30 June 2018 showing the effects of the Warkworth Transaction and the Glencore Transaction. However, the Pro Forma Transactions are not the subject of this prospectus.

The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with Rule 4.29(1) of the Listing Rules to permit the inclusion of the C&A Pro Forma in the prospectus on the following grounds and conditions:

(a) the Pro Forma Transactions are not the subject of the prospectus and the adjustments for the effects of Pro Forma Transactions made to the financial information set out in *"Appendix IIB – Unaudited Pro Forma Financial Information of the Enlarged Group"* are not directly attributable to the transaction concerned (i.e. the Global Offering), but for the reasons set out above, inclusion of the pro forma income statement showing the effect of Pro Forma Transactions in the prospectus would assist investors in analysing the future prospects of the Company; and

(b) the reporting accountants will report on the Pro Forma Transactions in accordance with Rule 4.29(7) of the Listing Rules.

4. FINANCIAL INFORMATION MOOLARBEN

Paragraph 32 of the Third Schedule to the Companies (WUMP) Ordinance provides that, if the proceeds of the issue of shares are applied in the purchase of any business, a separate accountants' report in relation to the business in respect of each of the three financial years immediately preceding the issue of the prospectus is required.

The Company has entered into an agreement with KORES, subject to satisfaction of certain conditions precedent, to acquire a 4% interest in Moolarben for a total consideration of A$84 million, which the Company intends to fund using a portion of the expected proceeds from the Global Offering.

The Company has applied for a certificate of exemption pursuant to section 342A(1)(b) of the Companies (WUMP) Ordinance from strict compliance with the requirements of paragraph 32 of the Third schedule to the Companies (WUMP) Ordinance, in respect of the requirement to include a separate accountants report on the Moolarben JV on the following grounds:

(a) the Company has consolidated 81% of the financial results of the Moolarben JV for each of the years ended 31 December 2015, 2016 and 2017 in its financial statements based on its current interest in the Moolarben JV. Therefore, the financial results of the Moolarben JV, insofar as the Company's 81% interest, have already been substantially disclosed in, among other sections, the "*Appendix IA – Accountants' Report of the Group*";

(b) (i) the profit and loss information of the Moolarben JV in respect of the financial years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 and (ii) the assets and liabilities information of the Moolarben JV as at the last date to which the financial statements of the business were prepared are disclosed in note 45 to "*Appendix IA – Accountants' Report of the Group*";

(c) (i) the 81% of the financial results of the Moolarben JV pursuant to the Company's existing interest in the Moolarben JV and (ii) the income statement and balance sheet of the Moolarben JV will, when taken together, provide the investors with sufficient disclosure on the financial information of the Moolarben JV;

(d) strict compliance with paragraph 32 of the Third Schedule to C(WUMP)O would be unduly burdensome given the time and cost involved in preparing a separate accountants' report. The Reporting Accountants has estimated and that it would take approximately one month for such accountants' report to be prepared. In addition, the Company is not otherwise required under the applicable accounting standards, the listing rules of the ASX (on which it has been listed since 2012) or the applicable laws of Australia (in which it was incorporated) to prepare a separate accountants' report on Moolarben; and

(e) (i) financial information in relation to the Company's 81% interest in the Moolarben JV and (ii) the income statement and balance sheet of the Moolarben JV have already been disclosed in the "*Appendix IA – Accountants' Report of the Group*". Accordingly, the Directors consider that the exemption from the requirement to include a separate accountants' report on the Moolarben JV would not prejudice the interests of the investing public.

The SFC has granted a certificate of exemption from strict compliance with paragraph 32 of the Third Schedule to C(WUMP)O on the conditions that (a) the particulars of the exemption be set forth in this prospectus and (b) this prospectus be issued on or before 26 November 2018.

5. WAIVER IN RELATION TO THE PUBLIC FLOAT REQUIREMENTS

Rule 8.08(1) of the Listing Rules requires that there must be an open market in the securities for which listing is sought and that a sufficient public float of an issuer's listed securities must be maintained.

The Company has applied to the Stock Exchange, and the Stock Exchange has granted us, a waiver under Rule 8.08(1)(d) that the minimum public float requirement under Rule 8.08(1)(a) be reduced subject to the following:

(i) the minimum public float shall be the higher of (a) 15.05%; and (b) such percentage immediately after completion of the Global Offering and exercise of the Over-allotment Option;

(ii) the Company's market capitalisation at the time of listing is over HK$10 billion;

(iii) appropriate disclosure of the lower prescribed percentage of public float be made in this prospectus together with a confirmation of sufficiency of public float in its successive annual reports after the listing;

(iv) there will be an open market in the Shares, and the number of Shares and the extent of their distribution would enable the market to operate properly; and

(v) the Company will implement appropriate measures and mechanisms to ensure continual maintenance of the minimum percentage of public float.

6. WAIVER IN RELATION TO MANAGEMENT PRESENCE IN HONG KONG

Pursuant to Rule 8.12 of the Listing Rules, the Company must have sufficient management presence in Hong Kong. This normally means that at least two of the Executive Directors must be ordinarily resident in Hong Kong.

The Group is an Australian-based coal producer which currently operates and manages mines in New South Wales, Queensland and Western Australia. The Group is registered in, headquartered in, and has its principal place of business in Australia. The Executive Director and the senior management team who are responsible for the management of the Group's operations are based in Australia or the PRC. Accordingly, the Company does not have, and for the foreseeable future will not have, sufficient management presence in Hong Kong for the purpose of satisfying the management presence requirement under Rule 8.12 of the Listing Rules.

The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the requirement for management presence in Hong Kong under Rule 8.12 of the Listing Rules, subject to the Company adopting the following arrangements to maintain regular communications with the Stock Exchange:

(a) the Company has appointed Mr. Baocai ZHANG and Ms. Laura Ling ZHANG as its authorised representatives for the purpose of Rule 3.05 of the Listing Rules, who will act as the Company's principal channel of communication with the Stock Exchange. As and when the Stock Exchange wishes to contact the Directors on any matters, each of these authorised representatives will have the means to contact all of the Directors promptly at all times;

(b) the Company has provided the Stock Exchange with the contact details of each Director (including their respective mobile phone number, office phone number, fax number and e-mail address) to facilitate communication with the Stock Exchange;

(c) each Director who is not ordinarily resident in Hong Kong possesses or is able to apply for valid travel documents to visit Hong Kong and is able to meet with the Stock Exchange within a reasonable period; and

(d) the Company has appointed Somerley Capital Limited as its compliance adviser in compliance with Rule 3A.19 of the Listing Rules, who will act as an additional channel of communication with the Stock Exchange.

7. WAIVER IN RELATION TO DEALING IN SECURITIES BY CORE CONNECTED PERSON DURING A LISTING APPLICATION PROCESS

Rule 9.09(b) of the Listing Rules provides that in the case of a new applicant, there must be no dealing in the securities for which listing is sought by any core connected person of the issuer from 4 clear business days before the expected hearing date until listing is granted.

Under the JPS, a common waiver from strict compliance with Rule 9.09(b) of the Listing Rules in respect of dealing in securities by core connected persons for the period from four clear business days before the expected hearing date until listing is granted (the "**Restricted Period**") is subject to the following conditions:

(a) the core connected person(s):

  (i) have no influence over the Global Offering process;

  (ii) are not in possession of non-public inside information; and

  (iii) can conduct dealings in the issuer's securities on markets outside the Stock Exchange that cannot be controlled by the issuer (e.g. a public investor who may become a substantial shareholder before the issuer lists on the Stock Exchange or connected persons at the subsidiary level);

(b) the issuer promptly releases any inside information to the public in its overseas jurisdiction(s) in accordance with the relevant laws and regulations; and

(c) the issuer notifies the Stock Exchange of breaches of the dealing restriction by any of its connected persons during the Restricted Period.

On the grounds and subject to the conditions set out below, the Company has applied for, and the Stock Exchange has granted, such common waiver in respect of any dealing by core connected persons (excluding (i) Yankuang, Yanzhou, Cinda and their associates and (ii) the directors and the chief executive of the Company and its subsidiaries and their associates):

(a) as the Shares are publicly traded on the ASX, the Company and its management are not in a position to control dealings in the Shares by any other person (whether or not an existing Shareholder) or their associates who may, as a result of such dealing, become a substantial shareholder of the Company (within the meaning of the Listing Rules) and who are currently not and will not after the Listing become directors or members of senior management of the Company or any of its subsidiaries (the "**new potential substantial shareholders**");

(b) the new potential substantial shareholders shall have no influence over the Global Offering and are not in possession of any non-public inside information;

(c) the Company and its management do not have control over the investment decisions of the new potential substantial shareholder and its close associates;

(d) the Company will promptly release any inside information to the public on the ASX in accordance with the ASX Listing Rules and the relevant Australian laws and regulations;

(e) none of (i) Yankuang, Yanzhou, Cinda and their associates; and (ii) the Directors and the chief executive of the Company and its subsidiaries and their associates will deal in the Shares during the Restricted Period; and

(f) the Company will notify the Stock Exchange if it has come to its knowledge that there are any dealings or suspected dealings in the Shares by any of its core connected persons during the Restricted Period.

8. WAIVER IN RELATION TO THE RESTRICTIONS ON EXISTING SHAREHOLDERS TO SUBSCRIBE FOR SHARES

Rule 10.04 of the Listing Rules provides that a person who is an existing shareholder of the issuer may only subscribe for or purchase any securities for which listing is sought which are being marketed by or on behalf of a new applicant either in his or its own name or through nominees if the conditions in Rules 10.03(1) and (2) are fulfilled. Paragraph 5(2) of Appendix 6 to the Listing Rules provides that no allocations will be permitted, without the prior written consent of the Stock Exchange, to directors or existing shareholders of the applicant or their close associates unless the conditions set out in Rules 10.03 and 10.04 are fulfilled.

Under the JPS, a common waiver from strict compliance with Rule 10.04 and Paragraph 5(2) of Appendix 6 of the Listing Rules in respect of the restriction on existing shareholders to subscribe for or purchase securities for which listing is sought is subject to the following conditions that the existing shareholders are public investors who:

(a) are not the issuer's connected persons; and

(b) have no influence over the offering process and will be treated the same as other placees.

The Company has applied for, and the Stock Exchange has granted, such common waiver from strict compliance with the requirements of Rule 10.04 and Paragraph 5(2) of Appendix 6 of the Listing Rules in respect of the restriction on the existing Shareholders (excluding core connected persons of the Company and their close associates) (the "**Non-connected Existing Shareholders**") to subscribe for or purchase Shares in the Global Offering and for existing Shareholders to exercise their right to take up their pro rata entitlement as existing Shareholders under the Australian Entitlement Offer on the following grounds and conditions:

(a) the Company is listed on the ASX and its Shares are publicly traded. The Non-connected Existing Shareholders are public investors in the Company;

(b) the Non-connected Existing Shareholders do not have the power to appoint directors or any other special rights;

(c) the Non-connected Existing Shareholders have no influence over the offering process and will be treated the same as other placees in the Global Offering;

(d) any allocation of Shares to the Non-connected Existing Shareholders and/or their close associates will not affect the Company's ability to satisfy the minimum public float requirement (as described in "– *Waiver in Relation to the Public Float Requirements*" above);

(e) each of the Company, the Joint Global Coordinators and the Sponsors confirms to the Stock Exchange in writing that, based on their discussions with and confirmations from the Company and other Joint Global Coordinators, no preferential treatment has been, nor will be, given to the Non-connected Existing Shareholders and/or their close associates as a placee in the International Offering by virtue of their relationship with the Company;

(f) the relevant information in respect of any allocation to Non-connected Existing Shareholders and/or their close associates will be disclosed in the allotment results announcement to be published by the Company; and

(g) the connected persons of the Company will not subscribe for Shares in the Global Offering.

9. WAIVER IN RELATION TO THE RESTRICTION ON DISPOSAL OF SHARES BY CONTROLLING SHAREHOLDERS AFTER A NEW LISTING

Rule 10.07(1) of the Listing Rules provides that a person or group of persons shown by the listing document issued at the time of the issuer's application for listing to be controlling shareholders of the issuer shall not and shall procure that the relevant registered holder(s) shall not:

(a) in the period commencing on the date by reference to which disclosure of the shareholding of the controlling shareholders is made in the listing document and ending on the date which is 6 months from the date on which dealings in

the securities of a new applicant commence on the Stock Exchange (the "**First Six Month Period**"), dispose of, nor enter into any agreement to dispose of or otherwise create any options, rights, interests or encumbrances in respect of, any of those securities (the "**Securities**") of the issuer in respect of which he is or they are shown by that listing document to be the beneficial owner(s); or

(b) in the period of 6 months commencing on the date on which the First Six Month Period expires, dispose of, nor enter into any agreement to dispose of or otherwise create any options, rights, interest or encumbrances in respect of, any of the Securities if, immediately following such disposal or upon the exercise or enforcement of such options, rights, interests or encumbrances, that person or group of persons would cease to be a controlling shareholder.

Under Australian law, a person has a relevant interest in a share if they (i) are the registered holder of the share, or (ii) have the power to control voting of the share or (iii) have the power to control disposal of the share. If the Controlling Shareholders give lock up undertakings in favour of the Stock Exchange, this will result in the Stock Exchange acquiring a "relevant interest" in 65.45% of the Shares.

Under Australian takeovers law, a person cannot acquire a relevant interest above 20% unless they fall within one of the permitted gateways (exceptions) or unless relief is provided by ASIC. Accordingly, the Company has sought and ASIC has granted relief to the Stock Exchange from the acquisition of a relevant interest in the Shares subject to the inclusion of the carve outs in paragraphs (a) and (b) below to be included in the lock up undertakings to be given by the Controlling Shareholders, on the basis that the relief is consistent with ASIC's existing policy as it applies to the ASX.

The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the requirements of Rule 10.07(1) of the Listing Rules in respect of the restriction on disposal of Shares by the Controlling Shareholders to allow the Controlling Shareholder:

(a) to accept a takeover bid that has been made for 100% (or some lesser percentage, in the event of a proportional takeover bid) of the Shares in the Company and in circumstances where at least 50% of the Shares held by non-locked up Shareholders that are the subject of the takeover bid have also accepted that takeover bid, provided that if the takeover bid is a conditional takeover bid and does not become unconditional, then the Shares which had been accepted into the takeover bid will not be released from the restrictions and undertakings referred to above; or

(b) to have the Controlling Shareholders' Shares in the Company acquired by a bidder following a scheme of arrangement in relation to the Company.

10. WAIVER IN RELATION TO NON-EXEMPT CONTINUING CONNECTED TRANSACTIONS

Certain members of the Group have entered into certain transactions which will constitute non-exempt continuing connected transactions of the Company under the Listing Rules following the Listing. The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the announcement and independent shareholders' approval requirements in relation to the non-exempt

continuing connected transactions under Chapter 14A of the Listing Rules. See "*Connected Transactions – Waiver Application for Non-exempt Continuing Connected Transactions*".

11. WAIVER IN RELATION TO THE REQUIREMENT TO MAKE RELEVANT STATUTES OR REGULATIONS AVAILABLE FOR INSPECTION

Rule 19.10(6) of the Listing Rules provides that an overseas issuer must offer for inspection a copy of any statutes or regulations which are relevant to the summary of the regulatory provisions of the jurisdiction in which the overseas issuer is incorporated. In the case of the Company, these include the Australia Corporations Act, ASX Listing Rules, ASX Settlement Operating Rules and the Australia Foreign Acquisitions and Takeovers Act. These copies of legislation are lengthy and it would be difficult to deliver copies to Hong Kong in physical format. In addition, these copies of legislation can be readily accessed via the internet. For further details about how to access these copies of legislation via the internet, please see "*Appendix VIII – Documents Delivered to the Registrar of Companies and Available for Inspection*". The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with Rule 19.10(6) of the Listing Rules.

12. WAIVERS IN RELATION TO CERTAIN ARTICLES IN THE COMPANY'S CONSTITUTION

The Company has applied for, and the Stock Exchange has granted, waivers from strict compliance of the Constitution with certain paragraphs of Appendix 3 of the Listing Rules, (see *"Appendix V – Summary of the Constitution of the Company and the Australia Corporations Act"* for further details), on the basis that:

(i) the Company would be subject to the Australian laws and other relevant applicable rules and regulations;

(ii) the differences from the requirements of Appendix 3 to the Listing Rules are not considered material from the perspective of shareholders protection; and

(iii) relevant Australian laws and regulations and the Constitution are disclosed in this prospectus.

LISTINGS

The Company currently has a primary listing of Shares on the ASX, which it intends to maintain alongside its proposed primary listing of Shares on the Stock Exchange. Application has been made to the Listing Committee for the listing of, and permission to deal in, the Shares.

REGISTRATION

The principal register of members of the Company in Australia is maintained by the Australian Share Registry. The Company has established a register of members in Hong Kong, which is maintained by the Hong Kong Share Registrar.

Only certificates for Shares issued by the Hong Kong Share Registrar will be valid for delivery in respect of dealings effected on the Stock Exchange.

Shares held on the Australian Share Registry are in uncertificated form. The Company, through its Australian Share Registry, operates an issuer sponsored sub-register. In addition, the Company participates in the Australian security transfer system known as the Clearing House Electronic Sub-Register System, commonly called CHESS. Shareholders whose Shares are held on the Australian register and who elect to have their shareholding managed by a broker will have their holding recorded by the Australian Share Registry on the CHESS sub-register. All other shareholders whose Shares are held on the Australian register will have their holding recorded on the issuer sponsored sub-register. Within five business days in Sydney after the date of issue of shares held on the Australian register the Australian Share Registry will send Shareholders on the issuer sponsored sub-register a notice advising them of the opening balance of their holdings. Where Shares are to be issued through CHESS, the Australian Share Registry will deliver the Shares to the account specified by the relevant shareholder by no later than five business days in Sydney following the date of issue.

DEALINGS

The transaction costs of dealings in the Shares on the Stock Exchange include a Stock Exchange trading fee of 0.005%, an SFC transaction levy of 0.0027%, a transfer deed stamp duty of HK$5.00 per transfer deed and ad valorem stamp duty on both the buyer and the seller charged at the rate of 0.1% each of the value of the Shares transferred. The brokerage commission in respect of trades of Shares on the Stock Exchange is freely negotiable.

The brokerage commission in respect of trades of Shares on the ASX is freely negotiable.

SETTLEMENT

Settlement of dealings on the ASX will take place on the second Business Day following the date of transaction. Investors in Hong Kong must settle their trades executed on the Stock Exchange through their brokers directly or through custodians. For an investor in Hong Kong who has deposited his Shares in his stock account or in his designated CCASS Participant's stock account maintained with CCASS, settlement will be effected in CCASS in accordance with the CCASS Rules in effect from time to time. For an investor who holds the physical certificates, settlement certificates and the duly executed transfer forms must be delivered to his broker by the settlement date.

An investor may arrange with his broker on a settlement date in respect of his trades executed on the Stock Exchange. Under the Listing Rules and the CCASS Rules, the date of settlement must not be later than the second day following the trade date on which the settlement services of CCASS are open for use by CCASS participants (T+2). For trades settled under CCASS, the CCASS Rules provide that the defaulting broker may be compelled to compulsorily buy-in by HKSCC the day after the date of settlement (T+3), or if it is not practicable to do so on T+3, at any time thereafter. HKSCC may also impose fines from T+2 onwards. The CCASS stock settlement fee payable by each counterparty to a Stock Exchange trade is currently 0.002% of the gross transaction value subject to a minimum fee of HK$2 and a maximum fee of HK$100 per trade.

SHUNTING REGISTERS

The general procedure for shunting Shares between the Australian Share Registry and the Hong Kong Share Registrar, are as follows:

- each respective share registrar in Australia and Hong Kong has set up a control account as part of the reconciliation of issued capital for the Company. For example, the Australian Share Registry has established a control holding on the Company's Australian principal register with the name "Hong Kong Register Control Account", with the current issued capital of the Hong Kong Share Registrar. This control holding is excluded from any reports concerning largest shareholders and similar matters. The Hong Kong Share Registrar has set up a similar control account with the Shares registered on the Australian principal register;

- when a Shareholder wishes to shunt Shares from between the two registers (the "**home register**") to the other register (the "**target register**"), the Shareholder provides the home registrar with an instruction (either a removal form for retail holders, or via a secure portal for brokers/participants). This instruction provides details of the shareholder on the home register, and in what form they are to be issued on the target register. The home registrar then removes the Shares from their holding, and places the Shares into the control account (to reconcile to the Shares being placed onto the target register). A confirmation is then sent to the target registrar, who debits their control account (that reconciles to the home register) and either, depending on the removal direction, issues in the name of the shareholder a) a certificate (Hong Kong), b) creates an issuer sponsored holding (Australia) or c) initiates the process to deposit the shares into the Central Securities Depository (CHESS or CCASS); and

- Both the Australian principal and Hong Kong branch share registers will be on Computershare's single registry platform they are reconciled automatically and the issue capital balances both within and across the two registers.

Typically, the shunting process takes between three to six business days. The period of time required to shunt Shares between the Australian Share Registry and the Hong Kong Share Registrar may vary and there is no certainty of when shunted Shares will be available for trading or settlement.

Processing fees for the shunting of shares are payable by Shareholders.

HONG KONG UNDERWRITERS

Morgan Stanley Asia Limited
CMB International Capital Limited
BOCI Asia Limited
Citigroup Global Markets Asia Limited
CCB International Capital Limited
China Everbright Securities (HK) Limited
Cinda International Securities Limited
Haitong International Securities Company Limited
Zhongtai International Securities Limited

UNDERWRITING

This prospectus is published solely in connection with the Hong Kong Public Offering. The Hong Kong Public Offering is fully underwritten by the Hong Kong Underwriters on a conditional basis. The International Offering is expected to be fully underwritten by the International Underwriters. If, for any reason, the Offer Price is not agreed between the Joint Global Coordinators (on behalf of the Underwriters) and the Company the Global Offering will not proceed and will lapse.

The Global Offering comprises the Hong Kong Public Offering of initially 5,944,200 Hong Kong Offer Shares and the International Offering of initially 53,497,700 International Offer Shares, subject, in each case, to reallocation on the basis as described in "*Structure of the Global Offering*" and to the Over-allotment Option (in the case of the International Offering).

UNDERWRITING ARRANGEMENTS AND EXPENSES

Hong Kong Public Offering

Hong Kong Underwriting Agreement

The Hong Kong Underwriting Agreement was entered into on 23 November 2018. Pursuant to the Hong Kong Underwriting Agreement, the Company is offering the Hong Kong Offer Shares for subscription on the terms and conditions set out in this prospectus, the Application Forms and the Hong Kong Underwriting Agreement at the Offer Price.

Subject to (a) the Listing Committee granting approval for the listing of, and permission to deal in, the Shares in issue and to be issued pursuant to the Global Offering and the Australian Entitlement Offer on the Main Board of the Stock Exchange and such approval not having been withdrawn and (b) certain other conditions set out in the Hong Kong Underwriting Agreement, the Hong Kong Underwriters have agreed severally but not jointly to procure subscribers for, or themselves to subscribe for, their respective applicable proportions of the Hong Kong Offer Shares being offered which are not taken up under the Hong Kong Public Offering on the terms and conditions set out in this prospectus, the Application Forms and the Hong Kong Underwriting Agreement.

The Hong Kong Underwriting Agreement is conditional on, among other things, the International Underwriting Agreement having been executed and becoming unconditional and not having been terminated in accordance with its terms.

Grounds for Termination

If any of the events set out below shall occur at any time prior to 8:00 a.m. on the Listing Date, the Joint Global Coordinators (for themselves and on behalf of the Hong Kong Underwriters) in their absolute discretion may, by giving a written notice to the Company, terminate the Hong Kong Underwriting Agreement with immediate effect:

(a) there develops, occurs, exists or comes into force:

(i) any new law or regulation or any change or development involving a prospective change in existing laws or regulations or any change or development involving a prospective change in the interpretation or application thereof by any court or other competent Authority in or affecting Hong Kong, the PRC, the United States, the United Kingdom, the European Union (or any member thereof), Singapore or Australia (the "**Relevant Jurisdictions**" and each a "**Relevant Jurisdiction**"); or

(ii) any change or development involving a prospective change, or any event or circumstances or series of events resulting in or likely to result in any change or development involving a prospective change, in any local, national, regional or international financial, economic, political, military, industrial, fiscal, regulatory, currency, credit or market matters or conditions, equity securities or exchange control or any monetary or trading settlement system or other financial markets (including conditions in the stock and bond markets, money and foreign exchange markets, the inter-bank markets, credit markets), in or affecting any Relevant Jurisdiction; or

(iii) any event, or series of events, in the nature of *force majeure* (including any acts of government, declaration of a national or international emergency, calamity, crisis, epidemic, pandemic, large scale outbreaks of diseases (including Severe Acute Respiratory Syndrome (SARS), swine or avian flu, H5N1, H1N1, H7N9 and such related/mutated forms) or prolonged interruption or delay in transportation, economic sanctions, strikes, labour disputes, lock-outs, fire, explosion, flooding, earthquake, civil commotion, riots, public disorder, acts of war, outbreak or escalation of hostilities (whether or not war is declared), acts of God or acts of terrorism (whether or not responsibility has been claimed)), in or affecting any Relevant Jurisdiction; or

(iv) the imposition of any moratorium, suspension or restriction (including any imposition of or requirement for any minimum or maximum price limit or price range) in or on trading in securities generally on the Stock Exchange, the ASX, the New York Stock Exchange, the NASDAQ Global Market, the London Stock Exchange, the Tokyo Stock Exchange, the Singapore Stock Exchange, the Shanghai Stock Exchange or the Shenzhen Stock Exchange; or

(v) the imposition of any general moratorium on commercial banking activities in or affecting any Relevant Jurisdiction, or any disruption in commercial banking activities or foreign exchange trading or securities settlement or clearance services, procedures or matters in or affecting any Relevant Jurisdiction; or

(vi) the imposition of economic sanctions, or the withdrawal of trading privileges, in whatever form, directly or indirectly, by, or for, any Relevant Jurisdiction; or

(vii) any change or development involving a prospective change or amendment in or affecting Taxation or exchange control, currency exchange rates or foreign investment regulations (including a material devaluation of the Hong Kong dollar, United States dollar, Australian dollar or the Renminbi against any foreign currencies or a change in the system under which the value of the Hong Kong dollar is linked to that of the United States dollar or the Renminbi is linked to any foreign currency or currencies), or the implementation of any exchange control, in any Relevant Jurisdiction or affecting an investment in the Offer Shares; or

(viii) any adverse change or development or likely to be any prospective adverse change or development in the assets, liabilities, general affairs, business, management, prospects, shareholders' equity, profits, losses, earnings, results of operations, financial or trading position or condition or performance of the Group as a whole; or

(ix) a Director or a member of senior management of the Company being charged with an indictable offence or prohibited by operation of law or otherwise disqualified from taking part in the management of a company or the commencement by any governmental, political or regulatory body of any investigation or other action against any Director or senior management in his or her capacity as such or an announcement by any governmental, political or regulatory body that it intends to commence any such investigation or take any such action; or

(x) the chairman of the Board, the chief executive officer of the Company, the chief financial officer of the Company, any other Directors or any other member of senior management of the Company vacating his or her office (other than by reason of death, incapacity or serious illness); or

(xi) a prohibition on the Company for whatever reason from offering, allotting, issuing or selling any of the Offer Shares (including the Over-allotment Option) pursuant to the terms of the Global Offering; or

(xii) the issue or requirement to issue by the Company of any supplement or amendment to this prospectus, any Application Forms or other documents in connection with the offer and sale of the Shares pursuant to the Companies (Winding Up and Miscellaneous Provisions) Ordinance or the Listing Rules or upon any requirement or request of the Stock Exchange and/or the SFC; or

(xiii) an authority or a political body or organisation commencing any investigation or other action, or announcing an intention to commence investigation or take other action, against any Director, the chief executive officer of the Company, the chief financial officer of the Company or any member of the Group; or

(xiv) any litigation, dispute, legal action, arbitration, proceeding or claim being threatened or instigated against the Company, any Director or any member of the Group; or

(xv) a contravention by the Company, any member of the Group or any Director of the Companies Ordinance, the Companies (Winding Up and Miscellaneous Provisions) Ordinance, the Listing Rules or applicable laws and regulations; or

(xvi) non-compliance of this prospectus (or any other documents used in connection with the contemplated offer and sale of the Offer Shares) or any aspect of the Global Offering with the Listing Rules or any other applicable laws and regulations; or

(xvii) any breach of the ASX Listing Rules or other Australian securities legislation or regulations by the Company or the Directors; or

(xviii) any investigation of the Group by ASIC or any Australian securities regulators or any circumstances which may result in an investigation of the Group being carried out; or

(xix) any suspension of trading of the Company's shares on the ASX which is not in connection with the pending publication of an announcement or other documents relating to the Global Offering or the Australian Entitlement Offer; or

(xx) Yanzhou ceasing to hold at least 50% of the issued share capital of the Company; or

(xxi) any change or prospective change or development in, or a materialisation of, any of the risks set out in "*Risk Factors*"; or

(xxii) any order or petition for the winding up or liquidation of any member of the Group or any composition or arrangement made by any member of the Group with its creditors or a scheme of arrangement entered into by any member of the Group or any resolution for the winding-up of any member of the Group or the appointment of a provisional liquidator, receiver or manager over all or part of the assets or undertaking of any member of the Group or anything analogous thereto occurring in respect of any member of the Group; or

(xxiii) a valid demand by any creditor for repayment or payment of any indebtedness of any member of the Group or in respect of which any member of the Group is liable prior to its stated maturity,

which, individually or in the aggregate, in the sole and absolute opinion of the Joint Global Coordinators (for themselves and on behalf of the Hong Kong Underwriters): (1) has or will or may have a material adverse effect on the assets, liabilities, business, management, general affairs, shareholders' equity, profits, losses, prospects, results of operations, financial or trading position or condition of the Group as a whole; (2) has or will have or may have a material adverse effect on the success or marketability of the Global Offering or the level of applications or the distribution of the Offer Shares under the Hong Kong Public Offering or the level of interest under the International Offering; (3) makes or will make or may make it inadvisable, inexpedient, impracticable or incapable for the Hong Kong Public Offering and/or the International Offering to be implemented or proceed as envisaged or to market the Global Offering or the delivery or distribution of the Offer Shares on the terms and in the manner contemplated by the Offering Documents; (4) has or will or may have the effect of making any part of the Hong Kong Underwriting Agreement (including underwriting) or the International Underwriting Agreement incapable of performance in accordance with its terms or preventing or delaying the processing of applications and/or payments

pursuant to the Global Offering or pursuant to the underwriting thereof; or (5) there has come to the notice of the Joint Global Coordinators (for themselves and on behalf of the Hong Kong Underwriters): (i) any breach of, or any matter, event or circumstance rendering untrue, incorrect, incomplete or misleading in any respect, any of the representations, warranties and undertakings given by the Company in the Hong Kong Underwriting Agreement or the International Underwriting Agreement, as applicable; or (ii) that any statement contained in any of the Offering Documents and/or in any notices, announcements, advertisements, communications or other documents (including any announcement, circular, document or other communication pursuant to this Agreement) issued or used by or on behalf of the Company in connection with the Hong Kong Public Offering (including any supplement or amendment thereto) was, when it was issued, or has become, untrue, incorrect, inaccurate, incomplete or misleading in any material respect, or that any estimate, forecast, expression of opinion, intention or expectation contained in any of the Offering Documents and/or any notices, announcements, advertisements, communications or other documents issued or used by or on behalf of the Company in connection with the Hong Kong Public Offering (including any supplement or amendment thereto) is not fair and honest and based on reasonable grounds or reasonable assumptions; or

(b) there has come to the notice of the Joint Global Coordinators:

(i) that any matter has arisen or has been discovered which would, had it arisen or been discovered immediately before the date of this prospectus, constitute a material omission from, or material misstatement in, any of the Offering Documents and/or in any notices, announcements, advertisements, communications or other documents issued or used by or on behalf of the Company in connection with the Hong Kong Public Offering (including any supplement or amendment thereto); or

(ii) any material breach of any of the obligations imposed upon any party to the Hong Kong Underwriting Agreement or the International Underwriting Agreement (other than upon any of the Joint Global Coordinators, the Joint Bookrunners, the Joint Sponsors, the Joint Lead Managers or the Underwriters); or

(iii) any event, act or omission which gives or is likely to give rise to any liability of the Company pursuant to the indemnities given by it under the Hong Kong Underwriting Agreement or the International Underwriting Agreement; or

(iv) the approval by the Listing Committee of the Stock Exchange of the listing of, and permission to deal in, the Shares in issue and to be issued (including any additional Shares that may be issued pursuant to the exercise of the Over-Allotment Option) under the Global Offering and the Australian Entitlement Offer is refused or not granted, other than subject to customary conditions, on or before the date of the Listing, or if granted, the approval is subsequently withdrawn, cancelled, qualified (other than by customary conditions), revoked or withheld; or

(v) any person (other than any of the Joint Sponsors) has withdrawn its consent to the issue of this prospectus with the inclusion of its reports, letters and/or legal opinions (as the case may be) and references to its name included in the form and context in which it respectively appears; or

(vi) the Company withdraws this prospectus (and/or any other documents issued or used in connection with the Global Offering) or the Global Offering.

Undertakings to the Stock Exchange pursuant to the Listing Rules

(A) Undertakings by the Company

Pursuant to Rule 10.08 of the Listing Rules, the Company has undertaken to the Stock Exchange that it will not exercise its power to issue any further Shares, or securities convertible into Shares (whether or not of a class already listed) or enter into any agreement to such an issue within six months from the Listing Date (whether or not such issue of Shares or securities will be completed within six months from the Listing Date), except (a) pursuant to the Global Offering and the Australian Entitlement Offer or (b) under any of the circumstances provided under Rule 10.08 of the Listing Rules.

(B) Undertakings by the Controlling Shareholders

Pursuant to Rule 10.07 of the Listing Rules and a waiver from strict compliance with Rule 10.07 of the Listing Rules granted by the Stock Exchange, each of the Controlling Shareholders has undertaken to the Stock Exchange and the Company that, except pursuant to (a) any lending of Shares pursuant to the Stock Borrowing Agreement or (b) the Global Offering, it will not and will procure that the relevant registered holder(s) will not:

(i) in the period commencing on the date by reference to which disclosure of its holding of Shares is made in this prospectus and ending on the date which is six months from the Listing Date, dispose of, nor enter into any agreement to dispose of or otherwise create any options, rights, interests or encumbrances in respect of, any of the Shares in respect of which it is shown by this prospectus to be the beneficial owner; and

(ii) in the period of six months commencing on the date on which the period referred to in paragraph (i) above expires, dispose of, nor enter into any agreement to dispose of or otherwise create any options, rights, interests or encumbrances in respect of, any of the Shares referred to in paragraph (i) above if, immediately following such disposal or upon the exercise or enforcement of such options, rights, interests or encumbrances, it would cease to be a controlling shareholder of the Company, in each case, save as

(a) permitted under the Listing Rules;

(b) to accept a takeover bid that has been made for 100% (or some lesser percentage, in the event of a proportional takeover bid) of the Shares in the Company and in circumstances where at least 50% of the Shares held by non-locked up Shareholders that are the subject of the takeover bid have also accepted that takeover bid, provided that if the takeover bid is a conditional takeover bid and does not become unconditional, then the Shares which had been accepted into the takeover bid will not be released from the restrictions and undertakings referred to above; or

(c) to have the Controlling Shareholders' Shares in the Company acquired by a bidder following a scheme of arrangement in relation to the Company.

See "*Waivers from Strict Compliance with the Listing Rules and Exemptions from Strict Compliance with the Companies (WUMP) Ordinance*" for details.

Pursuant to Note 3 to Rule 10.07(2) of the Listing Rules, each of the Controlling Shareholders has undertaken to the Stock Exchange and the Company that, within the period commencing on the date by reference to which disclosure of its holding of Shares is made in this prospectus and ending on the date which is 12 months from the Listing Date, it will and will procure that the relevant registered holder(s) will:

(1) when it pledges or charges any Shares beneficially owned by him/her/it in favour of an authorised institution (as defined in the Banking Ordinance (Chapter 155 of the Laws of Hong Kong)) pursuant to Note 2 to Rule 10.07(2) of the Listing Rules, immediately inform the Company of such pledge or charge together with the number of Shares so pledged or charged; and

(2) when it receives indications, either verbal or written, from the pledgee or chargee of any Shares that any of the pledged or charged Shares will be disposed of, immediately inform the Company of such indications.

Undertakings by the Company Pursuant to the Hong Kong Underwriting Agreement

Except for (a) the offer and sale of the Offer Shares pursuant to the Global Offering (including pursuant to the Over-Allotment Option), (b) the issue of Shares pursuant to the Australian Entitlement Offer and (c) any grants made pursuant to the Equity Incentive Plan adopted by the Company, the Company has undertaken to each of the Joint Global Coordinators, the Joint Sponsors, the Joint Bookrunners, the Joint Lead Managers, the Hong Kong Underwriters not to, without the prior written consent of the Joint Sponsors and Joint Global Coordinators (for themselves and on behalf of the Hong Kong Underwriters) and unless in compliance with the Listing Rules, at any time during the period commencing on the date of the Hong Kong Underwriting Agreement and ending on, and including the date falling six months after the Listing Date (the "First Six-Month Period"):

(i) allot, issue, sell, accept subscription for, offer to allot, issue or sell, contract or agree to allot, issue or sell, grant or sell any option, warrant, contract or right to subscribe for or purchase, grant or purchase any option, warrant, contract or right to allot, issue or sell, or otherwise transfer or dispose of, or agree to transfer or dispose of, either directly or indirectly, conditionally or unconditionally, any Shares or any other securities of the Company, or any interest in any of the foregoing (including any securities convertible into or exchangeable or exercisable for or that represent the right to receive, or any warrants or other rights to purchase, any Shares); or

(ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of Shares or any other securities of the Company, or any interest in any of the foregoing (including any securities convertible into or exchangeable or exercisable for or that represent the right to receive, or any warrants or other rights to purchase, any Shares); or

(iii) enter into any transaction with the same economic effect as any transaction described in paragraphs (i) or (ii) above; or

(iv) offer to or agree to or announce any intention to effect any transaction described in paragraphs (i), (ii) or (iii) above,

in each case, whether any such transaction described in paragraphs (i), (ii) or (iii) above is to be settled by delivery of the Shares or other securities of the Company, or in cash or otherwise, and whether or not the allotment or issue of Shares or such other securities will be completed within the First Six-Month Period. In the event that, during the period of six months immediately following the First Six-Month Period (the "Second Six-Month Period"), the Company enters into any such transactions or offers or agrees to, or announces, any intention to effect any such transaction, the Company will take all reasonable steps to ensure that it will not create a disorderly or false market in the Shares or other securities of the Company.

Hong Kong Underwriters' Interests in the Company

Save for their respective obligations under the Hong Kong Underwriting Agreement and, if applicable, the Stock Borrowing Agreement, as at the Latest Practicable Date, none of the Hong Kong Underwriters was interested, legally or beneficially, directly or indirectly, in any Shares or any securities of any member of the Group or had any right or option (whether legally enforceable or not) to subscribe for or purchase, or to nominate persons to subscribe for or purchase, any Shares or any securities of any member of the Group.

Following the completion of the Global Offering, the Hong Kong Underwriters and their affiliated companies may hold a certain portion of the Shares as a result of fulfilling their respective obligations under the Hong Kong Underwriting Agreement.

International Offering

International Underwriting Agreement

In connection with the International Offering, the Company expects to enter into the International Underwriting Agreement with the International Underwriters on the Price Determination Date. Under the International Underwriting Agreement and subject to the Over-allotment Option, the International Underwriters would, subject to certain conditions set out therein, agree severally but not jointly to procure subscribers for, or themselves to subscribe for, their respective applicable proportions of the International Offer Shares initially being offered pursuant to the International Offering. It is expected that the International Underwriting Agreement may be terminated on similar grounds as the Hong Kong Underwriting Agreement. Potential investors should note that in the event that the International Underwriting Agreement is not entered into, the Global Offering will not proceed. See "*Structure of the Global Offering – The International Offering*".

Over-allotment Option

The Company is expected to grant to the Stabilising Manager or its affiliate the Over-allotment Option, exercisable at any time from the Listing Date until 30 days after the last day for lodging applications under the Hong Kong Public Offering, pursuant to which the Company may be required to issue up to an aggregate of 8,916,200 Shares, representing not more than 15% of the number of Offer Shares initially available under the Global Offering, at the Offer Price, to, among other things, cover over-allocations in the International Offering, if any. See "*Structure of the Global Offering – Over-allotment Option*".

Commissions and Expenses

The Underwriters will receive an underwriting commission of 2.5% of the aggregate Offer Price of all the Offer Shares (including any Offer Shares to be issued pursuant to the exercise of the Over-allotment Option), out of which they will pay any sub-underwriting commissions and other fees.

For any unsubscribed Hong Kong Offer Shares reallocated to the International Offering, the underwriting commission will not be paid to the Hong Kong Underwriters but will instead be paid, at the rate applicable to the International Offering, to the relevant International Underwriters.

The aggregate underwriting commissions payable to the Underwriters in relation to the Global Offering (assuming an Offer Price of HK$24.66 per Offer Share (which is the mid-point of the Offer Price Range) and the exercise of the Over-allotment Option in full) will be approximately HK$42.1 million.

The aggregate underwriting commissions and fees together with the Stock Exchange listing fees, the SFC transaction levy and the Stock Exchange trading fee, legal and other professional fees and printing and all other expenses relating to the Global Offering are estimated to be approximately HK$220 million (assuming an Offer Price of HK$24.66 per Offer Share (which is the mid-point of the Offer Price Range) and the exercise of the Over-allotment Option in full) and will be paid by the Company.

Indemnity

The Company has agreed to indemnify the Hong Kong Underwriters for certain losses which they may suffer or incur, including losses arising from their performance of their obligations under the Hong Kong Underwriting Agreement and any breach by them of the Hong Kong Underwriting Agreement.

ACTIVITIES BY SYNDICATE MEMBERS

The underwriters of the Hong Kong Public Offering and the International Offering (together, the "**Syndicate Members**") and their affiliates may each individually undertake a variety of activities (as further described below) which do not form part of the underwriting or stabilising process.

The Syndicate Members and their affiliates are diversified financial institutions with relationships in countries around the world. These entities engage in a wide range of commercial and investment banking, brokerage, funds management, trading, hedging, investing and other activities for their own account and for the account of others. In the ordinary course of their various business activities, the Syndicate Members and their respective affiliates may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers. Such investment and trading activities may involve or relate to assets, securities and/or instruments of the Company and/or persons and entities with relationships with the Company and may also include swaps and other financial instruments entered into for hedging purposes in connection with the Group's loans and other debt.

In relation to the Shares, the activities of the Syndicate Members and their affiliates could include acting as agent for buyers and sellers of the Shares, entering into transactions with those buyers and sellers in a principal capacity, including as a lender to initial purchasers of the Shares (which financing may be secured by the Shares) in the Global Offering, proprietary trading in the Shares, and entering into over the counter or listed derivative transactions or listed or unlisted securities transactions (including issuing securities such as derivative warrants listed on a stock exchange) which have as their underlying assets, assets including the Shares. Such transactions may be carried out as bilateral agreements or trades with selected counterparties. Those activities may require hedging activity by those entities involving, directly or indirectly, the buying and selling of the Shares, which may have a negative impact on the trading price of the Shares. All such activities could occur in Hong Kong and elsewhere in the world and may result in the Syndicate Members and their affiliates holding long and/or short positions in the Shares, in baskets of securities or indices including the Shares, in units of funds that may purchase the Shares, or in derivatives related to any of the foregoing.

In relation to issues by Syndicate Members or their affiliates of any listed securities having the Shares as their underlying securities, whether on the Stock Exchange or on any other stock exchange, the rules of the stock exchange may require the issuer of those securities (or one of its affiliates or agents) to act as a market maker or liquidity provider in the security, and this will also result in hedging activity in the Shares in most cases.

All such activities may occur both during and after the end of the stabilising period described in "*Structure of the Global Offering*". Such activities may affect the market price or value of the Shares, the liquidity or trading volume in the Shares and the volatility of the price of the Shares, and the extent to which this occurs from day to day cannot be estimated.

It should be noted that when engaging in any of these activities, the Syndicate Members will be subject to certain restrictions, including the following:

(a) the Syndicate Members (other than the Stabilising Manager or any person acting for it) must not, in connection with the distribution of the Offer Shares, effect any transactions (including issuing or entering into any option or other derivative transactions relating to the Offer Shares), whether in the open market or otherwise, with a view to stabilising or maintaining the market price of any of the Offer Shares at levels other than those which might otherwise prevail in the open market; and

(b) the Syndicate Members must comply with all applicable laws and regulations, including the market misconduct provisions of the SFO, including the provisions prohibiting insider dealing, false trading, price rigging and stock market manipulation.

Certain of the Syndicate Members or their respective affiliates have provided from time to time, and expect to provide in the future, investment banking and other services to the Company and each of its affiliates for which such Syndicate Members or their respective affiliates have received or will receive customary fees and commissions.

In addition, the Syndicate Members or their respective affiliates may provide financing to investors to finance their subscriptions of Offer Shares in the Global Offering.

THE GLOBAL OFFERING

This prospectus is published in connection with the Hong Kong Public Offering as part of the Global Offering. Morgan Stanley Asia Limited, CMB International Capital Limited, BOCI Asia Limited and Citigroup Global Markets Asia Limited are the Joint Global Coordinators of the Global Offering.

The listing of the Shares on the Stock Exchange is sponsored by the Joint Sponsors. The Joint Sponsors have made an application on behalf of the Company to the Listing Committee of the Stock Exchange for the listing of, and permission to deal in, the Shares in issue and to be issued as mentioned in this prospectus.

59,441,900 Offer Shares will initially be made available under the Global Offering comprising:

(a) the Hong Kong Public Offering of initially 5,944,200 Shares (subject to reallocation) in Hong Kong as described in "– *The Hong Kong Public Offering*" below; and

(b) the International Offering of initially 53,497,700 Shares (subject to reallocation and the Over-allotment Option) (i) in the United States solely to QIBs in reliance on Rule 144A or another exemption from, or in a transaction not subject to, the registration requirements of the U.S. Securities Act and (ii) outside the United States (including to professional and institutional investors within Hong Kong) in offshore transactions in reliance on Regulation S, as described in "– *The International Offering*" below.

Investors may either:

(i) apply for Hong Kong Offer Shares under the Hong Kong Public Offering; or

(ii) apply for or indicate an interest for International Offer Shares under the International Offering,

but may not do both.

The Offer Shares will represent approximately 4.52% of the total Shares in issue immediately following the completion of the Global Offering, disregarding any Shares issued upon any exercise of the Over-allotment Option. If the Over-allotment Option is exercised in full, the Offer Shares will represent approximately 5.16% of the total Shares in issue immediately following the completion of the Global Offering. These percentages will decrease to the extent that any eligible existing Shareholders elect to take up their entitlements under the Australian Entitlement Offer.

The number of Offer Shares to be offered under the Hong Kong Public Offering and the International Offering may also be subject to reallocation as described in "– the Hong Kong Public Offering – Reallocation" below.

References in this prospectus to applications, Application Forms, application monies or the procedure for applications relate solely to the Hong Kong Public Offering.

THE HONG KONG PUBLIC OFFERING

Number of Offer Shares initially offered

The Company is initially offering 5,944,200 Shares for subscription by the public in Hong Kong at the Offer Price, representing approximately 10.00% of the total number of Offer Shares initially available under the Global Offering. The number of Offer Shares initially offered under the Hong Kong Public Offering, subject to any reallocation of Offer Shares between the International Offering and the Hong Kong Public Offering, will represent approximately 0.45% of the total Shares in issue immediately following the completion of the Global Offering (assuming the Over-allotment Option is not exercised).

The Hong Kong Public Offering is open to members of the public in Hong Kong as well as to institutional and professional investors. Professional investors generally include brokers, dealers, companies (including fund managers) whose ordinary business involves dealing in shares and other securities and corporate entities that regularly invest in shares and other securities.

Completion of the Hong Kong Public Offering is subject to the conditions set out in "*– Conditions of the Global Offering*" below.

Allocation

Allocation of Offer Shares to investors under the Hong Kong Public Offering will be based solely on the level of valid applications received under the Hong Kong Public Offering. The basis of allocation may vary, depending on the number of Hong Kong Offer Shares validly applied for by applicants. Such allocation could, where appropriate, consist of balloting, which could mean that some applicants may receive a higher allocation than others who have applied for the same number of Hong Kong Offer Shares, and those applicants who are not successful in the ballot may not receive any Hong Kong Offer Shares.

For allocation purposes only, the total number of Hong Kong Offer Shares available under the Hong Kong Public Offering (after taking into account any reallocation referred to below) will be divided equally (to the nearest board lot) into two pools: pool A and pool B. The Hong Kong Offer Shares in pool A will be allocated on an equitable basis to applicants who have applied for Hong Kong Offer Shares with an aggregate price of HK$5 million (excluding the brokerage, the SFC transaction levy and the Stock Exchange trading fee payable) or less. The Hong Kong Offer Shares in pool B will be allocated on an equitable basis to applicants who have applied for Hong Kong Offer Shares with an aggregate price of more than HK$5 million (excluding the brokerage, the SFC transaction levy and the Stock Exchange trading fee payable) and up to the total value in pool B.

Investors should be aware that applications in pool A and applications in pool B may receive different allocation ratios. If any Hong Kong Offer Shares in one (but not both) of the pools are unsubscribed, such unsubscribed Hong Kong Offer Shares will be transferred to the other pool to satisfy demand in that other pool and be allocated accordingly. For the purpose of the immediately preceding paragraph only, the "price" for Hong Kong Offer Shares means the price payable on application therefor (without regard to the Offer Price as finally determined). Applicants can only receive an allocation of Hong Kong Offer Shares from either pool A or pool B and not from both pools. Multiple or suspected multiple applications under the Hong Kong Public Offering and any application for more than 2,972,100 Hong Kong Offer Shares is liable to be rejected.

Reallocation

The allocation of the Offer Shares between the Hong Kong Public Offering and the International Offering is subject to reallocation. Paragraph 4.2 of Practice Note 18 of the Listing Rules requires a clawback mechanism to be put in place which would have the effect of increasing the number of Offer Shares under the Hong Kong Public Offering to a certain percentage of the total number of Offer Shares offered under the Global Offering if certain prescribed total demand levels are reached.

If the number of Offer Shares validly applied for under the Hong Kong Public Offering represents (a) 15 times or more but less than 50 times, (b) 50 times or more but less than 100 times and (c) 100 times or more of the total number of Offer Shares initially available under the Hong Kong Public Offering, then Offer Shares will be reallocated to the Hong Kong Public Offering from the International Offering. As a result of such reallocation, the total number of Offer Shares available under the Hong Kong Public Offering will be increased to 17,832,500 Offer Shares (in the case of (a)), 23,776,700 Offer Shares (in the case of (b)) and 29,720,900 Offer Shares (in the case of (c)), representing approximately 30%, 40% and 50% of the total number of Offer Shares initially available under the Global Offering, respectively (before any exercise of the Over-allotment Option) (the "PN18 Clawback"). In each case, the additional Offer Shares reallocated to the Hong Kong Public Offering will be allocated between pool A and pool B and the number of Offer Shares allocated to the International Offering will be correspondingly reduced in such manner as the Joint Global Coordinators deem appropriate.

In addition, the Joint Global Coordinators may reallocate Offer Shares from the International Offering to the Hong Kong Public Offering to satisfy valid applications under the Hong Kong Public Offering.

According to Guidance Letter HKEX-GL91-18 issued by the Stock Exchange, if (a) the International Offering is undersubscribed and the Hong Kong Public Offering is fully subscribed or oversubscribed or (b) the International Offering is fully subscribed or oversubscribed and the Hong Kong Public Offering is oversubscribed by less than 15 times of the total number of Offer Shares initially available under the Hong Kong Public Offering, then the Joint Global Coordinators may only reallocate Offer Shares from the International Offering to the Hong Kong Public Offering other than pursuant to Practice Note 18 of the Listing Rules on the following conditions in accordance with Guidance Letter HKEX-GL91-18 (the "**Allocation Cap**"):

(i) the maximum total number of shares that may be reallocated from the International Offering to the Hong Kong Public Offering shall be not more than double the number of Hong Kong Offer Shares initially available under the Hong Kong Public Offering (i.e. 11,888,400 Offer Shares); and

(ii) the final Offer Price shall be fixed at the bottom of the indicative Offer Price Range stated in this prospectus.

If the Hong Kong Public Offering is not fully subscribed, the Joint Global Coordinators may reallocate all or any unsubscribed Hong Kong Offer Shares to the International Offering, in such proportions as the Joint Global Coordinators deem appropriate. The Allocation Cap will not be triggered.

The Offer Shares to be offered in the Hong Kong Public Offering and the Offer Shares to be offered in the International Offering may, in certain circumstances, be

reallocated between these offerings at the discretion of the Joint Global Coordinators, subject to the PN18 Clawback and the Allocation Cap (as applicable).

Details of any reallocation of Offer Shares between the Hong Kong Public Offering and the International Offering will be disclosed in the results announcement which is expected to be published on Wednesday, 5 December 2018.

Applications

Each applicant under the Hong Kong Public Offering will be required to give an undertaking and confirmation in the application submitted by him that he and any person(s) for whose benefit he is making the application has not applied for or taken up, or indicated an interest for, and will not apply for or take up, or indicate an interest for, any International Offer Shares under the International Offering. Such applicant's application is liable to be rejected if such undertaking and/or confirmation is/are breached and/or untrue (as the case may be) or if he has been or will be placed or allocated International Offer Shares under the International Offering.

Applicants under the Hong Kong Public Offering are required to pay, on application, the Maximum Offer Price of HK$25.84 per Offer Share in addition to the brokerage, the SFC transaction levy and the Stock Exchange trading fee payable on each Offer Share, amounting to a total of HK$2,610.04 for one board lot of 100 Shares. If the Offer Price, as finally determined in the manner described in "– *Pricing and Allocation*" below, is less than the Maximum Offer Price of HK$25.84 per Offer Share, appropriate refund payments (including the brokerage, the SFC transaction levy and the Stock Exchange trading fee attributable to the surplus application monies) will be made to successful applicants, without interest. Further details are set out in "*How to Apply for Hong Kong Offer Shares*".

THE INTERNATIONAL OFFERING

Number of Offer Shares initially offered

The International Offering will consist of an offering of initially 53,497,700 Shares, representing approximately 90.00% of the total number of Offer Shares available under the Global Offering (subject to reallocation and the Over-allotment Option). The number of Offer Shares initially offered under the International Offering, subject to any reallocation of Offer Shares between the International Offering and the Hong Kong Public Offering, will represent approximately 4.07% of the total Shares in issue immediately following the completion of the Global Offering (disregarding any Shares issued upon any exercise of the Over-allotment Option).

Allocation

The International Offering will include selective marketing of Offer Shares to QIBs in the United States as well as institutional and professional investors and other investors anticipated to have a sizeable demand for such Offer Shares in Hong Kong and other jurisdictions outside the United States in reliance on Regulation S. Professional investors generally include brokers, dealers, companies (including fund managers) whose ordinary business involves dealing in shares and other securities and corporate entities that regularly invest in shares and other securities. Allocation of Offer Shares pursuant to the International Offering will be effected in accordance with the "book-building" process described in "– *Pricing and Allocation*" below and based on a number of factors, including the level and timing of demand, the total size of the relevant

investor's invested assets or equity assets in the relevant sector and whether or not it is expected that the relevant investor is likely to buy further Shares and/or hold or sell its Shares after the Listing. Such allocation is intended to result in a distribution of the Shares on a basis which would lead to the establishment of a solid professional and institutional shareholder base to the benefit of the Group and the Shareholders as a whole.

The Joint Global Coordinators (on behalf of the Underwriters) may require any investor who has been offered Offer Shares under the International Offering and who has made an application under the Hong Kong Public Offering to provide sufficient information to the Joint Global Coordinators so as to allow it to identify the relevant applications under the Hong Kong Public Offering and to ensure that they are excluded from any allocation of Offer Shares under the Hong Kong Public Offering.

Reallocation

The total number of Offer Shares to be issued or sold pursuant to the International Offering may change as a result of the clawback arrangement described in "– *The Hong Kong Public Offering – Reallocation*" above, the exercise of the Over-allotment Option in whole or in part and/or any reallocation of unsubscribed Offer Shares originally included in the Hong Kong Public Offering.

OVER-ALLOTMENT OPTION

In connection with the Global Offering, the Company is expected to grant the Over-allotment Option to the Stabilising Manager or its affiliate.

Pursuant to the Over-allotment Option, the Stabilising Manager or its affiliate will have the right exercisable at any time from the Listing Date until 30 days after the last day for lodging applications under the Hong Kong Public Offering, to require the Company to issue up to additional 8,916,200 Offer Shares, representing not more than 15% of the total number of Offer Shares initially available under the Global Offering.

If the Over-allotment Option is exercised in full, the additional Offer Shares to be issued pursuant thereto will represent approximately 0.67% of the total Shares in issue immediately following the completion of the Global Offering and the Australian Entitlement Offer (assuming the level of takeup by eligible existing Shareholders of the Australian Entitlement Offer (excluding Yanzhou, Cinda and CSIL) is 100%) and approximately 0.68% of the total Shares in issue immediately following the completion of the Global Offering and the Australian Entitlement Offer (assuming the level of takeup by existing Shareholders eligible to participate in the retail tranche of the Australian Entitlement Offer is 0% and any unexercised rights in the retail tranche of the Australian Entitlement Offer are not acquired by any investors in the institutional bookbuild). Whether or not the Over-allotment Option is exercised, an announcement will be made.

STABILISATION

Stabilisation is a practice used by underwriters in some markets to facilitate the distribution of securities. To stabilise, the underwriters may bid for, or purchase, the securities in the secondary market during a specified period of time, to retard and, if possible, prevent a decline in the initial public market price of the securities below the offer price. Such transactions may be effected in all jurisdictions where it is permissible to do so, in each case in compliance with all applicable laws and regulatory requirements, including those of Hong Kong. In Hong Kong, the price at which stabilisation is effected is not permitted to exceed the offer price.

In connection with the Global Offering, the Stabilising Manager (or any person acting for it), may over-allocate or effect transactions with a view to stabilising or supporting the market price of the Shares at a level higher than that which might otherwise prevail for a limited period after the Listing Date. However, there is no obligation on the Stabilising Manager (or any person acting for it) to conduct any such stabilising action. Such stabilising action, if taken, (a) will be conducted at the absolute discretion of the Stabilising Manager (or any person acting for it) and in what the Stabilising Manager reasonably regards as the best interest of the Company, (b) may be discontinued at any time and (c) is required to be brought to an end within 30 days of the last day for lodging applications under the Hong Kong Public Offering.

Stabilisation action permitted in Hong Kong pursuant to the Securities and Futures (Price Stabilizing) Rules of the SFO includes (a) over-allocating for the purpose of preventing or minimising any reduction in the market price of the Shares, (b) selling or agreeing to sell the Shares so as to establish a short position in them for the purpose of preventing or minimising any reduction in the market price of the Shares, (c) purchasing, or agreeing to purchase, the Shares pursuant to the Over-allotment Option in order to close out any position established under paragraph (a) or (b) above, (d) purchasing, or agreeing to purchase, any of the Shares for the sole purpose of preventing or minimising any reduction in the market price of the Shares, (e) selling or agreeing to sell any Shares in order to liquidate any position established as a result of those purchases and (f) offering or attempting to do anything as described in paragraph (b), (c), (d) or (e) above.

Specifically, prospective applicants for and investors in the Offer Shares should note that:

(a) the Stabilising Manager (or any person acting for it) may, in connection with the stabilising action, maintain a long position in the Shares;

(b) there is no certainty as to the extent to which and the time or period for which the Stabilising Manager (or any person acting for it) will maintain such a long position;

(c) liquidation of any such long position by the Stabilising Manager (or any person acting for it) and selling in the open market may have an adverse impact on the market price of the Shares;

(d) no stabilising action can be taken to support the price of the Shares for longer than the stabilisation period, which will begin on the Listing Date, and is expected to expire on Saturday, 29 December 2018, being the 30th day after the last day for lodging applications under the Hong Kong Public Offering. After this date, when no further stabilising action may be taken, demand for the Shares, and therefore the price of the Shares, could fall;

(e) the price of the Shares cannot be assured to stay at or above the Offer Price by the taking of any stabilising action; and

(f) stabilising bids or transactions effected in the course of the stabilising action may be made at any price at or below the Offer Price and can, therefore, be done at a price below the price paid by applicants for, or investors in, the Offer Shares.

The Company will ensure or procure that an announcement in compliance with the Securities and Futures (Price Stabilizing) Rules of the SFO will be made within seven days of the expiration of the stabilisation period.

ASIC has issued a no-action letter in respect of any potential breaches of the following sections of the Australia Corporations Act arising from stabilisation activities conducted in accordance with all relevant applicable laws and regulatory requirements in Hong Kong and as described above: (i) section 1041A (market manipulation); and (ii) section 1041B-1041C (market rigging), subject to specified conditions being followed by the Stabilising Manager which includes a condition (the **Daily Disclosure Requirement**) requiring that on each day before trading on ASX commences, the Stabilisation Manager must notify ASX for publication on ASX's market announcement platform:

(a) the number of Shares purchased by the Stabilisation Manager on the previous trading day under the market stabilisation; and

(b) its determination of the lowest price payable for Shares by institutions under the Offer (ie the Offer Price) adjusted for the prevailing AUD:HKD exchange rate for that day (being the Offer Price for each Share in Hong Kong dollars converted into Australian dollars at the prevailing exchange rate for that day).

The Daily Disclosure Requirement is not an obligation contained in the Securities and Futures (Price Stabilizing) Rules of the SFO and may have the effect of reducing the ability of market stabilisation to retard downward movements in the trading price of Shares.

Over-Allocation

Following any over-allocation of Shares in connection with the Global Offering, the Stabilising Manager (or its affiliate or any person acting for it) may cover such over-allocations by, among other methods, exercising the Over-allotment Option in full or in part, by using Shares purchased by the Stabilising Manager (or its affiliate or any person acting for it) in the secondary market at prices that do not exceed the Offer Price or through the Stock Borrowing Agreement as detailed below or a combination of these means.

STOCK BORROWING AGREEMENT

In order to facilitate the settlement of over-allocations, if any, in connection with the Global Offering, the Stabilising Manager (or its affiliate or any person acting for it) may choose to borrow up to 8,916,200 Shares (being the maximum number of Shares which may be issued pursuant to the exercise of the Over-allotment Option) from Yanzhou, pursuant to the Stock Borrowing Agreement, which is expected to be entered into between the Stabilising Manager (or its affiliate or any person acting for it) and Yanzhou on or about the Price Determination Date.

If the Stock Borrowing Agreement with Yanzhou is entered into, the borrowing of Shares will only be effected by the Stabilising Manager (or its affiliate or any person acting for it) for the settlement of over-allocations in the International Offering and such borrowing arrangement is not subject to the restrictions of Rule 10.07(1)(a) of the Listing Rules, provided that the requirements set out in Rule 10.07(3) of the Listing Rules, being that the Stock Borrowing Agreement will be for the sole purpose of covering any short position prior to the exercise of the Over-allotment Option in connection with the International Offering, are complied with.

The same number of Shares so borrowed must be returned to Yanzhou, as the case may be, on or before the third business day following the earlier of (a) the last day for exercising the Over-allotment Option and (b) the day on which the Over-allotment Option is exercised in full.

The Shares borrowing arrangement described above will be effected in compliance with all applicable laws, rules and regulatory requirements. No payment will be made to Yanzhou by the Stabilising Manager (or its affiliate or any person acting for it) in relation to such Shares borrowing arrangement.

PRICING AND ALLOCATION

Pricing for the Offer Shares for the purpose of the various offerings under the Global Offering will be fixed on the Price Determination Date, which is expected to be on or about Thursday, 29 November 2018 and, in any event, no later than Wednesday, 5 December 2018, by agreement between the Joint Global Coordinators (on behalf of the Underwriters), the Company, and the number of Offer Shares to be allocated under the various offerings will be determined shortly thereafter.

The Offer Price will not be more than HK$25.84 per Offer Share and is expected to be not less than HK$23.48 per Offer Share, unless otherwise announced, as further explained below. Applicants under the Hong Kong Public Offering must pay, on application, the Maximum Offer Price of HK$25.84 per Offer Share plus brokerage of 1.0%, SFC transaction levy of 0.0027% and Stock Exchange trading fee of 0.005%, amounting to a total of HK$2,610.04 for one board lot of 100 Shares.

The International Underwriters will be soliciting from prospective investors indications of interest in acquiring Offer Shares in the International Offering. Prospective professional and institutional investors will be required to specify the number of Offer Shares under the International Offering they would be prepared to acquire either at different prices or at a particular price. This process, known as "book-building", is expected to continue up to, and to cease on or about, the last day for lodging applications under the Hong Kong Public Offering.

The Joint Global Coordinators (on behalf of the Underwriters) may, where they deem appropriate, based on the level of interest expressed by prospective investors during the book-building process in respect of the International Offering, and with the consent of the Company, reduce the number of Offer Shares offered and/or the Offer Price Range below that stated in this prospectus at any time on or prior to the morning of the last day for lodging applications under the Hong Kong Public Offering. In such a case, the Company will, as soon as practicable following the decision to make such reduction, and in any event not later than the morning of the last day for lodging applications under the Hong Kong Public Offering, cause to be published in the South China Morning Post (in English) and the Hong Kong Economic Times (in Chinese) and on the websites of the Company and the Stock Exchange at **www.yancoal.com.au** and **www.hkexnews.hk**, respectively, notices of the reduction. Upon the issue of such a notice, the revised number of Offer Shares and/or the Offer Price Range will be final and conclusive and the Offer Price, if agreed upon by the Joint Global Coordinators (on behalf of the Underwriters) and the Company, will be fixed within such revised Offer Price Range.

Before submitting applications for the Hong Kong Offer Shares, applicants should have regard to the possibility that any announcement of a reduction in the number of Offer Shares and/or the Offer Price Range may not be made until the last day for lodging applications under the Hong Kong Public Offering. Such notice will also include confirmation or revision, as appropriate, of the working capital statement and the Global Offering statistics as currently set out in this prospectus, and any other financial information which may change as a result of any such reduction. In the absence of any such notice so published, the number of Offer Shares will not be reduced and/or the Offer

Price, if agreed upon by the Joint Global Coordinators (on behalf of the Underwriters) and the Company, will under no circumstances be set outside the Offer Price Range as stated in this prospectus.

The final Offer Price, the level of indications of interest in the International Offering, the level of applications in the Hong Kong Public Offering, the basis of allocations of the Hong Kong Offer Shares and the results of allocations in the Hong Kong Public Offering are expected to be made available through a variety of channels in the manner described in "*How to Apply for Hong Kong Offer Shares – Publication of Results*".

UNDERWRITING

The Hong Kong Public Offering is fully underwritten by the Hong Kong Underwriters under the terms and conditions of the Hong Kong Underwriting Agreement and is subject to, among other things, the Joint Global Coordinators (on behalf of the Underwriters) and the Company agreeing on the Offer Price.

The Company expects to enter into the International Underwriting Agreement relating to the International Offering on the Price Determination Date.

These underwriting arrangements, including the Underwriting Agreements, are summarised in "*Underwriting*".

CONDITIONS OF THE GLOBAL OFFERING

Acceptance of all applications for Offer Shares will be conditional on:

(a) the Listing Committee granting approval for the listing of, and permission to deal in, the Shares in issue and to be issued pursuant to the Global Offering on the Main Board of the Stock Exchange and all other Shares to be issued pursuant to the Australian Entitlement Offer and such approval not subsequently having been withdrawn or revoked prior to the Listing Date;

(b) the Offer Price having been agreed between the Joint Global Coordinators (on behalf of the Underwriters) and the Company;

(c) the execution and delivery of the International Underwriting Agreement on or about the Price Determination Date; and

(d) the obligations of the Hong Kong Underwriters under the Hong Kong Underwriting Agreement and the obligations of the International Underwriters under the International Underwriting Agreement becoming and remaining unconditional and not having been terminated in accordance with the terms of the respective agreements,

(unless and to the extent such conditions are validly waived on or before such dates and times) and, in any event, not later than the date which is 30 days after the date of this prospectus.

If, for any reason, the Offer Price is not agreed between the Joint Global Coordinators (on behalf of the Underwriters), the Company on or before Wednesday, 5 December 2018, the Global Offering will not proceed and will lapse.

The consummation of each of the Hong Kong Public Offering and the International Offering is conditional upon, among other things, the other offering becoming unconditional and not having been terminated in accordance with its terms.

If the above conditions are not fulfilled or waived prior to the dates and times specified, the Global Offering will lapse and the Stock Exchange will be notified immediately. Notice of the lapse of the Hong Kong Public Offering will be published by the Company in the South China Morning Post (in English) and the Hong Kong Economic Times (in Chinese) and on the websites of the Company and the Stock Exchange at **www.yancoal.com.au** and **www.hkexnews.hk**, respectively, on the next day following such lapse. In such a situation, all application monies will be returned, without interest, on the terms set out in "*How to Apply for Hong Kong Offer Shares – Refund of Application Monies*". In the meantime, all application monies will be held in separate bank account(s) with the receiving bank or other bank(s) in Hong Kong licensed under the Banking Ordinance (Chapter 155 of the Laws of Hong Kong).

Share certificates for the Offer Shares will only become valid at 8:00 a.m. on Thursday, 6 December 2018, provided that the Global Offering has become unconditional in all respects at or before that time.

DEALINGS IN THE SHARES

Assuming that the Hong Kong Public Offering becomes unconditional at or before 8:00 a.m. in Hong Kong on Thursday, 6 December 2018, it is expected that dealings in the Shares on the Stock Exchange will commence at 9:00 a.m. on Thursday, 6 December 2018.

The Shares will be traded in board lots of 100 Shares each and the stock code of the Shares will be 3668.

IMPORTANT

The Company will be relying on Section 9A of the Companies (Exemption of Companies and Prospectuses from Compliance with Provisions) Notice (Chapter 32L of the Laws of Hong Kong) and will be issuing the **WHITE** and **YELLOW** Application Forms without them being accompanied by a printed prospectus. The contents of the printed prospectus are identical to the electronic version of the prospectus which can be accessed and downloaded from the websites of the Company at **www.yancoal.com.au** and the Stock Exchange at **www.hkexnews.hk** under the "*HKExnews > Listed Company Information > Latest Listed Company Information*" section, respectively.

Members of the public may obtain a copy of the printed prospectus, free of charge, upon request during normal business hours from 9:00 a.m. on Monday, 26 November 2018 until 12:00 noon on Thursday, 29 November 2018 at the following locations:

1. any of the following branches of the receiving bank for the Hong Kong Public Offering:

   Bank of China (Hong Kong) Limited

	Branch Name	Address
Hong Kong Island	King's Road Branch	131-133 King's Road, North Point, Hong Kong
	Central District (Wing On House) Branch	B/F-2/F, Wing On House, 71 Des Voeux Road Central, Hong Kong
Kowloon	Lam Tin Branch	Shop 12, 49 Kai Tin Road, Lam Tin, Kowloon
	Tsim Sha Tsui Branch	24-28 Carnarvon Road, Tsim Sha Tsui, Kowloon
New Territories	Tseung Kwan O Plaza Branch	Shop 112-125, Level 1, Tseung Kwan O Plaza, Tseung Kwan O, New Territories
	Tuen Mun Town Plaza Branch	Shop 2, Tuen Mun Town Plaza phase II, Tuen Mun, New Territories

2. any of the following offices of the Joint Global Coordinators:

   (a) **Morgan Stanley Asia Limited**, at 46/F, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong;

   (b) **CMB International Capital Limited**, at 45/F, Champion Tower, 3 Garden Road, Central, Hong Kong; and

(c) **BOCI Asia Limited**, at 26th Floor, Bank of China Tower, 1 Garden Road, Central, Hong Kong; and

(d) **Citigroup Global Markets Asia Limited**, at 50/F, Champion Tower, 3 Garden Road, Central, Hong Kong; and

3. the Depository Counter of HKSCC at 1/F, One & Two Exchange Square, 8 Connaught Place, Central, Hong Kong.

Details of where printed prospectuses may be obtained will be displayed prominently at every branch of Bank of China (Hong Kong) Limited, where WHITE Application Forms are distributed.

During normal business hours from 9:00 a.m. on Monday, 26 November 2018 until 12:00 noon on Thursday, 29 November 2018, at least three copies of the printed prospectus will be available for inspection at every location where the **WHITE** and **YELLOW** Application Forms are distributed as set out below.

A. APPLICATIONS FOR HONG KONG OFFER SHARES

1. How to Apply

If you apply for Hong Kong Offer Shares, then you may not apply for or indicate an interest for International Offer Shares.

To apply for Hong Kong Offer Shares, you may:

- use a **WHITE** or **YELLOW** Application Form;
- apply online through **the White Form eIPO** service at **www.eipo.com.hk**; or
- electronically cause HKSCC Nominees to apply on your behalf.

None of you or your joint applicant(s) may make more than one application, except where you are a nominee and provide the required information in your application.

The Company, the Joint Global Coordinators, the **White Form eIPO** Service Provider and their respective agents may reject or accept any application, in full or in part, for any reason at their discretion.

2. Who Can Apply

You can apply for Hong Kong Offer Shares on a **WHITE** or **YELLOW** Application Form if you or any person(s) for whose benefit you are applying:

- are 18 years of age or older;
- have a Hong Kong address;
- are outside the United States (within the meaning of Regulation S) or are a person described in paragraph (h)(3) of Rule 902 of Regulation S; and
- are not a legal or natural person of the PRC (except qualified domestic institutional investors).

If you apply for Hong Kong Offer Shares online through the **White Form eIPO** service, in addition to the above you must also:

- have a valid Hong Kong identity card number; and
- provide a valid e-mail address and a contact telephone number.

If you are a firm, the application must be in the individual members' names. If you are a body corporate, the Application Form must be signed by a duly authorised officer, who must state his representative capacity, and stamped with your corporation's chop.

If an application is made by a person under a power of attorney, the Company and the Joint Global Coordinators, as the Company's agent, may accept it at their discretion, and on any conditions they think fit, including requiring evidence of the attorney's authority.

The number of joint applicants may not exceed four and they may not apply by means of the **White Form eIPO** service for the Hong Kong Offer Shares.

Unless permitted by the Listing Rules, you cannot apply for any Hong Kong Offer Shares if:

- you are an existing beneficial owner of Shares and/or a substantial shareholder of any of the Company's subsidiaries;
- you are a director or chief executive of the Company and/or any of the Company's subsidiaries;
- you are a close associate of any of the above persons;
- you are a connected person of the Company or a person who will become a connected person of the Company immediately upon the completion of the Global Offering; or
- you have been allocated or have applied for any International Offer Shares or otherwise participate in the International Offering.

3. Applying for Hong Kong Offer Shares

Which Application Channel to Use

For Hong Kong Offer Shares to be issued in your own name, use a **WHITE** Application Form or apply online through the **White Form eIPO** service at **www.eipo.com.hk**.

For Hong Kong Offer Shares to be issued in the name of HKSCC Nominees and deposited directly into CCASS to be credited to your or a designated CCASS Participant's stock account, use a **YELLOW** Application Form or electronically instruct HKSCC via CCASS to cause HKSCC Nominees to apply for you.

Where to Collect the Application Forms

You can collect a **WHITE** Application Form and a prospectus during normal business hours from 9:00 a.m. on Monday, 26 November 2018 until 12:00 noon on Thursday, 29 November 2018 from:

(a) any of the following offices of the Joint Global Coordinators:

Morgan Stanley Asia Limited	**CMB International Capital Limited**	**BOCI Asia Limited**	**Citigroup Global Markets Asia Limited**
46/F International Commerce Centre	45/F, Champion Tower	26th Floor	50/F, Champion Tower
1 Austin Road West	3 Garden Road	Bank of China Tower	3 Garden Road
Kowloon, Hong Kong	Central, Hong Kong	1 Garden Road	Central, Hong Kong
		Central, Hong Kong	

(b) any of the following branches of the receiving bank for the Hong Kong Public Offering:

Bank of China (Hong Kong) Limited

	Branch Name	**Address**
Hong Kong Island	King's Road Branch	131-133 King's Road, North Point, Hong Kong
	Central District (Wing On House) Branch	B/F-2/F, Wing On House, 71 Des Voeux Road Central, Hong Kong
Kowloon	Lam Tin Branch	Shop 12, 49 Kai Tin Road, Lam Tin, Kowloon
	Tsim Sha Tsui Branch	24-28 Carnarvon Road, Tsim Sha Tsui, Kowloon
New Territories	Tseung Kwan O Plaza Branch	Shop 112-125, Level 1, Tseung Kwan O Plaza, Tseung Kwan O, New Territories
	Tuen Mun Town Plaza Branch	Shop 2, Tuen Mun Town Plaza phase II, Tuen Mun, New Territories

You can collect a **YELLOW** Application Form and a prospectus during normal business hours from 9:00 a.m. on Monday, 26 November 2018 until 12:00 noon on Thursday, 29 November 2018 from:

- the Depository Counter of HKSCC at 1/F, One & Two Exchange Square, 8 Connaught Place, Central, Hong Kong; or

- your stockbroker.

Time for Lodging Application Forms

Your completed **WHITE** or **YELLOW** Application Form, together with a cheque or a banker's cashier order attached and marked payable to "BANK OF CHINA (HONG KONG) NOMINEES LIMITED – YANCOAL AUSTRALIA PUBLIC OFFER" for the payment, should be deposited in the special collection boxes provided at any of the branches of the receiving bank listed above at the following times:

Monday, 26 November 2018	–	**9:00 a.m. to 5:00 p.m.**
Tuesday, 27 November 2018	–	**9:00 a.m. to 5:00 p.m.**
Wednesday, 28 November 2018	–	**9:00 a.m. to 5:00 p.m.**
Thursday, 29 November 2018	–	**9:00 a.m. to 12:00 noon**

The application lists will be open from 11:45 a.m. to 12:00 noon on Thursday, 29 November 2018, the last day for applications, or such later time as described in "– *Effect of Bad Weather on the Opening and Closing of the Application Lists*" below.

4. Terms and Conditions of an Application

Follow the detailed instructions in the **WHITE** or **YELLOW** Application Form carefully, otherwise your application may be rejected.

By submitting a **WHITE** or **YELLOW** Application Form or applying through the **White Form eIPO** service, among other things, you:

(a) undertake to execute all relevant documents and instruct and authorise the Company and/or the Joint Global Coordinators (or its agents or nominees), as agents of the Company, to execute any documents for you and to do on your behalf all things necessary to register any Hong Kong Offer Shares allocated to you in your name or in the name of HKSCC Nominees as required by the Constitution;

(b) agree to comply with the Constitution of the Company, the Companies (Winding Up and Miscellaneous Provisions) Ordinance and the Australia Corporations Act;

(c) confirm that you have read the terms and conditions and application procedures set out in this prospectus and in the Application Form and agree to be bound by them;

(d) confirm that you have received and read this prospectus and have relied only on the information and representations in this prospectus in making your application and will not rely on any other information or representations, except those in any supplement to this prospectus;

(e) confirm that you are aware of the restrictions on the Global Offering set out in this prospectus;

(f) agree that none of the Company, the Relevant Persons and the **White Form eIPO** Service Provider is or will be liable for any information and representations not in this prospectus (and any supplement to this prospectus);

(g) undertake and confirm that you or the person(s) for whose benefit you have made the application have not applied for or taken up, or indicated an interest for, and will not apply for or take up, or indicate an interest for, any International Offer Shares nor participated in the International Offering;

(h) agree to disclose to the Company, the Hong Kong Share Registrar, the receiving bank and the Relevant Persons any personal data which any of them may require about you and the person(s) for whose benefit you have made the application;

(i) if the laws of any place outside Hong Kong apply to your application, agree and warrant that you have complied with all such laws and neither the Company nor the Relevant Persons will breach any laws outside Hong Kong as a result of the acceptance of your offer to purchase, or any action arising from your rights and obligations under the terms and conditions in this prospectus and the Application Form;

(j) agree that once your application has been accepted, you may not rescind it because of an innocent misrepresentation;

(k) agree that your application will be governed by the laws of Hong Kong;

(l) represent, warrant and undertake that (i) you understand that the Hong Kong Offer Shares have not been and will not be registered under the U.S. Securities Act and (ii) you and any person for whose benefit you are applying for the Hong Kong Offer Shares are outside the United States (within the meaning of Regulation S) or are a person described in paragraph (h)(3) of Rule 902 of Regulation S;

(m) warrant that the information you have provided is true and accurate;

(n) agree to accept the Hong Kong Offer Shares applied for or any lesser number allocated to you under the application;

(o) authorise (i) the Company to place your name(s) or the name of HKSCC Nominees on the register of members of the Company as the holder(s) of any Hong Kong Offer Shares allocated to you and such other registers as required under the Constitution of the Company and (ii) the Company and/or its agents to send any Share certificate(s) and/or any e-Refund payment instructions and/or any refund cheque(s) to you or the first-named applicant for joint applications by ordinary post at your own risk to the address stated on the application, unless you have fulfilled the criteria mentioned in "– *Personal Collection*" below to collect the Share certificate(s) and/or refund cheque(s) in person;

(p) declare and represent that this is the only application made and the only application intended by you to be made to benefit you or the person for whose benefit you are applying;

(q) understand that the Company, the Directors and the Joint Global Coordinators will rely on your declarations and representations in deciding whether or not to allocate any of the Hong Kong Offer Shares to you and that you may be prosecuted for making a false declaration;

(r) (if the application is made for your own benefit) warrant that no other application has been or will be made for your benefit on a **WHITE** or **YELLOW** Application Form or by giving **electronic application instructions** to HKSCC or through the **White Form eIPO** service or by any one as your agent or by any other person; and

(s) (if you are making the application as an agent for the benefit of another person) warrant that (i) no other application has been or will be made by you as agent for or for the benefit of that person or by that person or by any other person as agent for that person on a **WHITE** or **YELLOW** Application Form or by giving **electronic application instructions** to HKSCC and (ii) you have due authority to sign the Application Form or give **electronic application instructions** on behalf of that other person as its agent.

Additional Instructions for YELLOW Application Forms

You should refer to the **YELLOW** Application Form for details.

5. Applying Through the White Form eIPO Service

General

Individuals who meet the criteria in "– *Who Can Apply*" above may apply through the **White Form eIPO** service for the Offer Shares to be allocated and registered in their own names through the designated website at **www.eipo.com.hk**.

Detailed instructions for application through the **White Form eIPO** service are set out on the designated website. If you do not follow the instructions, your application may be rejected and may not be submitted to the Company. If you apply through the designated website, you authorise the **White Form eIPO** Service Provider to apply on the terms and conditions in this prospectus, as supplemented and amended by the terms and conditions of the **White Form eIPO** Service Provider.

Time for Submitting Applications under the White Form eIPO Service

You may submit your application through the **White Form eIPO** service through the designated website at **www.eipo.com.hk** (24 hours daily, except on the last day for applications) from 9:00 a.m. on Monday, 26 November 2018 until 11:30 a.m. on Thursday, 29 November 2018 and the latest time for completing full payment of application monies in respect of such applications will be 12:00 noon on Thursday, 29 November 2018, the last day for applications, or such later time as described in "– *Effect of Bad Weather on the Opening and Closing of the Application Lists*" below.

No Multiple Applications

If you apply by means of the **White Form eIPO** service, once you complete payment in respect of any **electronic application instruction** given by you or for your benefit through the **White Form eIPO** service to make an application for Hong Kong Offer Shares, an actual application will be deemed to have been made. For the avoidance of doubt, giving an **electronic application instruction** under the **White Form eIPO** service more than once and obtaining different application reference numbers without effecting full payment in respect of a particular reference number will not constitute an actual application.

Only one application may be made for the benefit of any person. If you are suspected of submitting more than one application through the **White Form eIPO** service or by any other means, all of your applications are liable to be rejected.

Section 40 of the Companies (Winding Up and Miscellaneous Provisions) Ordinance

For the avoidance of doubt, the Company and all other parties involved in the preparation of this prospectus acknowledge that each applicant who gives or causes to give **electronic application instructions** is a person who may be entitled to compensation under Section 40 of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (as applied by Section 342E of the Companies (Winding Up and Miscellaneous Provisions) Ordinance).

Environmental Protection

The obvious advantage of the **White Form eIPO** is to save the use of paper via the self-serviced and electronic application process. Computershare Hong Kong Investor Services Limited, the designated **White Form eIPO** Service Provider, will contribute HK$2 for each "Yancoal Australia Ltd" **White Form eIPO** application submitted via the website **www.eipo.com.hk** to support the funding of "Dongjiang River Source Tree Planting" project initiated by Friends of the Earth (HK)".

6. Applying By Giving Electronic Application Instructions to HKSCC via CCASS

General

CCASS Participants may give **electronic application instructions** to apply for the Hong Kong Offer Shares and to arrange payment of the money due on application and payment of refunds under their participant agreements with HKSCC and the General Rules of CCASS and the CCASS Operational Procedures.

If you are a **CCASS Investor Participant**, you may give these **electronic application instructions** through the CCASS Phone System by calling +852 2979 7888 or through the CCASS Internet System (**https://ip.ccass.com**) (using the procedures in HKSCC' s "An Operating Guide for Investor Participants" in effect from time to time).

HKSCC can also input **electronic application instructions** for you if you go to:

Hong Kong Securities Clearing Company Limited
Customer Service Centre 1/F,
One & Two Exchange Square,
8 Connaught Place, Central,
Hong Kong

and complete an input request form.

You can also collect a prospectus from the above address.

If you are not **a CCASS Investor Participant**, you may instruct your broker or custodian who is a CCASS Clearing Participant or a CCASS Custodian Participant to give **electronic application instructions** via CCASS terminals to apply for the Hong Kong Offer Shares on your behalf.

You will be deemed to have authorised HKSCC and/or HKSCC Nominees to transfer the details of your application to the Company, the Joint Global Coordinators and the Hong Kong Share Registrar.

Giving Electronic Application Instructions to HKSCC via CCASS

Where you have given **electronic application instructions** to apply for the Hong Kong Offer Shares and a **WHITE** Application Form is signed by HKSCC Nominees on your behalf:

(a) HKSCC Nominees will only be acting as a nominee for you and is not liable for any breach of the terms and conditions of the **WHITE** Application Form or this prospectus; and

(b) HKSCC Nominees will do the following things on your behalf:

- agree that the Hong Kong Offer Shares to be allocated to you shall be registered in the name of HKSCC Nominees and deposited directly into CCASS for the credit of the CCASS Participant's stock account on your behalf or your CCASS Investor Participant's stock account;

- agree to accept the Hong Kong Offer Shares applied for or any lesser number allocated;

- undertake and confirm that you have not applied for or taken up, or indicated an interest for, and will not apply for or take up, or indicate an interest for, any International Offer Shares nor participated in the International Offering;

- (if the electronic application instructions are given for your benefit) declare that only one set of **electronic application instructions** has been given for your benefit;

- (if you are an agent for another person) declare that you have only given one set of **electronic application instructions** for the other person's benefit and are duly authorised to give those instructions as its agent;

- confirm that you understand that the Company, the Directors and the Joint Global Coordinators will rely on your declarations and representations in deciding whether or not to allocate any of the Hong Kong Offer Shares to you and that you may be prosecuted for making a false declaration;

- authorise the Company to place HKSCC Nominees' name on the register of members of the Company as the holder of the Hong Kong Offer Shares allocated to you and such other registers as required under the Constitution, and despatch Share certificate(s) and/or refund monies in accordance with the arrangements separately agreed between the Company and HKSCC;

- confirm that you have read the terms and conditions and application procedures set out in this prospectus and agree to be bound by them;

- confirm that you have received and read a copy of this prospectus and have relied only on the information and representations in this prospectus in causing the application to be made and will not rely on any other information or representations, except those in any supplement to this prospectus;

- agree that neither the Company nor the Relevant Persons is or will be liable for any information and representations not in this prospectus (and any supplement to this prospectus);

- agree to disclose to the Company, the Hong Kong Share Registrar, the receiving bank and the Relevant Persons any personal data which they may require about you;

- agree (without prejudice to any other rights which you may have) that once HKSCC Nominees' application has been accepted, it cannot be rescinded for innocent misrepresentation;

- agree that any application made by HKSCC Nominees on your behalf is irrevocable on or before Tuesday, 25 December 2018, such agreement to take effect as a collateral contract with the Company, and to become binding when you give the instructions and such collateral contract to be in consideration of the Company agreeing that it will not offer any Hong Kong Offer Shares to any person on or before Tuesday, 25 December 2018, except by means of one of the procedures referred to in this prospectus. However, HKSCC Nominees may revoke the application on or before Tuesday, 25 December 2018 if a person responsible for this prospectus under Section 40 of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (as applied by Section 342E of the Companies (Winding Up and Miscellaneous Provisions) Ordinance) gives a public notice under that section on or before the fifth day after the time of the opening of the application lists (excluding any day which is a Saturday, Sunday or public holiday in Hong Kong) which excludes or limits that person's responsibility for this prospectus;

- agree that once HKSCC Nominees' application is accepted, neither that application nor **your electronic application instructions** can be revoked, and that acceptance of that application will be evidenced by the announcement of the results of the Hong Kong Public Offering by the Company;

- agree to the arrangements, undertakings and warranties under the participant agreement between you and HKSCC, read with the General Rules of CCASS and the CCASS Operational Procedures, for giving **electronic application instructions** to apply for Hong Kong Offer Shares;

- agree with the Company, for itself and for the benefit of each Shareholder (and so that the Company will be deemed by its acceptance in whole or in part of the application by HKSCC Nominees to have agreed, for the Company and on behalf of each Shareholder, with each CCASS Participant giving **electronic application instructions**) to observe and comply with the Constitution of the Company, the Companies (Winding Up and Miscellaneous Provisions) Ordinance and the Australia Corporations Act; and

- agree that your application, any acceptance of it and the resulting contract will be governed by and construed in accordance with the laws of Hong Kong.

Effect of Giving Electronic Application Instructions to HKSCC via CCASS

By giving **electronic application instructions** to HKSCC or instructing your broker or custodian who is a CCASS Clearing Participant or a CCASS Custodian Participant to give such instructions to HKSCC, you (and, if you are joint applicants, each of you jointly and severally) are deemed to have done the following things. Neither HKSCC nor HKSCC Nominees will be liable to the Company or any other person in respect of the things mentioned below:

- instructed and authorised HKSCC to cause HKSCC Nominees (acting as nominee for the relevant CCASS Participants) to apply for the Hong Kong Offer Shares on your behalf;

- instructed and authorised HKSCC to arrange payment of the Maximum Offer Price, brokerage, SFC transaction levy and Stock Exchange trading fee by debiting your designated bank account and, in the case of a wholly or partially unsuccessful application and/or if the Offer Price is less than the Maximum Offer Price initially paid on application, refund of the application monies (including brokerage, SFC transaction levy and Stock Exchange trading fee) by crediting your designated bank account; and

- instructed and authorised HKSCC to cause HKSCC Nominees to do on your behalf all the things stated in the **WHITE** Application Form and in this prospectus.

Minimum Purchase Amount and Permitted Numbers

You may give or cause your broker or custodian who is a CCASS Clearing Participant or a CCASS Custodian Participant to give **electronic application instructions** for a minimum of 100 Hong Kong Offer Shares. Instructions for more than 100 Hong Kong Offer Shares must be in one of the numbers set out in the table in the Application Forms. No application for any other number of Hong Kong Offer Shares will be considered and any such application is liable to be rejected.

Time for Inputting Electronic Application Instructions

CCASS Clearing/Custodian Participants can input **electronic application instructions** at the following times on the following dates[(1)]:

Monday, 26 November 2018	–	9:00 a.m. to 8:30 p.m.
Tuesday, 27 November 2018	–	8:00 a.m. to 8:30 p.m.
Wednesday, 28 November 2018	–	8:00 a.m. to 8:30 p.m.
Thursday, 29 November 2018	–	8:00 a.m. to 12:00 noon

Note:

(1) The times in this sub-section are subject to change as HKSCC may determine from time to time with prior notification to CCASS Clearing/Custodian Participants and/or CCASS Investor Participants.

CCASS Investor Participants can input **electronic application instructions** from 9:00 a.m. on Monday, 26 November 2018 until 12:00 noon on Thursday, 29 November 2018 (24 hours daily, except on Thursday, 29 November 2018, the last day for applications).

The latest time for inputting your **electronic application instructions** will be 12:00 noon on Thursday, 29 November 2018, the last day for applications, or such later time as described in "– *Effect of Bad Weather on the Opening and Closing of the Application Lists*" below.

No Multiple Applications

If you are suspected of having made multiple applications or if more than one application is made for your benefit, the number of Hong Kong Offer Shares applied for by HKSCC Nominees will be automatically reduced by the number of Hong Kong Offer Shares for which you have given such instructions and/or for which such instructions have been given for your benefit. Any **electronic application instructions** to make an application for the Hong Kong Offer Shares given by you or for your benefit to HKSCC will be deemed to be an actual application for the purposes of considering whether multiple applications have been made.

Section 40 of the Companies (Winding Up and Miscellaneous Provisions) Ordinance

For the avoidance of doubt, the Company and all other parties involved in the preparation of this prospectus acknowledge that each CCASS Participant who gives or causes to give **electronic application instructions** is a person who may be entitled to compensation under Section 40 of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (as applied by Section 342E of the Companies (Winding Up and Miscellaneous Provisions) Ordinance).

Personal Data

The section of the Application Form headed "Personal Data" applies to any personal data held by the Company, the Hong Kong Share Registrar, the receiving bank and the Relevant Persons about you in the same way as it applies to personal data about applicants other than HKSCC Nominees.

7. Warning for Electronic Applications

The application for Hong Kong Offer Shares by giving **electronic application instructions** to HKSCC is only a facility provided to CCASS Participants. Similarly, the application for Hong Kong Offer Shares through the **White Form eIPO** service is only a facility provided by the **White Form eIPO** Service Provider to public investors. Such facilities are subject to capacity limitations and potential service interruptions and you are advised not to wait until the last day for applications to make your electronic application. The Company, the Relevant Persons and the **White Form eIPO** Service Provider take no responsibility for such applications and provide no assurance that any CCASS Participant or person applying through the **White Form eIPO** service will be allocated any Hong Kong Offer Shares.

To ensure that CCASS Investor Participants can give their **electronic application instructions**, they are advised not to wait until the last minute to input their instructions to the systems. In the event that CCASS Investor Participants have problems connecting to the CCASS Phone System or the CCASS Internet System for submission of their **electronic application instructions**, they should either (a) submit a **WHITE** or **YELLOW** Application Form or (b) go to HKSCC's Customer Service Centre to complete an input request form for **electronic application instructions** before 12:00 noon on Thursday, 29 November 2018, the last day for applications, or such later time as described in "– *Effect of Bad Weather on the Opening and Closing of the Application Lists*" below.

8. How Many Applications Can You Make

Multiple applications for the Hong Kong Offer Shares are not allowed except by nominees. If you are a nominee, in the box on the Application Form marked "For nominees", you must include:

- an account number; or
- some other identification code,

for **each** beneficial owner or, in the case of joint beneficial owners, for each joint beneficial owner. If you do not include this information, the application will be treated as being made for your benefit.

All of your applications will be rejected if more than one application on a **WHITE** or **YELLOW** Application Form or by giving **electronic application instructions** to HKSCC or through **the White Form eIPO** service is made for your benefit (including the part of the application made by HKSCC Nominees acting on **electronic application instructions**).

If an application is made by an unlisted company and:

- the principal business of that company is dealing in securities; and
- you exercise statutory control over that company,

then the application will be treated as being made for your benefit.

"**Unlisted company**" means a company with no equity securities listed on the Stock Exchange.

"**Statutory control**" means you:

- control the composition of the board of directors of the company;
- control more than half of the voting power of the company; or
- hold more than half of the issued share capital of the company (not counting any part of it which carries no right to participate beyond a specified amount in a distribution of either profits or capital).

B. HOW MUCH ARE THE HONG KONG OFFER SHARES

The Maximum Offer Price is HK$25.84 per Offer Share. You must also pay brokerage of 1.0%, SFC transaction levy of 0.0027% and Stock Exchange trading fee of 0.005%. This means that for one board lot of 100 Hong Kong Offer Shares, you will pay HK$2,610.04.

You must pay the Maximum Offer Price, together with brokerage, SFC transaction levy and Stock Exchange trading fee, in full upon application for Hong Kong Offer Shares under the terms and conditions set out in the Application Forms.

The Application Forms have tables showing the exact amount payable for the numbers of Offer Shares that may be applied for.

You may submit an application using a **WHITE** or **YELLOW** Application Form or through the **White Form eIPO** service in respect of a minimum of 100 Hong Kong Offer Shares. Each application or **electronic application instruction** in respect of more than 100 Hong Kong Offer Shares must be in one of the numbers set out in the table in the Application Form, or as otherwise specified on the designated website at **www.eipo.com.hk**.

If your application is successful, brokerage will be paid to the Exchange Participants (as defined in the Listing Rules), and the SFC transaction levy and the Stock Exchange trading fee will be paid to the Stock Exchange (in the case of the SFC transaction levy, collected by the Stock Exchange on behalf of the SFC).

For further details on the Offer Price, see "*Structure of the Global Offering – Pricing and Allocation*".

C. EFFECT OF BAD WEATHER ON THE OPENING AND CLOSING OF THE APPLICATION LISTS

The application lists will not open or close if there is:

- a tropical cyclone warning signal number 8 or above; or
- a "black" rainstorm warning

in force in Hong Kong at any time between 9:00 a.m. and 12:00 noon on Thursday, 29 November 2018. Instead, they will open between 11:45 a.m. and 12:00 noon on the next business day which does not have either of those warnings in force in Hong Kong at any time between 9:00 a.m. and 12:00 noon.

If the application lists do not open and close on Thursday, 29 November 2018 or if there is a tropical cyclone warning signal number 8 or above or a "black" rainstorm warning signal in force in Hong Kong that may affect the dates mentioned in "*Expected Timetable*", an announcement will be made.

D. PUBLICATION OF RESULTS

The Company expects to announce the Offer Price, the level of indications of interest in the International Offering, the level of applications in the Hong Kong Public Offering and the basis of allocations of the Hong Kong Offer Shares on Wednesday, 5 December 2018 in the South China Morning Post (in English) and the Hong Kong Economic Times (in Chinese) and on the websites of the Company at **www.yancoal.com.au** and the Stock Exchange at **www.hkexnews.hk**.

The results of allocations and the Hong Kong identity card/passport/Hong Kong business registration numbers of successful applicants under the Hong Kong Public Offering will be available at the times and dates and in the manner set out below:

- in the announcement to be posted on the websites of the Company and the Stock Exchange at **www.yancoal.com.au** and **www.hkexnews.hk**, respectively, by no later than 9:00 a.m. on Wednesday, 5 December 2018;
- from the designated results of allocations website at **www.iporesults.com.hk** (alternatively: English **https://www.eipo.com.hk/en/Allotment**; Chinese **https://www.eipo.com.hk/zh-hk/Allotment**) with a "search by ID function" on a 24 hour basis from 8:00 a.m. on Wednesday, 5 December 2018 to 12:00 midnight on Tuesday, 11 December 2018;
- from the allocation results telephone enquiry line by calling +852 2862 8669 between 9:00 a.m. and 10:00 p.m. from Wednesday, 5 December 2018 to Saturday, 8 December 2018; and
- in the special allocation results booklets which will be available for inspection during the opening hours of the receiving bank designated branches referred to above from Wednesday, 5 December 2018 to Friday, 7 December 2018.

If the Company accepts your offer to purchase (in whole or in part), which it may do by announcing the basis of allocations and/or making available the results of allocations publicly, there will be a binding contract under which you will be required to purchase the Hong Kong Offer Shares if the conditions of the Global Offering are satisfied and the Global Offering is not otherwise terminated. Further details are set out in "*Structure of the Global Offering*".

You will not be entitled to exercise any remedy of rescission for innocent misrepresentation at any time after acceptance of your application. This does not affect any other right you may have.

E. CIRCUMSTANCES IN WHICH YOU WILL NOT BE ALLOCATED HONG KONG OFFER SHARES

You should note the following situations in which the Hong Kong Offer Shares will not be allocated to you:

(a) If your application is revoked:

By completing and submitting an Application Form or giving **electronic application instructions** to HKSCC or through the **White Form eIPO** service, you agree that your application or the application made by HKSCC Nominees on your behalf cannot be revoked on or before Tuesday, 25 December 2018. This agreement will take effect as a collateral contract with the Company.

Your application or the application made by HKSCC Nominees on your behalf may only be revoked on or before Tuesday, 25 December 2018 in the following circumstances:

(i) if a person responsible for this prospectus under Section 40 of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (as applied by Section 342E of the Companies (Winding Up and Miscellaneous Provisions) Ordinance) gives a public notice under that section on or before the fifth day after the time of the opening of the application lists (excluding any day which is a Saturday, Sunday or public holiday in Hong Kong) which excludes or limits that person's responsibility for this prospectus; or

(ii) if any supplement to this prospectus is issued, in which case applicants who have already submitted an application will be notified that they are required to confirm their applications. If applicants have been so notified but have not confirmed their applications in accordance with the procedure to be notified, all unconfirmed applications will be deemed revoked.

If your application or the application made by HKSCC Nominees on your behalf has been accepted, it cannot be revoked. For this purpose, acceptance of applications which are not rejected will be constituted by notification in the press of the results of allocation, and where such basis of allocation is subject to certain conditions or provides for allocation by ballot, such acceptance will be subject to the satisfaction of such conditions or results of the ballot, respectively.

(b) If the Company or its agents exercise their discretion to reject your application:

The Company, the Joint Global Coordinators, the **White Form eIPO** Service Provider and their respective agents or nominees have full discretion to reject or accept any application, or to accept only part of any application, without giving any reasons.

(c) If the allocation of Hong Kong Offer Shares is void:

The allocation of Hong Kong Offer Shares will be void if the Listing Committee does not grant permission to list the Shares either:

- within three weeks from the closing date of the applications lists; or
- within a longer period of up to six weeks if the Listing Committee notifies the Company of that longer period within three weeks of the closing date of the application lists.

(d) If:

- you make multiple applications or are suspected of making multiple applications;
- you or the person for whose benefit you apply for, have applied for or taken up, or indicated an interest for, or have been or will be placed or allocated (including conditionally and/or provisionally) Hong Kong Offer Shares and International Offer Shares;
- your payment is not made correctly or the cheque or banker's cashier order paid by you is dishonoured upon its first presentation;
- your Application Form is not completed in accordance with the stated instructions;
- your **electronic application instructions** through the **White Form eIPO** service are not completed in accordance with the instructions, terms and conditions on the designated website at **www.eipo.com.hk**;
- you apply for more than 2,972,100 Hong Kong Offer Shares, being approximately 50% of the 5,944,200 Hong Kong Offer Shares initially available under the Hong Kong Public Offering;
- the Company or the Joint Global Coordinators believe that by accepting your application, it would violate applicable securities or other laws, rules or regulations; or
- the Underwriting Agreements do not become unconditional or are terminated.

F. REFUND OF APPLICATION MONIES

If an application is rejected, not accepted or accepted in part only, or if the Offer Price as finally determined is less than the Maximum Offer Price per Offer Share (excluding brokerage, SFC transaction levy and Stock Exchange trading fee payable thereon) paid on application, or if the conditions of the Global Offering as set out in "*Structure of the Global Offering – Conditions of the Global Offering*" are not satisfied or if any application is revoked, the application monies, or the appropriate portion thereof, together with the related brokerage, SFC transaction levy and Stock Exchange trading fee, will be refunded, without interest or the cheque or banker's cashier order will not be cleared.

Any refund of your application monies will be made on or before Wednesday, 5 December 2018.

G. DESPATCH/COLLECTION OF SHARE CERTIFICATES/e-REFUND PAYMENT INSTRUCTIONS/REFUND CHEQUES

You will receive one Share certificate for all Hong Kong Offer Shares allocated to you under the Hong Kong Public Offering (except pursuant to applications made on **YELLOW** Application Forms or by **electronic application instructions** to HKSCC via CCASS where the Share certificates will be deposited into CCASS as described below).

No temporary document of title will be issued in respect of the Offer Shares. No receipt will be issued for sums paid on application.

If you apply by **WHITE** or **YELLOW** Application Form, subject to personal collection as mentioned below, the following will be sent to you (or, in the case of joint applicants, to the first-named applicant) by ordinary post, at your own risk, to the address specified on the Application Form:

(a) Share certificate(s) for all the Hong Kong Offer Shares allocated to you (for applicants on **YELLOW** Application Forms, Share certificate(s) for the Hong Kong Offer Shares allocated to you will be deposited into CCASS as described below); and

(b) refund cheque(s) crossed "Account Payee Only" in favour of the applicant (or, in the case of joint applicants, the first-named applicant) for (i) all or the surplus application monies for the Hong Kong Offer Shares, wholly or partially unsuccessfully applied for and/or (ii) the difference between the Offer Price and the Maximum Offer Price paid on application in the event that the Offer Price is less than the Maximum Offer Price paid on application (including brokerage of 1.0%, SFC transaction levy of 0.0027% and Stock Exchange trading fee of 0.005% but without interest).

Part of the Hong Kong identity card number/passport number provided by you or the first-named applicant (if you are joint applicants) may be printed on your refund cheque, if any. Your banker may require verification of your Hong Kong identity card number/passport number before encashment of your refund cheque. Inaccurate completion of your Hong Kong identity card number/passport number may invalidate or delay encashment of your refund cheque.

Subject to arrangement on despatch/collection of Share certificates and refund cheques as mentioned below, any refund cheques and Share certificate(s) are expected to be posted on or before Wednesday, 5 December 2018. The right is reserved to retain any Share certificate(s) and any surplus application monies pending clearance of cheque(s) or banker's cashier order(s).

Share certificates will only become valid at 8:00 a.m. on Thursday, 6 December 2018, provided that the Global Offering has become unconditional in all respects at or before that time. Investors who trade Share on the basis of publicly available allocation details or prior to the receipt of the Share certificates or prior to the Share certificates becoming valid do so entirely at their own risk.

Personal Collection

(a) If you apply using a WHITE Application Form:

- If you apply for 1,000,000 Hong Kong Offer Shares or more on a **WHITE** Application Form and have provided all information required by your Application Form, you may collect your refund cheque(s) and/or Share certificate(s) (where applicable) from the Hong Kong Share Registrar, Computershare Hong Kong Investor Services Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong from 9:00 a.m. to 1:00 p.m. on Wednesday, 5 December 2018, or any other place or date notified by the Company in the newspapers.

- If you are an individual who is eligible for personal collection, you must not authorise any other person to collect for you. If you are a corporate applicant who is eligible for personal collection, your authorised representative must provide a letter of authorisation from your corporation stamped with your corporation's chop. Both individuals and authorised representatives must produce, at the time of collection, evidence of identity acceptable to the Hong Kong Share Registrar.

- If you do not personally collect your refund cheque(s) and/or Share certificate(s) (where applicable) within the time specified for collection, they will be despatched promptly to you to the address specified in your Application Form by ordinary post and at your own risk.

- If you apply for less than 1,000,000 Hong Kong Offer Shares on a **WHITE** Application Form, your refund cheque(s) and/or Share certificate(s) (where applicable) will be sent to the address specified in your Application Form on or before Wednesday, 5 December 2018 by ordinary post and at your own risk.

(b) If you apply using a YELLOW Application Form:

- If you apply for 1,000,000 Hong Kong Offer Shares or more and have provided all information required by your Application Form, please follow the same instructions as described above. If you have applied for less than 1,000,000 Hong Kong Offer Shares, your refund cheque(s) will be sent to the address specified in the Application Form on or before Wednesday, 5 December 2018 by ordinary post and at your own risk.

- If you apply by using a **YELLOW** Application Form and your application is wholly or partially successful, your Share certificate(s) will be issued in the name of HKSCC Nominees and deposited into CCASS for credit to your or your designated CCASS Participant's stock account as stated in your Application Form on Wednesday, 5 December 2018 or, in the event of a contingency, on any other date determined by HKSCC or HKSCC Nominees.

- If you apply through a designated CCASS Participant (other than a CCASS Investor Participant), for Hong Kong Offer Shares credited to your designated CCASS Participant's stock account (other than a CCASS Investor Participant), you can check the number of Hong Kong Offer Shares allocated to you with that CCASS Participant.

- If you apply as a CCASS Investor Participant, the Company expects to publish the results of CCASS Investor Participants' applications together with the results of the Hong Kong Public Offering on Wednesday, 5 December 2018 in the manner as described in "– Publication of Results" above. You should check the announcement published by the Company and report any discrepancies to HKSCC before 5:00 p.m. on Wednesday, 5 December 2018 or any other date as determined by HKSCC or HKSCC Nominees. Immediately after the credit of the Hong Kong Offer Shares to your stock account, you can check your new account balance via the CCASS Phone System and the CCASS Internet System. HKSCC will also make available to you an activity statement showing the number of Hong Kong Offer Shares credited to your CCASS Investor Participant stock account.

(c) If you apply through White Form eIPO service:

- If you apply for 1,000,000 Hong Kong Offer Shares or more through the **White Form eIPO** service and your application is wholly or partially successful, you may collect your Share certificate(s) (where applicable) in person from the Hong Kong Share Registrar, Computershare Hong Kong Investor Services Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, from 9:00 a.m. to 1:00 p.m. on Wednesday, 5 December 2018, or any other place or date notified by the Company in the newspapers as the date of despatch or collection of Share certificates.

- If you do not personally collect your Share certificate(s) within the time specified for collection, they will be sent to the address specified in your application instructions by ordinary post and at your own risk.

- If you apply for less than 1,000,000 Hong Kong Offer Shares through the **White Form eIPO** service, your Share certificate(s) (where applicable) will be sent to the address specified in your application instructions on or before Wednesday, 5 December 2018 by ordinary post and at your own risk.

- If you apply and pay the application monies from a single bank account, any refund monies will be despatched to that bank account in the form of e-Refund payment instructions. If you apply and pay the application monies from multiple bank accounts, any refund monies will be despatched to the address specified in your application instructions in the form of refund cheque(s) by ordinary post and at your own risk.

(d) If you apply by giving electronic application instructions to HKSCC via CCASS:

Allocation of Hong Kong Offer Shares

- For the purposes of allocating Hong Kong Offer Shares, HKSCC Nominees will not be treated as an applicant. Instead, each CCASS Participant who gives **electronic application instructions** or each person for whose benefit instructions are given will be treated as an applicant.

Deposit of Share Certificates into CCASS and Refund of Application Monies

- If your application is wholly or partially successful, your Share certificate(s) will be issued in the name of HKSCC Nominees and deposited into CCASS for the credit of your designated CCASS Participant's stock account or your CCASS Investor Participant stock account on Wednesday, 5 December 2018 or on any other date determined by HKSCC or HKSCC Nominees.

- The Company expects to publish the application results of CCASS Participants (and where the CCASS Participant is a broker or custodian, the Company will include information relating to the relevant beneficial owner), your Hong Kong identity card/passport/Hong Kong business registration number or other identification code (Hong Kong business registration number for corporations) and the basis of allocations of the Hong Kong Offer Shares in the manner as described in "– *Publication of Results*" above on Wednesday, 5 December 2018. You should check the announcement published by the Company and report any discrepancies to HKSCC before 5:00 p.m. on Wednesday, 5 December 2018 or such other date as determined by HKSCC or HKSCC Nominees.

- If you have instructed your broker or custodian to give **electronic application instructions** on your behalf, you can also check the number of Hong Kong Offer Shares allocated to you and the amount of refund monies (if any) payable to you with that broker or custodian.

- If you have applied as a CCASS Investor Participant, you can also check the number of Hong Kong Offer Shares allocated to you and the amount of refund monies (if any) payable to you via the CCASS Phone System and the CCASS Internet System (under the procedures contained in HKSCC's "An Operating Guide for Investor Participants" in effect from time to time) on Wednesday, 5 December 2018. Immediately following the credit of the Hong Kong Offer Shares to your stock account and the credit of the refund monies to your bank account, HKSCC will also make available to you an activity statement showing the number of Hong Kong Offer Shares credited to your CCASS Investor Participant stock account and the amount of refund monies (if any) credited to your designated bank account.

- Refund of your application monies (if any) in respect of wholly and partially unsuccessful applications and/or difference between the Offer Price and the Maximum Offer Price per Offer Share initially paid on application (including brokerage, SFC transaction levy and Stock Exchange trading fee but without interest) will be credited to your designated bank account or the designated bank account of your broker or custodian on Wednesday, 5 December 2018.

H. ADMISSION OF THE SHARES INTO CCASS

If the Stock Exchange grants the listing of, and permission to deal in, the Shares and the Company complies with the stock admission requirements of HKSCC, the Shares will be accepted as eligible securities by HKSCC for deposit, clearance and settlement in CCASS with effect from the date of commencement of dealings in the Shares on the Stock Exchange or any other date HKSCC chooses. Settlement of transactions between Exchange Participants (as defined in the Listing Rules) is required to take place in CCASS on the second business day after any trading day.

All activities under CCASS are subject to the General Rules of CCASS and CCASS Operational Procedures in effect from time to time.

Investors should seek the advice of their stockbroker or other professional adviser for details of the settlement arrangements as such arrangements may affect their rights and interests.

All necessary arrangements have been made to enable the Shares to be admitted into CCASS.

The following is the text of a report set out on pages IA-1 to IA-136, received from the Company's joint reporting accountants, SHINEWING (HK) CPA Limited and ShineWing Australia, independent members of ShineWing International Limited, for the purpose of incorporation in this prospectus. It is prepared and addressed to the Directors of the Company and to the Joint Sponsors pursuant to the requirements of HKSIR 200 Accountants' Report on Historical Financial Information in Investment Circulars issued by the Hong Kong Institute of Certified Public Accountants.

SHINEWING (HK) CPA Limited
43/F., Lee Garden One,
33 Hysan Avenue,
Causeway Bay, Hong Kong

ShineWing Australia
Level 8,
167 Macquarie Street
Sydney NSW 2000

ACCOUNTANTS' REPORT ON HISTORICAL FINANCIAL INFORMATION TO THE DIRECTORS OF YANCOAL AUSTRALIA LTD, CMB INTERNATIONAL CAPITAL LIMITED, MORGAN STANLEY ASIA LIMITED AND BOCI ASIA LIMITED

Introduction

We report on the historical financial information of Yancoal Australia Ltd (the "Company") and its subsidiaries (hereinafter collectively referred to as the "Group") set out on pages IA-4 to IA-136, which comprises the consolidated statements of financial position of the Group and the statements of financial position of the Company as at 31 December 2015, 2016 and 2017 and 30 June 2018 and the consolidated statements of profit or loss and other comprehensive income, the consolidated statements of changes in equity and the consolidated statements of cash flows of the Group for each of the three financial years ended 31 December 2015, 2016 and 2017 and six months ended 30 June 2018 (the "Track Record Period") and a summary of significant accounting policies and other explanatory information (together, the "Historical Financial Information"). The Historical Financial Information set out on pages IA-4 to IA-136 forms an integral part of this report, which has been prepared for inclusion in the prospectus of the Company dated 26 November 2018 (the "Prospectus") in connection with the listing of the shares of the Company on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange").

Directors' Responsibility for the Historical Financial Information

The directors of the Company are responsible for the preparation of the Historical Financial Information that gives a true and fair view in accordance with the basis of preparation and presentation set out in note 2 to the Historical Financial Information, and for such internal control as the directors of the Company determine is necessary to enable the preparation of the Historical Financial Information that is free from material misstatement, whether due to fraud or error.

Reporting Accountants' Responsibility

Our responsibility is to express an opinion on the Historical Financial Information and to report our opinion to you. We conducted our work in accordance with Hong Kong Standard on Investment Circular Reporting Engagements 200 "Accountants' Reports on Historical Financial Information in Investment Circulars" issued by the Hong Kong Institute of Certified Public Accountants (the "HKICPA"). This standard requires that we comply with ethical standards and plan and perform our work to obtain reasonable assurance about whether the Historical Financial Information is free from material misstatement.

Our work involved performing procedures to obtain evidence about the amounts and disclosures in the Historical Financial Information. The procedures selected depend on the reporting accountants' judgement, including the assessment of risks of material misstatement of the Historical Financial Information, whether due to fraud or error. In making those risk assessments, the reporting accountants consider internal control relevant to the entity's preparation of the Historical Financial Information that give a true and fair view in accordance with the basis of preparation and presentation set out in note 2 to the Historical Financial Information in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Our work also included evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors of the Company, as well as evaluating the overall presentation of the Historical Financial Information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the Historical Financial Information gives, for the purpose of the accountants' report, a true and fair view of the financial position of the Group and the Company as at 31 December 2015, 2016 and 2017 and 30 June 2018 and of the Group's financial performance and cash flows for the Track Record Period in accordance with the basis of preparation and presentation set out in note 2 to the Historical Financial Information.

Review of Stub Period Comparative Financial Information

We have reviewed the stub period comparative financial information of the Group which comprises consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the six months ended 30 June 2017 and other explanatory information (the "Stub Period Comparative Financial Information"). The directors of the Company are responsible for the preparation and presentation of the Stub Period Comparative Financial Information in accordance with the basis of preparation and presentation set out in note 2 to the Historical Financial Information. Our responsibility is to express a conclusion on the Stub Period Comparative Financial Information based on our review. We conducted our review in accordance with International Standard on Review Engagements 2410, Review of Interim Financial Information Preformed by the Independent Auditor of the Entity issued by the International Auditing and Assurance Standards Board ("IAASB"). A review consists of making inquires, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion. Based on our review, nothing has come to our attention that causes us to believe that the Stub Period Comparative Financial Information, for the purposes of the accountants' report, is not prepared, in all material respects, in accordance with the basis of preparation and presentation set out in note 2 to the Historical Financial Information.

Report on matters under the rules governing the listing of securities on The Stock Exchange of Hong Kong Limited and the Companies (Winding Up and Miscellaneous Provisions) Ordinance

Adjustments

In preparing the Historical Financial Information, adjustments to the Underlying Financial Statements as defined on page IA-4 have been made.

Dividends

We refer to note 13 to the Historical Financial Information which states that no dividends have been paid by the Company in respect of the Track Record Period and contains information about the dividends declared by the Company after the Track Record Period.

SHINEWING (HK) CPA Limited
Certified Public Accountants
Chan Wing Kit
Practising Certificate Number: P03224
Hong Kong
26 November 2018

ShineWing Australia
Chartered Accountants
Rami Eltchelebi
Sydney
26 November 2018

HISTORICAL FINANCIAL INFORMATION OF THE GROUP

Preparation of Historical Financial Information

Set out below is the Historical Financial Information which forms an integral part of this accountants' report.

The consolidated financial statements of the Group for the Track Record Period ("Underlying Financial Statements") prepared in accordance with accounting policies which conform with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board ("IASB"), on which the Historical Financial Information is based, were audited by ShineWing Australia in accordance with Australian Auditing Standards issued by the Auditing and Assurance Standards Board in Australia.

The Historical Financial Information is presented in Australian Dollars ("A$") and all values are rounded to the nearest million (A$M) except when otherwise indicated.

A. HISTORICAL FINANCIAL INFORMATION

CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

		Year ended 31 December			Six months ended 30 June	
	NOTES	**2015**	**2016**	**2017**	**2017**	**2018**
		A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
Revenue	*7*	1,319	1,238	2,601	832	2,347
Other income	*8*	34	15	325	8	115
Changes in inventories of finished goods and work in progress		2	(7)	7	10	24
Raw materials and consumables used		(213)	(187)	(349)	(109)	(337)
Employee benefits	*11*	(229)	(188)	(302)	(102)	(254)
Depreciation and amortisation	*11*	(200)	(133)	(256)	(80)	(244)
Transportation		(261)	(267)	(312)	(122)	(274)
Contractual services and plant hire		(218)	(124)	(274)	(90)	(206)
Government royalties		(77)	(71)	(173)	(53)	(161)
Changes in deferred mining costs		(7)	–	–	–	–
Coal purchases		(158)	(211)	(340)	(148)	(182)
Other operating expenses		(147)	(163)	(330)	(76)	(170)
Finance costs	*9*	(162)	(209)	(294)	(105)	(152)
Share of (loss)/profit of equity-accounted investees, net of tax		(37)	(5)	32	17	33
(Loss)/profit before income tax	*11*	(354)	(312)	335	(18)	539
Income tax benefit/(expense)	*10*	63	85	(89)	4	(178)
(Loss)/profit for the year/period		(291)	(227)	246	(14)	361
Other comprehensive (expense)/income (after income tax):						
Items that may be reclassified subsequently to profit or loss:						
Cash flow hedges:						
Fair value (losses)/gains		(475)	(43)	348	290	(246)
Fair value losses transferred to profit and loss		22	133	229	101	45
Deferred taxes		134	(27)	(173)	(117)	60
Other comprehensive (expense)/income for the year/period, net of tax		(319)	63	404	274	(141)
Total comprehensive (expense)/income for the year/period		(610)	(164)	650	260	220
(Loss)/profit for the year/period attributable to:						
Equity holders of the Company		(291)	(227)	246	(14)	361
Non-controlling interests		–	–	–	–	–
		(291)	(227)	246	(14)	361
Total comprehensive (expense)/income for the year/period attributable to:						
Equity holders of the Company		(610)	(164)	650	260	220
Non-controlling interests		–	–	–	–	–
		(610)	(164)	650	260	220
(Loss)/earnings per share	*14*					
Basic (loss)/profit per share (A$)		(9.30)	(7.26)	0.54	(0.44)	0.29
Diluted (loss)/profit per share (A$)		(9.30)	(7.26)	0.31	(0.44)	0.29

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

	NOTES	At 31 December 2015	2016	2017	At 30 June 2018
		A$M	A$M	A$M	A$M
Current assets					
Cash and cash equivalents	15	154	190	207	485
Trade and other receivables	16	225	435	658	561
Royalty receivable	17	20	31	24	28
Non-contingent royalty receivable	29	–	–	–	18
Inventories	18	76	75	150	205
Other current assets		12	7	37	16
		487	738	1,076	1,313
Assets classified as held for sale	25	1,637	–	613	57
		2,124	738	1,689	1,370
Non-current assets					
Mining tenements	19	2,085	2,128	4,296	4,308
Exploration and evaluation assets	20	591	498	565	577
Intangible assets	21	72	70	99	98
Property, plant and equipment	22	1,250	1,526	2,832	2,938
Investments accounted for using the equity method	23	8	5	251	280
Trade and other receivables	16	379	407	473	348
Interest bearing loan to an associate	24	–	775	712	730
Royalty receivable	17	185	168	175	170
Non-contingent royalty receivable	29	–	–	–	7
Deferred tax assets	30	1,166	1,339	1,219	1,086
Other non-current assets		10	6	2	2
		5,746	6,922	10,624	10,544
Total assets		7,870	7,660	12,313	11,914
Current liabilities					
Trade and other payables	26	292	469	758	783
Interest-bearing liabilities	27	11	20	17	17
Provision	28	12	10	59	42
Non-contingent royalty payable	29	–	–	112	64
Derivative financial instruments		1	–	–	–
		316	499	946	906
Liabilities directly associated with assets classified as held for sale	25	322	–	67	–
		638	499	1,013	906

	NOTES	At 31 December 2015	At 31 December 2016	At 31 December 2017	At 30 June 2018
		A$M	A$M	A$M	A$M
Non-current liabilities					
Interest-bearing liabilities	27	4,721	4,930	4,682	4,267
Deferred tax liabilities	30	692	762	1,037	990
Provision	28	131	117	488	460
Non-contingent royalty payable	29	–	–	48	24
Deferred income		–	–	2	2
		5,544	5,809	6,257	5,743
Total liabilities		6,182	6,308	7,270	6,649
Net assets		1,688	1,352	5,043	5,265
Equity					
Contributed equity	31	3,103	3,104	6,217	6,220
Reserves		(880)	(817)	(413)	(554)
Accumulated losses		(535)	(935)	(764)	(403)
Equity attributable to equity holders of the Company		1,688	1,352	5,040	5,263
Non-controlling interests	36	–	–	3	2
Total equity		1,688	1,352	5,043	5,265

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

	Attributable to equity holders of the Company			
	Contributed equity	Hedge reserve	Accumulated losses	Total
	A$M (note 31)	*A$M (note 31)*	*A$M*	*A$M*
At 1 January 2015	3,106	(561)	(58)	2,487
Loss for the year	–	–	(291)	(291)
Other comprehensive loss:				
– Cash flow hedge reserve recognised	–	(319)	–	(319)
Total comprehensive loss for the year	–	(319)	(291)	(610)
Transactions with owners				
– Transaction cost of new subordinated capital notes ("SCN")	(3)	–	–	(3)
– Distributions to holders of SCN	–	–	(186)	(186)
Transactions with owners	(3)	–	(186)	(189)
At 31 December 2015	3,103	(880)	(535)	1,688
At 1 January 2016	3,103	(880)	(535)	1,688
Loss for the year	–	–	(227)	(227)
Other comprehensive income:				
– Cash flow hedge reserve recognised	–	63	–	63
Total comprehensive income/(loss) for the year	–	63	(227)	(164)
Transactions with owners				
– Transaction cost of new SCN	1	–	–	1
– Distributions to holders of SCN, net of exchange difference *(note 32)*	–	–	(173)	(173)
Transactions with owners	1	–	(173)	(172)
At 31 December 2016	3,104	(817)	(935)	1,352

	Attributable to equity holders of the Company					
	Contributed equity	Hedge reserve	Accumulated losses	Total	Non-controlling interests	Total
	A$M (note 31)	*A$M (note 31)*	*A$M*	*A$M*	*A$M (note 36)*	*A$M*
At 1 January 2017	3,104	(817)	(935)	1,352	–	1,352
Profit for the year	–	–	246	246	–	246
Other comprehensive income for the year:						
– Cash flow hedge reserve recognised	–	404	–	404	–	404
Total comprehensive income for the year	–	404	246	650	–	650
Transactions with owners						
– Issuance of ordinary shares	5,296	–	–	5,296	–	5,296
– SCN converted to ordinary shares	(2,183)	–	–	(2,183)	–	(2,183)
– Distribution paid to holders of SCN, net of exchange difference *(note 32)*	–	–	(75)	(75)	–	(75)
– Non-controlling interests on acquisition of subsidiaries *(note 36)*	–	–	–	–	3	3
Total transactions with owners	3,113	–	(75)	3,038	3	3,041
At 31 December 2017	6,217	(413)	(764)	5,040	3	5,043

For the six months ended 30 June 2018

	Attributable to equity holders of the Company							
	Contributed equity	Hedge reserve	Treasury shares reserve	Employee compensation reserve	Accumulated losses	Total	Non-controlling interests	Total
	A$M (note 31)	*A$M (note 31)*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M (note 36)*	*A$M*
At 1 January 2018	6,217	(413)	–	–	(764)	5,040	3	5,043
Profit for the period	–	–	–	–	361	361	–	361
Other comprehensive loss for the period:								
– Cash flow hedge reserve recognised	–	(141)	–	–	–	(141)	–	(141)
Total comprehensive (loss)/income for the period	–	(141)	–	–	361	220	–	220
Transactions with owners								
– Transaction cost, net of tax	3	–	–	–	–	3	–	3
– Acquisition of shares	–	–	(6)	–	–	(6)	–	(6)
– Share-based payment	–	–	–	6	–	6	–	6
– Acquisition of additional interests in a joint operation *(note 36)*	–	–	–	–	–	–	(1)	(1)
Total transactions with owners	3	–	(6)	6	–	3	(1)	2
At 30 June 2018	6,220	(554)	(6)	6	(403)	5,263	2	5,265

For the six months ended 30 June 2017 (unaudited)

	Attributable to equity holders of the Company					
	Contributed equity	Hedge reserve	Accumulated losses	Total	Non-controlling interests	Total
	A$M (note 31)	*A$M (note 31)*	*A$M*	*A$M*	*A$M*	*A$M*
At 1 January 2017 (audited)	3,104	(817)	(935)	1,352	–	1,352
Loss for the period	–	–	(14)	(14)	–	(14)
Other comprehensive income for the period:						
– Cash flow hedge reserve recognised	–	274	–	274	–	274
Total comprehensive income (loss) for the period	–	274	(14)	260	–	260
Transactions with owners						
– Distributions to holders of SCN, net of exchange difference *(note 32)*	–	–	(78)	(78)	–	(78)
Total transactions with owners	–	–	(78)	(78)	–	(78)
At 30 June 2017 (unaudited)	3,104	(543)	(1,027)	1,534	–	1,534

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
OPERATING ACTIVITIES					
(Loss)/profit before income tax	(354)	(312)	335	(18)	539
Adjustments for:					
Interest expenses	154	200	220	101	137
Interest income	(50)	(125)	(114)	(57)	(58)
Gain on non-substantial loan modification	–	–	(31)	–	–
Depreciation and amortisation	200	133	256	80	244
Release of provisions	(13)	(14)	(87)	(6)	(32)
Other interest charges	–	–	7	–	7
Provision of inventories	12	1	1	–	1
Unwinding of discount on provisions	6	5	50	2	6
Remeasurement on financial assets/liabilities	(2)	6	(8)	(2)	27
Impairment of financial assets	–	–	–	–	21
Net loss on disposal of property, plant and equipment	3	7	4	–	6
Stamp duty accrual	–	(5)	9	–	(9)
Impairment reversal of mining tenements	–	–	(100)	–	–
Fair value losses recycled from hedge reserve	–	133	229	101	45
Foreign exchange (gains)/losses	(5)	1	20	10	(36)
Finance lease interest expenses	2	4	4	2	2
Gain on acquisition/(disposal) of interest in joint operation and subsidiaries	(6)	–	(177)	–	(78)
Release of research and development provision	(4)	–	–	–	–
Gain on forward foreign exchange contracts	(1)	–	–	–	–
Unwind of discount on non-contingent royalty	–	–	13	–	–
Share of loss/(profit) of equity-accounted investees, net of tax	37	5	(32)	(17)	(33)
Operating cash flows before movements in working capital	(21)	39	599	196	789
(Increase)/decrease in inventories	(22)	9	(12)	(15)	(44)
Decrease/(increase) in operating receivables	50	(55)	(184)	100	10
Increase/(decrease) in operating payables	12	73	125	38	47
Decrease/(increase) in prepayments	7	9	(10)	4	8
Decrease in deferred mining assets	7	–	–	–	–
Decrease in provisions	(22)	(4)	–	1	(24)
Cash generated from operations					
Interest paid	(126)	(181)	(169)	(79)	(111)
Interest received	7	86	59	37	37
NET CASH (USED IN)/FROM OPERATING ACTIVITIES	(108)	(24)	408	282	712

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
INVESTING ACTIVITIES					
Purchase of property, plant and equipment	(290)	(353)	(299)	(138)	(71)
Payment for capitalised exploration and evaluation activities	(2)	–	(3)	(1)	(2)
Proceeds for disposal of property, plant and equipment	–	1	1	–	–
Reduction in cash balance from loss of control of subsidiaries	–	(11)	–	–	–
Payments for acquisition of interest in subsidiary (net of cash acquired)	(23)	–	(3,247)	–	(276)
Proceeds from disposal of interest in joint venture and subsidiaries (net of cash acquired)	–	–	–	–	524
Payment of non-contingent royalties	–	–	–	–	(78)
Receipts from non-contingent royalties	–	–	–	–	59
Payment for joint operation call option fee	–	–	(13)	–	–
Advances (to)/from joint operation	–	(40)	40	35	–
Repayment of loan from joint venture	–	–	–	–	69
Advances (to)/from related entities	–	(35)	35	5	(4)
Cash transferred from/(to) restricted accounts	1	(28)	31	(34)	–
Dividend received	–	–	6	–	7
NET CASH (USED IN)/FROM INVESTING ACTIVITIES	(314)	(466)	(3,449)	(133)	228
FINANCING ACTIVITIES					
Repayment of borrowings from associate	–	623	214	57	253
Advance of borrowings to associate	–	(35)	(151)	(42)	(271)
Proceeds from interest-bearing liabilities – related entities	402	251	188	–	–
Repayment of interest bearing liabilities	–	(198)	(196)	–	(664)
Payment for treasury shares	–	–	–	–	(6)
Payment of transaction costs	(13)	–	(68)	–	–
Payment of SCN distribution	(12)	(100)	(24)	(13)	–
Payment of finance lease liabilities	(11)	(16)	(26)	(16)	(10)
Proceeds from issues of shares and other equity securities	–	–	3,125	–	–
NET CASH FROM/(USED IN) FINANCING ACTIVITIES	366	525	3,062	(14)	(698)
NET (DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS	(56)	35	21	135	242
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR/PERIOD	204	159	190	190	207
Effect of foreign exchange rate	11	(4)	(4)	(8)	36
Changes included in assets held for sale	(5)	–	–	–	–
CASH AND CASH EQUIVALENTS AT THE END OF YEAR/PERIOD, REPRESENTED BY CASH AND CASH EQUIVALENTS	154	190	207	317	485

STATEMENTS OF FINANCIAL POSITION OF THE COMPANY

	NOTES	At 31 December 2015	At 31 December 2016	At 31 December 2017	At 30 June 2018
		A$M	A$M	A$M	A$M
ASSETS					
Current assets					
Cash and cash equivalents	*15*	127	63	112	283
Trade and other receivables	*16*	1,014	168	240	242
Non-contingent royalty receivable	*29*	–	–	–	18
Other current assets		4	1	9	4
		1,145	232	361	547
Non-current assets					
Intangible assets	*21*	3	2	2	1
Property, plant and equipment	*22*	28	39	46	44
Investments in subsidiaries		613	3,948	7,497	7,497
Trade and other receivables	*16*	4,951	749	737	720
Non-contingent royalty receivable	*29*	–	–	–	7
Interest bearing loan to an associate	*24*	–	775	712	730
Deferred tax assets	*30*	836	1,188	1,014	1,013
Other non-current assets		–	1	12	1
		6,431	6,702	10,020	10,013
Total assets		7,576	6,934	10,381	10,560
Current liabilities					
Trade and other payables	*26*	156	163	1,134	2,137
Derivative financial instruments		1	–	–	–
Non-contingent royalty payable	*29*	–	–	112	64
		157	163	1,246	2,201
Non-current liabilities					
Interest-bearing liabilities	*27*	4,693	5,225	4,644	4,233
Other non-current liabilities		–	–	–	1
Non-contingent royalty payable	*29*	–	–	48	24
		4,693	5,225	4,692	4,258
Total liabilities		4,850	5,388	5,938	6,459
Equity					
Contributed equity		3,115	3,115	6,217	6,220
Reserves		(880)	(817)	(413)	(554)
Retained profits/ (accumulated losses)		491	(752)	(1,361)	(1,565)
		2,726	1,546	4,443	4,101
Total liabilities and equity		7,576	6,934	10,381	10,560

NOTES TO THE HISTORICAL FINANCIAL INFORMATION

1. GENERAL

The Company was incorporated in Australia in 2004. The Company was listed on the Australian Securities Exchange on 28 June 2012 upon the successful merger with Gloucester Coal Limited. The Company's parent and ultimate holding company is Yanzhou Coal Mining Company Limited (the "Parent Company") and Yankuang Group Corporation Limited, a state-owned enterprise in the People's Republic of China ("PRC"), respectively. The addresses of the registered office and principal place of business of the Company are stated in the "Corporate Information" section of the Prospectus.

The principal activity of the Company is coal mining. The activities of its principal subsidiaries, associates, joint ventures and joint operations (together with the Company referred to as the "Group") are set out in below and notes 23(a), 23(b) and 23(c) respectively.

The consolidated financial statements are presented in Australian Dollars ("A$"), which is also the functional currency of the Company.

Particulars of the Company's subsidiaries at the end of each reporting period and at the date of this report are as follows:

Name of company	Place of incorporation/ operation	Issued and fully paid share capital*	Percentage of equity interest attributable to the Group as at 31 December 2015	31 December 2016	31 December 2017	30 June 2018	Date of this report	Principal activities
		A$	*%*	*%*	*%*	*%*	*%*	
Yancoal SCN Ltd	Australia	1	100	100	100	100	100	Issue SCN
Yancoal Australia Sales Pty Ltd[(i)]	Australia	100	100	100	100	100	100	Coal Sales
Yancoal Resources Limited	Australia	446,409,065	100	100	100	100	100	Coal mining business in Australia
Yancoal Mining Services Pty Ltd	Australia	100	100	100	100	100	100	Provide management services to the underground mine
Moolarben Coal Mines Pty Ltd	Australia	1	100	100	100	100	100	Coal business development
Moolarben Coal Operations Pty Ltd	Australia	2	100	100	100	100	100	Management of coal operations
Moolarben Coal Sales Pty Ltd	Australia	2	100	100	100	100	100	Coal business development
Felix NSW Pty Ltd	Australia	2	100	100	100	100	100	Investment holding
SASE Pty Ltd	Australia	9,650,564	90	90	90	90	90	No business in Australia, to be liquidated
Yarrabee Coal Company Pty. Ltd.	Australia	92,080	100	100	100	100	100	Coal mining and sales
Proserpina Coal Pty Ltd	Australia	1	100	100	100	100	100	Coal mining and sales
Athena Coal Operations Pty Ltd	Australia	1	100	100	100	100	100	Dormant
Athena Coal Sales Pty Ltd	Australia	1	100	100	100	100	100	Dormant
Gloucester Coal Ltd[(i)]	Australia	719,720,808	100	100	100	100	100	Coal resource exploration development

Name of company	Place of incorporation/ operation	Issued and fully paid share capital*	Percentage of equity interest attributable to the Group as at 31 December 2015	31 December 2016	31 December 2017	30 June 2018	Date of this report	Principal activities
		A$	%	%	%	%	%	
Westralian Prospectors N.L.[(i)]	Australia	93,001	100	100	100	100	100	No business in Australia
Eucla Mining N.L.[(i)]	Australia	2	100	100	100	100	100	Coal mining
CIM Duralie Pty Ltd[(ii)]	Australia	665	100	100	100	100	100	No business in Australia
Duralie Coal Marketing Pty Ltd[(ii)]	Australia	2	100	100	100	100	100	No business in Australia
Duralie Coal Pty Ltd[(i)]	Australia	2	100	100	100	100	100	Coal mining
Gloucester (SPV) Pty Ltd	Australia	2	100	100	100	100	100	Holding company
Gloucester (Sub Holdings 2) Pty Ltd[(ii)]	Australia	2	100	100	100	100	100	Holding company
CIM Mining Pty Ltd[(i)]	Australia	30,180,720	100	100	100	100	100	Holding Company
Monash Coal Holdings Pty Ltd[(ii)]	Australia	100	100	100	100	100	100	Holding Company
CIM Stratford Pty Ltd[(i)]	Australia	21,558,606	100	100	100	100	100	Holding Company
CIM Services Pty Ltd[(ii)]	Australia	8,400,002	100	100	100	100	100	Holding Company
Monash Coal Pty Ltd[(ii)]	Australia	100	100	100	100	100	100	Coal exploration
Stratford Coal Pty Ltd[(ii)]	Australia	10	100	100	100	100	100	Coal mining
Stratford Coal Marketing Pty Ltd[(ii)]	Australia	10	100	100	100	100	100	Coal sales
Paway Ltd	British Virgin Islands	1	100	100	100	100	100	Dormant
Coal & Allied Industries Ltd ("Coal & Allied")	Australia	86,584,735	–	–	100	100	100	Coal mining and related coal preparation and marketing
Kalamah Pty Ltd	Australia	1	–	–	100	100	100	Holding company
Coal & Allied (NSW) Pty Ltd	Australia	10,000	–	–	100	100	100	Employment company for Mt Thorley mine and Warkworth mine (together, "MTW") operation
Australian Coal Resources Ltd	Australia	5	–	–	100	100	100	Coal mining and related coal preparation and marketing
Coal & Allied Operations Pty Ltd	Australia	17,147,500	–	–	100	100	100	Coal mining and related coal preparation and marketing

Name of company	Place of incorporation/ operation	Issued and fully paid share capital*	Percentage of equity interest attributable to the Group as at 31 December 2015	31 December 2016	31 December 2017	30 June 2018	Date of this report	Principal activities
		A$	%	%	%	%	%	
HV Operations Pty Ltd[(iv)]	Australia	1	–	–	100	N/A	N/A	Managing entity of Hunter Valley Operations
Lower Hunter Land Holdings Pty Ltd	Australia	1	–	–	100	100	100	Management company of Lower Hunter Land entities
Oaklands Coal Pty Ltd	Australia	5,005	–	–	100	100	100	Coal exploration
Novacoal Australia Pty Ltd	Australia	530,000	–	–	100	100	100	Holding company
CNA Resources Ltd	Australia	14,258,694	–	–	100	100	100	Holding company
CNA Warkworth Pty Ltd	Australia	1	–	–	100	100	100	Holding company
Coal & Allied Mining Services Pty Ltd	Australia	10,000	–	–	100	100	100	Employment company for Mt Thorley Co Venture
RW Miller (Holdings) Ltd	Australia	42,907,017	–	–	100	100	100	Holding company
Mount Thorley Coal Loading Ltd	Australia	3,990,000	–	–	66	66	66	Operation of Mount Thorley Coal Loader in Mount Thorley
Gwandalan Land Pty Ltd	Australia	1	–	–	100	100	100	Holding company
Nords Wharf Land Pty Ltd	Australia	1	–	–	100	100	100	Invest in future land development at Nords Wharf
Catherine Hill Bay Land Pty Ltd	Australia	1	–	–	100	100	100	Hold land for future development
Black Hill Land Pty Ltd	Australia	1	–	–	100	100	100	Hold land for future development
Minmi Land Pty Ltd	Australia	1	–	–	100	100	100	Hold land for future development
Namoi Valley Coal Pty Ltd	Australia	8,400,000 ordinary shares 10,000 B-class 42,800,000 ordinary shares	–	–	100	100	100	Dormant
HVO Coal Sales Pty Ltd[(iv)]	Australia	1,000	–	–	68	N/A	N/A	Sales company for Hunter Valley Operations mining complex
CNA Warkworth Australasia Pty Ltd	Australia	2	–	–	100	100	100	Coal mining

Name of company	Place of incorporation/ operation	Issued and fully paid share capital*	Percentage of equity interest attributable to the Group as at 31 December 2015	31 December 2016	31 December 2017	30 June 2018	Date of this report	Principal activities
		A$	%	%	%	%	%	
CNA Bengalla Investments Pty Ltd	Australia	12	–	–	100	100	100	Dormant
Mount Thorley Operations Pty Ltd	Australia	24,214	–	–	100	100	100	Partner of Mount Thorley Joint Venture
Northern (Rhondda) Collieries Pty Ltd	Australia	62,082	–	–	100	100	100	Dormant
Miller Pohang Coal Company Pty Ltd	Australia	80 ordinary shares 20 redeemable preference shares	–	–	80	80	80	Coal sales and marketing company
Warkworth Mining Ltd	Australia	100	–	–	56	84	84	Joint venture operator
Warkworth Pastoral Company Pty Ltd	Australia	100	–	–	56	84	84	Pastoral company for the Joint Venture ("JV")
Warkworth Tailings Treatment Pty Ltd	Australia	100	–	–	56	84	84	Tailings company for the Warkworth JV
Warkworth Coal Sales Ltd	Australia	100	–	–	56	84	84	Marketing company for Warkworth JV
Parallax Holdings Pty Ltd	Australia	100	–	–	100	100	100	Dormant
HVO Services Pty Ltd[(iv)]	Australia	100	–	–	100	N/A	N/A	Dormant
Watagan Mining Company Pty Ltd ("Watagan")[(iii)]	Australia	100	100	N/A	N/A	N/A	N/A	Holding company
Austar Coal Mine Pty Limited[(i)(iii)]	Australia	64,000,000	100	N/A	N/A	N/A	N/A	Coal mining and sales
White Mining Limited[(iii)]	Australia	3,300,200	100	N/A	N/A	N/A	N/A	Holding company and mine management
White Mining Services Pty Limited[(iii)]	Australia	2	100	N/A	N/A	N/A	N/A	Dormant
White Mining (NSW) Pty Limited[(iii)]	Australia	10	100	N/A	N/A	N/A	N/A	Coal mining and sales
Ashton Coal Operations Pty Limited[(iii)]	Australia	5	100	N/A	N/A	N/A	N/A	Mine management
Ashton Coal Mines Ltd[(iii)]	Australia	5	100	N/A	N/A	N/A	N/A	Coal sales
Gloucester (Sub Holdings 1) Pty Ltd[(i)(iii)]	Australia	2	100	N/A	N/A	N/A	N/A	Holding company
Donaldson Coal Holdings Ltd[(i)(iii)]	Australia	204,945,942	100	N/A	N/A	N/A	N/A	Holding company
Donaldson Coal Pty Ltd[(i)(iii)]	Australia	6,688,782	100	N/A	N/A	N/A	N/A	Coal mining and sales

Name of company	Place of incorporation/ operation	Issued and fully paid share capital*	Percentage of equity interest attributable to the Group as at 31 December 2015	31 December 2016	31 December 2017	30 June 2018	Date of this report	Principal activities
		A$	*%*	*%*	*%*	*%*	*%*	
Donaldson Coal Finance Pty Ltd[(ii)(iii)]	Australia	10	100	N/A	N/A	N/A	N/A	Finance company
Abakk Pty Ltd[(ii)(iii)]	Australia	6	100	N/A	N/A	N/A	N/A	Dormant
Newcastle Coal Company Pty Ltd[(i)(iii)]	Australia	2,300,999	100	N/A	N/A	N/A	N/A	Coal mining
Primecoal International Pty Ltd[(ii)(iii)]	Australia	1	100	N/A	N/A	N/A	N/A	Dormant

Notes:

(i) These subsidiaries have been granted relief from the requirement to prepare financial reports in accordance with ASIC Legislative Instrument 2016/785.

(ii) These subsidiaries are members of the extended closed group for the purposes of ASIC Legislative Instrument 2016/785.

(iii) On 31 March 2016, the Group lost control of Watagan and its subsidiaries.

(iv) On 4 May 2018, the Group lost control of HVO Operations Pty Ltd, HVO Coal Sales Pty Ltd and HVO Services Pty (collectively referred as "HVO"). Details refer to note 23.

* Represents ordinary shares except when otherwise stated.

The following list contains details of the companies in the Historical Financial Information that are subject to audit during the Track Record Periods and the name of the respective auditors:

Name of Company	Financial period	Statutory auditor
The Company		
Yancoal Australia Ltd	31 December 2015-2017	ShineWing Australia
Subsidiaries		
Yancoal SCN Ltd	31 December 2015-2017	ShineWing Australia
Yancoal Resources Limited	31 December 2015-2017	ShineWing Australia
Moolarben Coal Mines Pty Ltd	31 December 2015-2017	ShineWing Australia
Coal & Allied[(i)]	31 December 2017	ShineWing Australia
Mount Thorley Coal Loading Ltd[(i)]	31 December 2017	ShineWing Australia
Warkworth Mining Ltd[(i)]	31 December 2017	ShineWing Australia
Warkworth Coal Sales Ltd[(i)]	31 December 2017	ShineWing Australia
Watagan[(ii)]	31 December 2016-2017	ShineWing Australia

(i) These entities were audited by PricewaterhouseCoopers for the years ended 31 December 2015 and 2016 prior to the Group's acquisition of the Coal and Allied Industries Ltd and its subsidiaries from Rio Tinto Limited ("Rio Tinto").

(ii) On 31 March 2016, the Group lost control of Watagan and its subsidiaries.

2. BASIS OF PREPARATION AND PRESENTATION

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRSs").

These consolidated financial statements include applicable disclosures required by the Hong Kong Companies Ordinance and the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules").

The consolidated financial statements have been prepared on a going concern basis.

3. APPLICATION OF NEW AND AMENDED IFRSs

For the purpose of preparing and presenting the Historical Financial Information for the Track Record Period, the Group has consistently adopted all of the new and revised IFRS, International Accounting Standards ("IASs"), IFRSs amendments and the related interpretations ("IFRICs") issued by the International Accounting Standards Board (the "IASB") which are effective for the Group's financial year beginning on 1 January 2018 throughout the Track Record Period. In addition, the Group has elected to apply IFRS 9 "Financial Instruments" and IFRS 15 "Revenue from Contracts with Customers" and the related Amendments throughout the Track Record Period.

New and revised IFRSs issued but not yet effective

At the date of authorisation of these consolidated financial statements, the following new and revised IFRSs have been published but are not yet effective, and have not been adopted early by the Group.

IFRS 16	Leases[1]
IFRS 17	Insurance Contracts[2]
Amendments to IFRSs	Annual improvements to IFRSs 2015-2017 Cycle[1]
Amendments to IFRS 9	Prepayment Features with Negative Compensation[1]
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture[3]
Amendments to IAS 19	Plan Amendment, Curtailment or Settlement[1]
Amendments to IAS 28	Long-term Interests in Associates and Joint Ventures[1]
IFRIC 23	Uncertainty over Income Tax Treatments[1]

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1 Effective for annual periods beginning on or after 1 January 2019.

2 Effective for annual periods beginning on or after 1 January 2021.

3 Effective date not yet been determined.

The directors of the Company anticipate that all the pronouncements will be adopted in the Group's accounting policy for the first period beginning after the effective date of the pronouncement. Information on new and amended IFRSs that are expected to have impact on the Group's accounting policies is provided below. Other new and amended IFRSs are not expected to have a material impact on the Group's consolidated financial statements.

IFRS 16 Leases

IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessors and lessees.

In respect of the lessee accounting, the standard introduces a single lessee accounting model, requiring lessees to recognise assets and liabilities for all leases with the lease term of more than 12 months, unless the underlying asset has a low value.

At the commencement date of the lease, the lessee is required to recognise a right-of-use asset at cost, which consists of the amount of the initial measurement of the lease liability, plus any lease payments made to the lessor at or before the commencement date less any lease incentives received, the initial estimate of restoration costs and any initial direct costs incurred by the lessee. A lease liability is initially recognised at the present value of the lease payments that are not paid at that date.

Subsequently, the right-of-use asset is measured at cost less any accumulated depreciation and any accumulated impairment losses, and adjusted for any remeasurement of the lease liability. Lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability, reducing the carrying amount to reflect the lease payment made, and remeasuring the carrying amount to reflect any reassessment or lease modifications or to reflect revised in-substance fixed lease payments. Depreciation and impairment expenses, if any, on the right-of-use asset will be charged to profit or loss following the requirements of IAS 16 *Property, Plant and Equipment*, while interest accrual on lease liability will be charged to profit or loss.

In respect of the lessor accounting, IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17 *Leases*. Accordingly, a lessor continues to classify its leases as operating leases or finance leases, and to account for those two types of leases differently.

IFRS 16 will supersede the current lease standards including IAS 17 *Leases* and the related interpretations when it becomes effective.

IFRS 16 will become effective for annual periods beginning on or after 1 January 2019 with early application permitted provided that the entity has applied IFRS 15 Revenue from Contracts with Customers at or before the date of initial application of IFRS 16.

As at 30 June 2018, the Group has non-cancellable operating lease commitments of A$177 million as disclosed in note 40. A preliminary assessment indicates that these arrangements will meet the definition of a lease under IFRS 16, and hence the Group will recognise a right-of-use asset and a corresponding liability in respect of all these leases unless they qualify for low value or short-term leases upon the application of IFRS 16. In addition, the application of new requirements may result changes in the measurement, presentation and disclosure as indicated above. The directors of the Company are in the process to determine the amounts of right-of-use assets and lease liabilities to be recognised in the consolidated statement of financial position, after taking into account all practical expedients and recognition exemption under IFRS 16. The directors of the Company expect that the adoption of IFRS 16 will not have material impact on the Group's results but certain portion of these lease commitments will be required to be recognised in the consolidated statement of financial position as right-of-use assets and lease liabilities.

4. SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments, which are stated at fair value. The principal accounting policies are set out below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal (or most advantageous) market at the measurement date under current market conditions (i.e. an exit price) regardless of whether that price is directly observable or estimated using another valuation technique. Details of fair value measurement are explained in the accounting policies set out below.

The principal accounting policies are set out below.

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and its subsidiaries for the Track Record Period.

Subsidiaries are entities controlled by the Group. The Group controls an entity when the Group is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. When assessing whether the Group has power over the entity, only substantive rights relating to the entity (held by the Group and others) are considered.

The Group includes the income and expenses of a subsidiary in the consolidated financial statements from the date it gains control until the date when the Group ceases to control the subsidiary.

Intra-group transactions, balances and unrealised gains and losses on transactions between group companies are eliminated in preparing the consolidated financial statements. Where unrealised losses on intra-group asset sales are reversed on consolidation, the underlying asset is also tested for impairment from the Group's perspective. Amounts reported in the financial statements of subsidiaries have been adjusted where necessary to ensure consistency with the accounting policies adopted by the Group.

Non-controlling interests represent the equity on a subsidiary not attributable directly or indirectly to the Company, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability. For each business combination, the Group can elect to measure any non-controlling interests either at fair value or at their proportionate share of the subsidiary's net identifiable assets.

Non-controlling interests are presented in the consolidated statements of financial position within equity, separately from the equity attributable to the owners of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated statement of profit or loss and other comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the owners of the Company.

Changes in the Group's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognised.

When the Group loses control of a subsidiary, the profit or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and any non-controlling interests. The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition for subsequent accounting under IFRS 9 "Financial Instruments" or, when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

In the Company's statement of financial position, subsidiaries are carried at cost less any impairment loss unless the subsidiary is held for sale or included in a disposal group. Cost is adjusted to reflect changes in consideration arising from contingent consideration amendments. Cost also includes direct attributable costs of investment.

The results of subsidiaries are accounted for by the Company on the basis of dividends received and receivable at the reporting date. All dividends whether received out of the investee's pre or post-acquisition profits are recognised in the Company's profit or loss.

Business combination

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs incurred to effect a business combination are recognised in profit or loss as incurred.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date, except that:

– deferred tax assets or liabilities arising from the assets acquired and liabilities assumed in the business combination are recognised and measured in accordance with IAS 12 *Income Taxes*;

– assets or liabilities related to the acquiree's employee benefit arrangements are recognised and measured in accordance with IAS 19 *Employee Benefits*;

– liabilities or equity instruments related to share-based payment transactions of the acquiree or the replacement of the acquiree's share-based payment transactions with the share-based payment transactions of the Group are measured in accordance with IFRS 2 *Share-based Payment* at the acquisition date (see the accounting policy below); and

– assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* are measured in accordance with that standard.

Goodwill is measured as the excess of the aggregate of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the Group's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after re-assessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the aggregate of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognised immediately in profit or loss as a gain on bargain purchase.

Non-controlling interests, unless as required by another standards, are measured at acquisition-date fair value except for non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation are measured either at fair value or at the present ownership instruments' proportionate share in the recognised amounts of the acquiree's identifiable net assets on a transaction-by-transaction basis.

Where the consideration transferred by the Group in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with the corresponding adjustments being made against goodwill or gain on bargain purchase. Measurement period adjustments are adjustments that arise from additional information obtained during the measurement period about facts and circumstances that existed as of the acquisition date. Measurement period does not exceed one year from the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounting for within equity. Contingent consideration that is classified as an asset or a liability is remeasured at subsequent reporting dates at fair value with corresponding gain or loss being recognised in profit or loss.

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date (i.e. the date when the Group obtains control), and the resulting gain or loss, if any, is recognised in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in other comprehensive income are reclassified to profit or loss where such treatment would be appropriate if that interest were disposed of.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (see above), or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognised as of that date.

Interests in other entities

(i) Associates

Associates are all entities over which the Group has significant influence but not control or joint control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting, after initially being recognised at cost. The Group's investments in associates includes goodwill identified on acquisition.

The Group's share of its associates' post-acquisition profits or losses is recognised in profit or loss, and its share of post-acquisition other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. Dividends receivable from associates are recognised as a reduction in the carrying amount of the investment.

When the Group's share of losses in an associate equals or exceeds its interest in the associate (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate), the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate.

Unrealised gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the associates have been changed where necessary, to ensure consistency with the policies adopted by the Group.

(ii) Joint arrangements

A joint arrangement is a contractual arrangement whereby two or more parties undertake economic activities under joint control. Joint control exists only when the strategic, financial and operational policy decisions relating to the activities of the joint arrangement require the unanimous consent of the parties sharing control.

A joint arrangement is either a joint operation or a joint venture. The structure of each joint arrangement is analysed to determine whether the joint arrangement is a joint operation or a joint venture. The classification of a joint arrangement is dependent on the rights and obligations of the parties to the arrangement.

Joint operations

The Group recognises its proportional right to the assets, liabilities, revenues and expenses of joint operations and its share of any jointly held or incurred assets, liabilities, revenues and expenses. These have been incorporated in the financial statements under the appropriate headings.

Joint ventures

A joint venture is structured through a separate vehicle and the parties have rights to the net assets of the arrangement. Joint ventures are accounted for using the equity method where the assets and liabilities will be on the consolidated statements of financial position, after adjusting for the share of profit or loss after tax, which is shown on the consolidated statements of profit or loss and other comprehensive income, after adjusting for amounts recognised directly in equity.

When the Group's share of losses in a joint venture equals or exceeds its interest in the joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the joint venture), the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the joint venture.

Unrealised gains on transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in the joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary, to ensure consistency with the policies adopted by the Group.

Parent entity financial information

(a) Investments in subsidiaries, associates and joint arrangements

Investments in subsidiaries, associates and joint arrangements are accounted for at cost less any impairment in the financial statements of the Company. Dividends received from associates are recognised in the parent entity's profit or loss, rather than being deducted from the carrying amount of these investments.

(b) Tax consolidation legislation

The Company and its wholly-owned Australian entities have implemented the tax consolidation legislation.

The head entity, the Company, and the entities in the tax consolidated group account for their own current and deferred tax amounts. These tax amounts are measured as if each entity in the tax consolidated group continues to be a stand alone taxpayer in its own right.

In addition to its own current and deferred tax amounts, the Company also recognises the current tax liabilities (or assets) and the deferred tax assets arising from unused tax losses and unused tax credits assumed from controlled entities in the tax consolidated group.

The entities have also entered into a tax funding agreement under which the wholly-owned entities fully compensate the Company for any current tax payable assumed and are compensated by the Company for any current tax receivable and deferred tax assets relating to unused tax losses or unused tax credits that are transferred to the Company under the tax consolidation legislation as loans between entities. The funding amounts are determined by reference to the amounts recognised in the wholly-owned entities' financial statements.

The amounts receivable/payable under the tax funding agreement are due upon receipt of the funding advice from the head entity, which is issued as soon as practicable after the end of each financial year. The head entity may also require payment of interim funding amounts to assist with its obligations to pay tax instalments.

Assets or liabilities arising under tax funding agreements with the tax consolidated entities are recognised as current amounts receivable from or payable to other entities in the Group.

Any difference between the amounts assumed and amounts receivable or payable under the tax funding agreement are recognised as a contribution to (or distribution from) wholly owned tax consolidated entities.

Segment information

Management has determined the operating segments based on the strategic direction and organisational structure of the Group together with reports reviewed by the Chief Operating Decision Makers ("CODM"), defined as the Executive Committee, that are used to make strategic decisions including resource allocation and assessment of segment performance.

The reportable segments are considered at a regional level being New South Wales ("NSW") and Queensland ("QLD").

Non-operating items of the Group are presented under the segment "Corporate" which includes administrative expenses, foreign exchange gains and losses on interest-bearing liabilities, and the elimination of intersegment transactions and other consolidation adjustments.

Revenue

Revenue is recognised when the control of the products or services has transferred to the customer. Revenue is measured at the amount of consideration to which the Group expects to be entitled in exchange for transferring control of products or services to the customer. Amounts disclosed as revenue are net of returns, trade allowances, rebates and amounts collected on behalf of third parties.

Descriptions of the Group's performance obligations in contracts with customers and significant judgments applied in revenue recognition are as follows:

(a) Sales of coal

The Group produces and sells a range of thermal and metallurgical coal products. Revenue from the sale of coal is recognised when control of the product has transferred to the customer. Control of the product is considered transferred to the customer at the time of delivery, usually on a Free On Board ("FOB") basis or a Cost and Freight ("CFR") basis. For CFR contracts the performance obligation relating to freight services is accounted for as a separate performance obligation. On occasion revenue from the sale of coal is recognised as the ship pulls into harbour on a Free Alongside Ship ("FAS") basis or from the stockpile on an ex-works basis.

A receivable is recognised when the products are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due. Payment of the transaction price is usually due within 21 days of the date when control of the products is transferred to the customer.

Some of the Group's coal sales contracts are long-term supply agreements which stipulate the nominal annual quantity and price negotiation mechanism. For those contracts, the actual quantity and transaction price applicable for future shipments are only negotiated or determined prior to the beginning of, or a date which is after, each contract year or delivery period. The transaction price for a future shipment is based on, or derived from, a market price prevailing at the time of the future shipment. As the future market price for coal is highly susceptible to factors outside the Group's influence, the transaction price for a shipment is not readily determinable until or nearing the time of the shipment. As a result, the Group has concluded that a contract with the customer does not exist for those shipments for which the actual delivery quantity and transaction price have not yet been negotiated or determined.

(b) Other revenue

(i) Interest

Interest income from a financial asset is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts the estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount. Interest income from a finance lease is recognised over the term of the lease based on a pattern reflecting a constant periodic rate of return on the net investment in the lease.

(ii) Mining services fees

The Group provides corporate support services, IT services and mining services which relates to the management of mines. The management and mining service agreements stipulate a fixed monthly service fee and payment of the service fees is usually due within 21 days after the end of each calendar month in which the service is rendered. Revenue from providing management and mining services is recognised in each month in which the services are rendered.

(iii) Sea freight services

When contracts for sale of coal include freight on a CFR basis the performance obligation associated with providing the shipping is separately measured and recognised as the service is provided.

(iv) Other

Other primarily consists of dividends, rents, sub-lease rental and management fees. Dividends are recognised as revenue when the right to receive payment is established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably. Rental income arising on land surrounding a mine site is accounted for on a straight-line basis over the lease term. Contingent rental income is recognised as income in the periods in which it is earned. Management fees are recognised upon the delivery of the service to the customer.

Other income

Gain on acquisition is recognised in line with the accounting for business combinations.

Taxation

The income tax expense or benefit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate enacted or substantially enacted at the end of the reporting period for each jurisdiction, adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses. The carrying value of the deferred tax asset is reviewed at each reporting period and reduced to the extent that it is no longer probable that future taxable profit will be available to allow all or part of the asset to be recovered.

Deferred tax liabilities and assets are recognised for taxable temporary differences between the carrying amount and tax bases of investments in controlled entities, except where the parent entity is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the Group has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Current and deferred tax is recognised in the profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

Equity-settled share-based payments

The grant date fair value of equity-settled share-based payment awards granted to employees is recognised as an expense, with a corresponding increase in equity, over the vesting period of the awards. The amount recognised as an expense is adjusted to reflect the number of awards for which related service and nonmarket performance conditions are expected to be met, such that the amount ultimately recognised is based on the number of awards that meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with market performance conditions, the grant date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

Property, plant and equipment

Items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses. The cost includes expenditure directly attributable to the acquisition of the items and the estimated restoration costs associated with the asset.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of any component accounted for as a separate asset is derecognised when replaced. All other repairs and maintenance are charged to profit or loss during the reporting period in which they are incurred.

Mine development assets include all mining related development expenditure that is not included under land, buildings and plant and equipment.

The open pit operations capitalise mine development costs including both direct and indirect costs incurred to remove overburden and other waste materials to enable access to the coal seams during the development of a mine before commercial production commences, and during future development of new open pit mining areas. Amortisation of those capitalised costs over the life of the operation commences at the time that commercial production begins for the mine for the new open pit mining area.

Underground mine development costs include both direct and indirect mining costs relating to underground longwall panel development and mains development (primary access/egress roads for the mine).

Mains development costs are capitalised net of the coal sales revenue earned from coal extracted as part of the mains development process. These capitalised costs are amortised over the life of the mine if the roads service the entire mine or over the life of the panels accessible from those mains if shorter than the mine life.

A regular review is undertaken of each area of interest to determine the appropriateness of continuing to carry forward mine development costs in relation to that area of interest. Accumulated costs in relation to an abandoned area are written off in full in the period in which the decision to abandon the area is made.

Assets under construction represent production site development projects under construction for production or for its own use purposes. Assets under construction are carried at cost less any impairment loss. Costs included costs of constructing the production plant and acquisition of mining rights, mining permits and licenses that form an integral part of the overall development projects. Assets under construction are classified to the appropriate category of property, plant and equipment or intangible assets when completed and ready for intended use. Depreciation or amortisation commences when the assets are ready for their intended use.

Open cut

During the commercial production stage of open pit operations, production stripping costs comprises the accumulation of expenses incurred to enable access to the coal seam, and includes direct removal costs (inclusive of an allocation of overhead expenditure) and machinery and plant running costs.

Production stripping costs are capitalised as part of an asset, if it can be demonstrated that it is probable that future economic benefits will be realised, the costs can be reliably measured and the entity can identify the component of the ore body for which access has been improved. The asset is called "stripping activity asset" included in mine development.

The stripping activity asset is amortised on a systematic basis, over the expected useful life of the identified component of the ore body that becomes more accessible as a result of the stripping activity. The units of production method shall be applied.

Production stripping costs that do not satisfy the asset recognition criteria are expensed.

Depreciation and amortisation

The depreciable amount of all fixed assets, excluding freehold land, is depreciated on a straight-line or units of production basis over the asset's useful life to the Group based on life of mine plans and Joint Ore Reserves Committee ("JORC") estimated reserves, commencing from the time the asset is held ready for use. Leased assets are depreciated over the asset's useful life or over the shorter of the asset's useful life and the lease term if there is no reasonable certainty that the Group will obtain ownership at the end of the lease term. Leasehold improvements are depreciated over the period of the lease or estimated useful life, whichever is the shorter, using the straight-line method.

For some assets, the useful life of the asset is linked to the level of production. In such cases, depreciation is charged on a units of production basis based on the recoverable reserves or the remaining useful hours. Alternatively, the straight-line method may be used where this provides a suitable alternative because production is not expected to fluctuate significantly from one year to another.

The estimated useful lives, residual values and depreciation method are reviewed at the end of each annual reporting period and any change in estimate is taken into account in the determination of remaining depreciation charges.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Any gain or loss arising on the disposal of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

Mining tenements

Mining tenements have a finite useful life and are carried at cost less any accumulated amortisation and impairment losses. Mining tenements are amortised from the date when commercial production commences, or the date of acquisition. Amortisation is calculated over the life of the mine on a 'units of production' method based on the JORC estimated reserves.

Changes in the annual amortisation rate resulting from changes in the remaining estimated reserves, are applied on a prospective basis from the commencement of the next financial year. Every year the mining tenement's carrying amount is compared to its recoverable amount and assessed for impairment, or for possible reversals of prior year impairment (see the accounting policy in respect of impairment losses on tangible and intangible assets below).

Exploration and evaluation assets

Exploration and evaluation expenditure incurred is accumulated in respect of each separately identifiable area of interest which is at the individual exploration permit or licence level. These costs are only carried forward where the right of tenure for the area of interest is current and to the extent that they are expected to be recouped through successful development and commercial exploitation, or alternatively, sale of the area, or where activities in the area have not yet reached a stage which permits reasonable assessment of the existence of economically recoverable reserves and active and significant operations in, or in relation to, the area of interest are continuing.

Exploration and evaluation assets acquired in a business combination are recognised at their fair value at the acquisition date and stated at costs less impairment. The carrying amount of exploration and evaluation assets are assessed for impairment when facts or circumstances suggest the carrying amount of the assets may exceed their recoverable amount. A regular review is undertaken for each area of interest to determine the appropriateness of continuing to carry forward costs in relation to each area of interest. Accumulated costs in relation to an abandoned area are written off in full in the period in which the decision to abandon the area is made.

Once the technical feasibility and commercial viability of the extraction of mineral resources in an area of interest are demonstrable, the exploration and evaluation assets attributable to that area of interest are first tested for impairment and then reclassified to mining tenements.

Impairment of assets

(i) Long term assets

Mining tenements, indefinite life intangibles and goodwill are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired.

An impairment loss is recognised immediately in profit or loss for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. Mining tenements and other non-financial assets (excluding goodwill) that have previously suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

For the purposes of assessing impairment, assets are grouped into Cash-Generating Units ("CGU"), being the lowest levels for which there are separately identifiable cash inflows which are largely independent of the cash inflows from other assets or groups of assets. For the purposes of goodwill impairment testing, CGUs to which goodwill has been allocated are aggregated so that the level at which impairment is tested reflects the lowest level at which goodwill is monitored for internal reporting purposes. The goodwill acquired in a business combination, for the purpose of impairment testing, is allocated to CGUs that are expected to benefit from the synergies of the combination.

The Group assesses impairment by evaluation of conditions and events specific to the Company that may be indicative of impairment triggers.

(ii) Other financial assets

The Group recognises a loss allowance for expected credit losses ("ECL") on investments in debt instruments that are measured at amortised cost. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Group recognises lifetime ECL when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECL ("12m ECL"). The assessment of whether lifetime ECL should be recognised is based on significant increases in the likelihood or risk of a default occurring since initial recognition instead of on evidence of a financial asset being credit-impaired at the reporting date or an actual default occurring.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of a financial instrument. In contrast, 12m ECL represents the portion of lifetime ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

Intangibles

(i) Goodwill

Goodwill acquired in a business combination is recognised at cost and subsequently measured at cost less any impairment losses. The cost represents the excess of the cost of a business combination over the fair value of the identifiable assets, liabilities and contingent liabilities acquired.

Goodwill is tested annually for impairment or more frequently if events or changes in circumstances indicate that it might be impaired.

(ii) Computer software

Computer software is carried at cost less accumulated amortisation and any accumulated impairment losses. Amortisation is calculated on a straight-line basis over the period of expected benefit, which ranges from 2.5 to 10 years.

(iii) Water rights

Water rights have been recognised at cost and are assessed annually for impairment or more frequently if events or changes in circumstances indicate that it might be impaired. The water rights have been determined to have an indefinite useful life as there is no expiry date on the licences.

(iv) Other

Other intangibles include access rights, other mining licenses and management rights associated with the Group's right to manage Port Waratah Coal Services. These intangibles have a finite useful life and are carried at cost less any accumulated amortisation and impairment losses. Amortisation of these other intangibles is calculated as the shorter of the life of the mine or agreement and using a units of production basis in tonnes, or on a straight-line basis. The estimated useful lives vary from 10 to 25 years.

Cash and cash equivalents

For the purpose of the consolidated statements of cash flows, cash and cash equivalents includes:

(i) cash on hand and at call deposits with banks or financial institutions, net of bank overdrafts; and

(ii) other short term, highly liquid investments, that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Royalty receivable

The royalty receivable is revalued at each reporting period based on expected future cash flows that are dependent on sales volumes, price changes and fluctuations in foreign exchange rates. Gains or losses arising from changes in the fair value of the royalty receivable is recognised in profit or loss. The cash receipts will be recorded against the royalty receivable which will be decreased over time. Since the contract is long term, unwinding of the discount (to reflect the time value of money) for the asset will be recognised under interest income.

The royalty receivable is measured based on management's expectations of the future cash flows with the re-measurement recorded in the consolidated statement of profit or loss and other comprehensive income at each reporting date.

The amount expected to be received during the next 12 months is disclosed as a current receivable and the discounted expected future cash flow beyond 12 months is disclosed as a non-current receivable.

Inventories

Coal stocks are stated at the lower of cost and net realisable value. Costs are assigned on a weighted average basis and include direct materials, direct labour and an appropriate proportion of variable and fixed overheads on the basis of normal mining capacity. Net realisable value is the estimated selling price in ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Inventories of auxiliary materials, spare parts, small tools, and fuel expected to be used in production are stated at weighted average cost after deducting rebates and discounts, less allowance for obsolescence, if necessary.

Assets classified as held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale or loss of control transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal group) is available for immediate sale or disposal in its present condition subject only to terms that are usual and customary for sales or disposals of such assets (or disposal group) and the transaction is highly probable. Management must be committed to the transaction, which should be expected to qualify for recognition as a completed transaction within one year from the date of classification.

When the Group is committed to a sale plan or other transaction involving loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale when the criteria described above are met, regardless of whether the Group will retain a non-controlling interest in its former subsidiary after the sale.

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell.

Leases

Property, plant and equipment held by the Group under leases that transfer to the Group substantially all of the risks and rewards of ownership are classified as finance leases.

The leased property, plant and equipment are initially measured at an amount equal to the lower of their fair value and the present value of the minimum lease payments. Subsequently they are accounted for in accordance with the property, plant and equipment accounting policy.

The corresponding minimum lease payments are included in lease liabilities within interest bearing liabilities. Each lease payment is allocated between finance cost and a reduction in the outstanding lease liability. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

The net gains arising on the sale of an asset and the leasing back of the same asset using a finance lease are included as deferred income in the statement of financial position and are released to the profit or loss on a straight-line basis over the term of the lease.

Rental income from operating leases is recognised in profit or loss on a straight-line basis over the term of the relevant lease.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of assets that necessarily take a substantial period of time to prepare for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

All other borrowing costs are recognised as an expense in the period in which they are incurred.

Provisions

Provisions are:

- recognised when: the Group has a legal or constructive obligation as a result of a past event; it is probable that cash will be required to settle the obligation; and the amount has been reliably estimated.

- measured at the present value of the management's best estimate at reporting date of the cash outflow required to settle the obligation.

Provisions are determined by discounting the expected future cash flows at a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the liability where the time value is material. Any increase in the provision due to the passage of the time is recognised as an interest expense.

Non-contingent royalty

In acquiring part of a business or operation, an assessment is made on the fair value of the assets and liabilities under IFRS 3 Business Combinations. The non-contingent royalty was fair valued on initial recognition and payable in US dollars so subject to foreign exchange movements. The amount has a finite life with any discounting and foreign exchange released to profit or loss over the contract term.

Land subsidence, restoration, rehabilitation and environmental costs

One consequence of coal mining is land subsidence caused by the resettlement of the land above the underground mining sites. Depending on the circumstances, the Group may relocate inhabitants from the land above the underground mining sites prior to mining those sites or the Group may compensate the inhabitants for losses or damages from land subsidence after the underground sites have been mined. The Group may also be required to make payments for restoration, rehabilitation or environmental protection of the land after the underground sites have been mined.

An estimate of such costs is recognised in the period in which the obligation is identified and is charged as an expense in proportion to the coal extracted. At each statement of financial position date, the Group adjusts the estimated costs in accordance with the actual land subsidence status. The provision is also adjusted for changes in estimates. Those adjustments are accounted for as a change in the corresponding capitalised cost, except where a reduction in the provision is greater than the undepreciated capitalised cost of any related assets, in which case the capitalised cost is reduced to nil and remaining adjustment is recognised in the income statement. Changes to the capitalised cost result in an adjustment to future depreciation and financial charges.

Foreign currencies

In the individual financial statements of each individual group entity, transactions in currencies other than the functional currency of that entity (foreign currencies) are recorded in the respective functional currency (i.e., the currency of the primary environment in which the entity operates) at the rates of exchanges prevailing on the dates of the transactions. At the end of the reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing on the reporting date.

Non-monetary items carried at fair value that are denominated in foreign currencies are translated at the rates prevailing on the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences arising on the settlement of monetary items, and on the retranslation of monetary items, are recognised in profit or loss in the period in which they arise.

Exchange differences on monetary items receivable from or payable to foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognised initially in other comprehensive income and reclassified from equity to profit or loss on repayment of the monetary items.

Employee benefits

(i) Employee benefits expenses

Employee benefits are expensed as the related service by the employee is provided and includes equity based transactions. Employee benefits recognised in the profit or loss are net of recoveries.

(ii) Superannuation

Contributions made by the Group to defined contribution superannuation funds are recognised as an expense in the period in which they are incurred.

(iii) Wages and salaries, annual leave and sick leave

Liabilities for employee benefits for wages, salaries, annual leave and accumulating sick leave that are expected to be wholly settled within 12 months of the reporting date represent present obligations resulting from employees' services provided to the reporting date and are calculated at undiscounted amounts based on wage and salary rates that the Group expects to pay as at the reporting date including related on costs, such as superannuation, workers compensation, insurance and payroll tax and are included in trade and other payables. Non-accumulating, non-monetary benefits such as housing and cars are expensed by the Group as the benefits are used by the employee.

Employee benefits payable later than 12 months have been measured at the present value of the estimated future cash outflows to be made for those benefits. In determining the liability, consideration is given to employee salary and wage increases and the probability that the employee may satisfy any vesting requirements. Those cash flows are discounted using corporate bonds with terms to maturity that match the expected timing of cash flows attributable to employee benefits.

Additional Long Service Leave payments are made monthly to the Coal Mining Industry (Long Service Leave Funding) Corporation based on the eligible monthly payroll of employees involved in the mining of black coal. Reimbursement is sought from the fund when long service leave is paid to employees involved in the mining of black coal. An asset for the amount recoverable from the Coal Mining Industry (Long Service Leave Funding) Corporation is recognised in trade and other receivables.

These employee benefits are presented as current provisions as the Group has no unconditional right to deferred settlement for at least 12 months after the end of the reporting period.

Financial instruments

Financial assets and financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition.

Financial assets

All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

All recognised financial assets are subsequently measured in their entirety at either amortised cost or fair value, depending on the classification of the financial assets.

Classification of financial assets

Debt instruments that meet the following conditions are subsequently measured at amortised cost:

- the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Amortised cost and effective interest method

The effective interest method is a method of calculating the amortised cost of a debt instrument and of allocating interest income over the relevant period.

For financial instruments other than purchased or originated credit-impaired financial assets, the effective interest rate is the rate that exactly discounts estimated future cash receipts (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) excluding ECL, through the expected life of the debt instrument, or, where appropriate, a shorter period, to the gross carrying amount of the debt instrument on initial recognition.

The amortised cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. On the other hand, the gross carrying amount of a financial asset is the amortised cost of a financial asset before adjusting for any loss allowance.

Interest income is recognised using the effective interest method for debt instruments measured subsequently at amortised cost. For financial instruments other than purchased or originated credit-impaired financial assets, interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired. For financial assets that have subsequently become credit-impaired, interest income is recognised by applying the effective interest rate to the amortised cost of the financial asset. If, in subsequent reporting periods, the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest rate to the gross carrying amount of the financial asset.

Interest income is recognised in profit or loss and is included in the "other income" line item.

Financial assets at FVTPL

Financial assets that do not meet the criteria for being measured at amortised cost or fair value through other comprehensive income ("FVTOCI") are measured at FVTPL. Specifically:

- Investments in equity instruments are classified as at FVTPL, unless the Group designates an equity investment that is neither held for trading nor a contingent consideration arising from a business combination as at FVTOCI on initial recognition.

- Debt instruments that do not meet the amortised cost criteria or the FVTOCI criteria are classified as at FVTPL. In addition, debt instruments that meet either the amortised cost criteria or the FVTOCI criteria may be designated as at FVTPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency that would arise from measuring assets or liabilities or recognising the gains and losses on them on different bases. The Group has not designed any debt instruments as at FVTPL.

Financial assets at FVTPL are measured at fair value, with changes in fair value arising from remeasurement recognised in profit or loss. The net gain or loss recognised in profit or loss excludes any dividend or interest earned on the financial assets and is included in the 'investment income' line item.

Significant increase in credit risk

In assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort. Forward-looking information considered includes the future prospects of the industries in which the Group's debtors operate, obtained from economic expert reports, financial analysts, governmental bodies, relevant think-tanks and other similar organisations, as well as consideration of various external sources of actual and forecast economic information that relate to the Group's core operations.

In particular, the following information is taken into account when assessing whether credit risk has increased significantly since initial recognition:

- an actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;

- significant deterioration in external market indicators of credit risk for a particular financial instrument, e.g. a significant increase in the credit spread, the credit default swap prices for the debtor, or the length of time or the extent to which the fair value of a financial asset has been less than its amortised cost;

- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;

- an actual or expected significant deterioration in the operating results of the debtor;
- significant increases in credit risk on other financial instruments of the same debtor; and
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

Despite the foregoing, the Group assumes that the credit risk on a financial instrument has not increased significantly since initial recognition if the financial instrument is determined to have low credit risk at the reporting date. A financial instrument is determined to have low credit risk if i) the financial instrument has a low risk of default, ii) the borrower has a strong capacity to meet its contractual cash flow obligations in the near term and iii) adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfill its contractual cash flow obligations. The Group considers a financial asset to have low credit risk when it has an internal or external credit rating of 'investment grade' as per globally understood definition.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

Definition of default

The Group considers the following as constituting an event of default for internal credit risk management purposes as historical experience indicates that receivables that meet either of the following criteria are generally not recoverable.

- when there is a breach of financial covenants by the counterparty; or
- information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collaterals held by the Group).

Irrespective of the above analysis, the Group considers that default has occurred when a financial asset is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

Credit-impaired financial assets

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

(a) significant financial difficulty of the issuer or the borrower;

(b) a breach of contract, such as a default or past due event;

(c) the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider; or

(d) it is becoming probable that the borrower will enter into bankruptcy or other financial reorganisation.

Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information as described above. As for the exposure at default, for financial assets, this is represented by the assets' gross carrying amount at the reporting date.

For financial assets, the ECL is estimated as the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive, discounted at the original effective interest rate.

Where lifetime ECL is measured on a collective basis to cater for cases where evidence of significant increases in credit risk at the individual instrument level may not yet be available, the financial instruments are grouped on the following basis:

- Nature of financial instruments;
- Past-due status;
- Nature, size and industry of debtors; and
- External credit ratings where available.

The grouping is regularly reviewed by management to ensure the constituents of each group continue to share similar credit risk characteristics.

If the Group has measured the loss allowance for a financial instrument at an amount equal to lifetime ECL in the previous reporting period, but determines at the current reporting date that the conditions for lifetime ECL are no longer met, the Group measures the loss allowance at an amount equal to 12m ECL at the current reporting date.

The Group recognises an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

Financial liabilities and equity instruments

Debt and equity instruments issued by the Group are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

An equity instrument is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities.

Financial liabilities

The Group's financial liabilities including trade and other payables, non-contingent royalty payable, interest-bearing liabilities which are initially recognised at fair value and subsequently measured at amortised cost, using the effective interest method and financial liabilities at fair value through profit or loss.

Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liabilities are either held for trading or those designated as at FVTPL on initial recognition.

A financial liability is classified as held for trading if:

- it has been incurred principally for the purpose of repurchasing in the near term; or
- on initial recognition it is a part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

Financial liabilities at FVTPL are measured at fair value, with any gains or losses arising on remeasurement recognised directly in profit or loss in the period in which they arise. The net gain or loss is recognised in profit or loss includes any interest paid on the financial liabilities. Fair value is determined in a manner described in note 34.

Effective interest method

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees paid or points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition. Interest expense is recognised on an effective interest basis.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognised at the proceeds received, net of direct issue costs.

SCN issued by the Group, which includes no contractual obligation for the Group to deliver cash or another financial asset to the holders or to exchange financial assets or financial liabilities with the holders under conditions that are potentially unfavourable to the Group, are classified as equity instruments and are initially recorded at the proceeds received.

Accounting for derivative financial instruments and hedging activities

Derivatives are initially recognised at fair value at the date when a derivative contract is entered into and are subsequently remeasured at their fair value at the end of the reporting period. The resulting gain or loss is recognised in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship. The Group designates certain derivatives as either: (i) hedges of the fair value of recognised assets or liabilities (fair value hedge); and (ii) hedges of highly probable forecast transactions (cash flow hedge).

The fair values of various derivative instruments used for hedging purposes are disclosed in note 34. The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedged item is more than 12 months and as a current asset or liability when the remaining maturity of the hedged item is less than 12 months.

At the inception of the hedging relationship the Group documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument that is used in a hedging relationship is highly effective in offsetting changes in fair values or cash flows of the hedged item.

(i) Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges are recognised in other comprehensive income and accumulated in cash flow hedge reserve. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss.

Amounts previously recognised in other comprehensive income and accumulated in cash flow hedge reserve in equity are reclassified to profit or loss in the periods when the hedged item is recognised in profit or loss.

Hedge accounting is discontinued when the Group revokes the hedging relationship, the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income and accumulated in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in profit or loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in profit or loss.

(ii) Derivatives that do not qualify for hedge accounting and those not designated as hedging instruments

Changes in the fair value of any derivative instruments that do not qualify for hedge accounting and those not designated as hedges are recognised immediately in the profit or loss.

Derecognition

A financial asset is derecognised only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in investment revaluation reserve is recognised in profit or loss.

A financial liability is derecognised when, and only when, the Group's obligations are discharged, cancelled or expire. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

5. ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, which are described in note 4, management is required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Critical judgment in applying the accounting policies

The following is the critical judgement, apart from those involving estimations (see below), that the directors of the Company have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognised and disclosures made in the Historical Financial Information.

Control over Watagan

There is significant judgment in assessing whether the Group controls Watagan, even though it holds 100% of the nominal share capital. An assessment has been made that in accordance with the accounting standards the Group does not control Watagan as it is not able to direct the relevant activities of Watagan, and therefore accounts for its interest in Watagan as an associate.

Sales of coal

The transaction price for a shipment is often linked to a market index of the respective delivery period. For example, the transaction price may be determined by reference to the average GlobalCOAL Newcastle Index for the delivery period. At the end of each reporting period, the final average index price may not become available for certain shipments. In those situations, the Group uses "the expected value" method to estimate the amount of variable consideration based on the most recent average index price as of the end of the reporting periods and for those shipments, the Group has determined that a significant reversal in the amount of revenue recognised will not occur.

Key sources of estimation uncertainty

The followings are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

Acquisition accounting

Accounting for acquisition of Coal & Allied requires judgement and estimates in determining the fair value of acquired assets and liabilities. Techniques used to determine the fair value of acquired assets and liabilities include an income and cost approach for mining tenements and depreciated replacement cost for the valuation of property, plant and equipment.

The relevant accounting standard allows the fair value of assets acquired to be refined for a window of one year after the acquisition date, and judgement is required to ensure the adjustments made reflect new information obtained about facts and circumstances that existed as of the acquisition date. The adjustments made on fair value of assets are retrospective in nature and have an impact on goodwill or gain recognised on acquisition.

Depreciation of property, plant and equipment

The cost of mine development (note 22) is depreciated using the unit of production method based on the estimated production volume for which the structure was designed. The management exercises their judgment in estimating the useful lives of the depreciable assets and the production volume of the mine. The estimated coal production volumes are updated at regular intervals and have taken into account recent production and technical information about each mine. These changes are considered a change in estimate for accounting purposes and are reflected on a prospective basis in related depreciation rates. Estimates of the production volume are inherently imprecise and represent only approximate amounts because of the subjective judgements involved in developing such information.

Amortisation of assets

Mining tenements (note 19) are amortised on unit of production basis over the shorter of their useful lives and the contractual period. The expensing of overburden removal costs is based on saleable coal production over estimated economically recoverable reserves. The useful lives are estimated on the basis of the total proven and probable reserves of the mine. Proven and probable mining reserve estimates are updated at regular intervals and have taken into account recent production and technical information about each mine.

Provisions

Rehabilitation costs

The rehabilitation provision has been created based on managements' internal estimates and assumptions relating to the current economic environment, which management believes is a reasonable basis upon which to estimate the future liability.

These estimates are reviewed regularly to take into account any material changes to the assumptions, however actual rehabilitation costs will ultimately depend upon the future market prices for the necessary decommissioning works and the timing of when the rehabilitation costs are incurred. Timing is dependent upon when the mines ceases to produce at economically viable rates, which in turn, will depend upon future coal prices, which are inherently uncertain.

Take or pay

The provision is recognised and estimated based on management's assessment of contracted port capacity versus forecast usage. This involves making assumptions about the probability, amount and timing of an outflow of resources embodying economic benefits.

Sales contract

The provision is recognised and estimated based on management's assessment of future market prices.

Investment in securities issued by Wiggins Island Coal Export Terminal Pty Ltd ("WICET")

The recoverable amount of Wiggins Island Preference Securities ("WIPS") and Gladstone Long Term Securities ("GiLTS"), is estimated based on expected future cashflows. WICET is currently re-negotiating its senior debt facility that could result in a change to those expected future cashflows.

Royalty receivable

The fair value of the royalty receivable is estimated based on expected future cash flows that are dependent on sales volumes, price changes and fluctuations in foreign exchange rates.

Impairment of assets

The determination of fair value and value in use requires management to make estimates and assumptions about expected production and sales volumes, coal prices (considering current and historical prices, price trends and related factors), foreign exchange rates, coal resources and reserves, operating costs, closure and rehabilitation costs and future capital expenditure. These estimates and assumptions are subject to risk and uncertainty; hence there is a possibility that changes in circumstance will alter these projections, which may impact the recoverable amount of the assets. In such circumstances, some or all the carrying amount of the assets may be further impaired or the impairment charge reduced with the impact recorded in the statement of profit or loss.

Taxation

The Group is subject to income taxes in Australia. Significant judgement is required in determining the provision for income taxes. Deferred tax assets, including those arising from unutilised tax losses, require the Group to assess the likelihood that the Group will generate sufficient taxable earnings in future periods, in order to utilise recognised deferred tax assets. Judgement is also required in respect of the application of existing tax laws.

Assumptions about the generation of future taxable profits depend on management's estimates of future cash flows. These estimates of future taxable income are based on forecast cash flows from operations (which are impacted by production and sales volumes, coal prices, reserves, operating costs, closure and rehabilitation costs, capital expenditure, and other capital management transactions). To the extent that future cash flows and taxable income differ significantly from estimates, the ability of the Group to realise the net deferred tax assets recorded at the reporting date could be impacted. In addition, future changes in tax laws could limit the ability of the Group to obtain tax deductions in future periods.

Coal reserves and resources

The Group estimates its coal resources and reserves based on information compiled by Competent Persons as defined by the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves (December 2012), which is prepared by the Joint Ore Reserves Committee ("JORC") of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia, known as the JORC 2012 Code, and Australian Securities Exchange ("ASX") Listing Rules 2012.

Mineral Resources and Ore Reserves are based on geological information and technical data relating to the size, depth, quality of coal, suitable production techniques and recovery rates. Such an analysis requires complex geological judgements to interpret the data. The estimation of Recoverable Reserves is based on factors such as estimates of foreign exchange rates, coal price, future capital requirements, rehabilitation obligations and production costs, along with geological assumptions and judgements made in estimating the size and quality of the reserves. Management forms a view of forecast sales prices based on current and long-term historical average price trend.

As the economic assumptions used may change and as additional geological information is produced during the operations of a mine, estimates of reserves may change. Additionally the amount of reserves that may actually be mined in the future and the Group's current reserve estimate may vary. Such changes may impact the Group's reported financial position and results including:

- the carrying value of the exploration and evaluation assets, mine properties, property, plant and equipment and goodwill may be affected due to changes in estimated future cash flows;

- depreciation and amortisation charges in the statement of profit and loss and other comprehensive income may change where such charges are determined using the units of production method, or where the useful life of the related assets change; and

- the carrying value of deferred income tax assets may change due to changes in the judgements regarding the existence of such assets and in estimates of the likely recovery of such assets.

Exploration and evaluation expenditure

The application of the Group's accounting policy for exploration and evaluation expenditure requires judgement in determining whether it is likely that future economic benefits are likely, which may be based on assumptions about future events or circumstances. Estimates and assumptions may change if new information becomes available. If after expenditure is capitalised information becomes available suggesting that the recovery of expenditure is unlikely, the amount capitalised is written off in the consolidated statement of profit or loss and other comprehensive income in the period when the new information becomes available.

Impairment of loan receivable from Watagan

The book value of Watagan's net assets has declined since inception and at 30 June 2018 the book value of liabilities exceeded the book value of assets by A$311 million. These losses have not been recognised as the accumulated losses exceeds the value of the investment by the Group. Non-current assets of A$1,590 million includes, A$724 million, A$371 million and A$386 million for the Ashton, Austar and Donaldson mines, respectively.

Non-current assets of A$1,590 million includes, A$724 million, A$371 million and A$386 million for the Ashton, Austar and Donaldson mines as at 30 June 2018, respectively.

Austar has recently been subject to prohibition notices issued by the Resource Regulator that restricted current operations, however as announced on 7 August 2018 these notices have now been lifted, and Donaldson remains on care and maintenance.

The value of the non-current assets in the Watagan balance sheet has been prepared on the basis that Austar will return to normal production give the notices lifted on 3 August 2018 and Donaldson will recommence operations at some time in the future which is management's current intention. Based on this estimation, there is no impairment on its loan receivable from Watagan.

However, if it is determined that either or both, Austar or Donaldson, are unable to restart operations or return to previously forecast levels of production or there are materially negative changes to other operating assumptions, impacting all three mines, including coal prices, exchange rates, operating costs, capital expenditure, geological conditions, approvals or changes to existing lease conditions or regulatory outcomes it is likely that the fair value of these mines would be reduced materially. Any impairment of these assets would increase the net asset deficit. In that event, an impairment may be recognised by the Group on its loan receivable from Watagan or on any further reconsolidation of Watagan.

6. SEGMENT INFORMATION

The Group is engaged primarily in the coal mining.

For management purposes, the Group considered the business at a regional level, namely NSW and QLD.

On 31 March 2016, the Company transferred control of Watagan. Watagan holds the ownership interests in the Austar, Ashton and Donaldson mines located in NSW. The amount disclosed for revenue in 2015 and 2016 below includes the operational results of the three mines for 2015 and the period 1 January 2016 to 31 March 2016.

(a) Segment revenues and results

Segment information about these businesses is presented below:

For the year ended 31 December 2015

	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Total segment revenue*	976	290	–	1,266
Add: fair value losses recycled from hedge reserve (derivative instruments)	22	–	–	22
Revenue from external customers	998	290	–	1,288
Operating Earnings before interest and tax ("EBIT")	(39)	(31)	(42)	(112)

For the year ended 31 December 2016

	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Total segment revenue*	873	326	(133)	1,066
Add: fair value losses recycled from hedge reserve (natural hedge)	–	–	133	133
Revenue from external customers	873	326	–	1,199
Operating EBIT	71	9	(41)	39

For the year ended 31 December 2017

	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Total segment revenue*	2,163	460	(229)	2,394
Add: fair value losses recycled from hedge reserve (natural hedge)	–	–	229	229
Revenue from external customers	2,163	460	–	2,623
Operating EBIT	682	92	(42)	732

For the six months ended 30 June 2017 (unaudited)

	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Total segment revenue*	616	219	(101)	734
Add: fair value losses recycled from hedge reserve (natural hedge)	–	–	101	101
Revenue from external customers	616	219	–	835
Operating EBIT	209	33	(45)	197

For the six months ended 30 June 2018

	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Total segment revenue*	2,051	199	(45)	2,205
Add: fair value losses recycled from hedge reserve (natural hedge)	–	–	45	45
Revenue from external customers	2,051	199	–	2,250
Operating EBIT	747	16	(27)	736

* Total segment revenue consists of revenue from the sales of coal whereas revenue disclosed in the consolidated statements of profit or loss and other comprehensive income also includes other revenue such as management fees, rents and sub-lease rentals, interest income, dividend income, mining services fee, sea freight and royalty income.

(b) Segment assets and liabilities

31 December 2015	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Segment assets	5,160	666	870	6,696
Deferred tax assets	21	31	1,114	1,166
Investments in associate and joint venture	–	–	8	8
Total assets	5,181	697	1,992	7,870

31 December 2016	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Segment assets	3,954	644	1,718	6,316
Deferred tax assets	45	25	1,269	1,339
Investments in associate and joint venture	–	–	5	5
Total assets	3,999	669	2,992	7,660

31 December 2017	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Segment assets	8,793	714	1,336	10,843
Deferred tax assets	182	24	1,013	1,219
Investments in associate and joint venture	191	–	60	251
Total assets	9,166	738	2,409	12,313

30 June 2018	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Segment assets	9,454	721	373	10,548
Deferred tax assets	82	14	990	1,086
Investments in associates and joint ventures	192	–	88	280
Total assets	9,728	735	1,451	11,914

Segment liabilities

A measure of total liabilities for reportable segments is not provided to the Executive Committee. The Executive Committee reviews the liabilities of the Group at a consolidated level.

(c) Other segment information

Year ended 31 December 2015

	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Non-cash items				
Remeasurement of royalty receivable	–	–	2	2
Depreciation and amortisation expense	(172)	(21)	(7)	(200)
Gain on acquisition of additional interests in joint operation and subsidiaries	–	–	6	6
Cash items	–	–	–	–
Total capital expenditure	319	15	2	336

Year ended 31 December 2016

	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Non-cash items				
Remeasurement of royalty receivable	–	–	(6)	(6)
Depreciation and amortisation expense	(94)	(31)	(8)	(133)
Transaction costs	–	–	(3)	(3)
Stamp duty payable	–	–	(12)	(12)
Cash items	–	–	–	–
Total capital expenditure	370	3	10	383

Year ended 31 December 2017

	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Non-cash items				
Remeasurement of royalty receivable	–	–	8	8
Depreciation and amortisation expense	(215)	(35)	(6)	(256)
Gain on acquisition of subsidiaries	–	–	177	177
Transactions costs	–	–	(16)	(16)
Stamp duty accrued	–	–	(9)	(9)
Impairment reversal of mining tenements	100	–	–	100
Cash items				
Transaction costs	–	–	(17)	(17)
Stamp duty paid	–	–	(148)	(148)
Total capital expenditure	335	4	1	340

Six months ended 30 June 2017 (unaudited)

	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Non-cash items				
Remeasurement of royalty receivable	–	–	2	2
Stamp duty	–	–	(3)	(3)
Transaction costs	–	–	(21)	(21)
Depreciation and amortisation expense	(61)	(16)	(3)	(80)
Cash items	–	–	–	–
Total capital expenditure	153	3	–	156

Six months ended 30 June 2018

	NSW	QLD	Corporate	Total
	A$M	*A$M*	*A$M*	*A$M*
Non-cash items				
Remeasurement of royalty receivable	–	–	2	2
Depreciation and amortisation expense	(229)	(12)	(3)	(244)
Gain on acquisition of interest in joint operation	–	–	78	78
Remeasurement of financial assets	–	–	(29)	(29)
Impairment of financial assets	–	–	(21)	(21)
Cash items				
Transaction costs	–	–	(10)	(10)
Stamp duty paid	–	–	(16)	(16)
Total capital expenditure	77	9	–	86

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
Reconciliation of segment revenue to total revenue					
Total segment revenue	1,266	1,066	2,394	734	2,205
Interest income	50	125	114	57	58
Mining services income	–	38	52	29	26
Sea freight	–	–	12	–	37
Other revenue	3	9	29	12	21
Total revenue	1,319	1,238	2,601	832	2,347

Geographical information

The following table sets out the geographical information. The geographical location of the specified non-current assets is based on the physical location of the asset, in the case of property, plant and equipment, the location of the operation to which they are allocated, in the case of intangible assets and goodwill, and the location of operations.

The geographical information of non-current assets (note) are as follows:

	At 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
Australia (place of domicile)	3,998	4,222	7,792	4,297	7,921

Note: Non-current assets excludes interests in other entities, trade and other receivables, interest bearing loan to associate, royalty receivable, other non-current assets, non-contingent royalty receivable and deferred tax assets.

Geographical information presented as the Group's revenue are disclosed in note 7 based on the location of goods delivered and services provided.

Information about major customers

Revenue from customers, each of them accounted for 10% or more of the Group's revenue, are set out below:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
Customer A[1]	247	162	–*	92	–*
Customer B[1]	201	–*	–*	–*	–*

[1] Revenue from NSW segment

* The corresponding revenue did not contribute over 10% of the total revenue of the Group

No revenue from each of the customers was 10% or more of the Group's revenue for the year ended 31 December 2017 and six months ended 30 June 2018.

Operating EBIT and Earnings Before Interest, Taxes, Depreciation and Amortization ("EBITDA")

The Executive Committee assesses the performance of the operating segments based on a measure of Operating EBIT and EBITDA. This measure excludes the effects of non-recurring expenditure from the operating segments such as restructuring costs, business combination related expenses and significant impairments of cash-generating units. Furthermore, the measure excludes the effects of fair value re-measurements and foreign exchange gains/(losses) on interest-bearing liabilities. Interest income and expense are not allocated to the NSW and QLD segments, as this type of activity is driven by the corporate function, which manages the cash position of the Group.

A reconciliation of Operating EBIT and EBITDA to (loss)/profit before income tax from continuing operations is provided as follows:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
(Loss)/profit before income tax	(354)	(312)	335	(18)	539
Adjustment:					
Finance costs	162	209	294	105	152
Bank fees and other charges	116	113	109	49	62
Interest income	(50)	(125)	(114)	(57)	(58)
Fair value losses recycled hedged reserve – US$ loans and derivatives	22	133	229	101	45
Gain on acquisition of subsidiary	–	–	(177)	–	–
Gain on disposal of joint operation and subsidiaries	–	–	–	–	(78)
Receipts from joint venture participant	–	–	(5)	(5)	–
Gain on non-substantial loan modification	–	–	(31)	–	–
Impairment reversal of mining tenements	–	–	(100)	–	–
Stamp duty expensed	–	12	167	3	16
Remeasurement of financial assets	–	–	–	–	29
Impairment of financial assets	–	–	–	–	21
Transaction costs	–	3	33	21	10
Gain on acquisition of additional interest in joint operation and subsidiaries	(6)	–	–	–	–
Remeasurement of royalty receivable	(2)	6	(8)	(2)	(2)
Operating EBIT	(112)	39	732	197	736
Adjustment for depreciation and amortisation	200	133	256	80	244
Operating EBITDA	88	172	988	277	980

7. REVENUE

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
Sales revenue					
Sales of coal					
Coal sold in Australia, gross	28	69	322	118	228
Coal sold outside Australia, gross	1,260	1,130	2,301	717	2,022
	1,288	1,199	2,623	835	2,250
Fair value of losses recycled from hedge reserve	(22)	(133)	(229)	(101)	(45)
	1,266	1,066	2,394	734	2,205
Other revenue					
Interest income	50	125	114	57	58
Mining services fees	–	38	52	29	26
Sea freight	–	–	12	–	37
Other	3	9	29	12	21
	53	172	207	98	142
Total revenue	1,319	1,238	2,601	832	2,347

Disaggregation of revenue

Revenue represents the gross amounts received and receivable arising from sales of coal during the Track Record Period.

Year ended 31 December 2015

	NSW	QLD	Total
	A$M	*A$M*	*A$M*
Primary geographical markets			
Australia (the Company's country of domicile)	14	14	28
Singapore	300	15	315
South Korea	348	79	427
China	30	77	107
Japan	103	49	152
Taiwan	58	10	68
All other foreign countries	145	46	191
Total	998	290	1,288
Major product			
Thermal coal	724	–	724
Metallurgical coal	274	290	564
Total	998	290	1,288

During the Track Record Period, all revenue are recognised at a point in time upon delivering.

Year ended 31 December 2016

	NSW	QLD	Total
	A$M	*A$M*	*A$M*
Primary geographical markets			
Australia (the Company's country of domicile)	10	59	69
Singapore	212	49	261
South Korea	222	74	296
China	163	16	179
Japan	69	74	143
Taiwan	56	37	93
All other foreign countries	141	17	158
Total	873	326	1,199
Major product			
Thermal coal	833	52	885
Metallurgical coal	40	274	314
Total	873	326	1,199

Year ended 31 December 2017

	NSW	QLD	Total
	A$M	*A$M*	*A$M*
Primary geographical markets			
Australia (the Company's country of domicile)	307	15	322
Singapore	193	144	337
South Korea	299	116	415
China	593	61	654
Japan	380	109	489
Taiwan	118	13	131
All other foreign countries	273	2	275
Total	2,163	460	2,623
Major product			
Thermal coal	1,442	443	1,885
Metallurgical coal	721	17	738
Total	2,163	460	2,623

Six months ended 30 June 2017 (unaudited)

	NSW	QLD	Total
	A$M	*A$M*	*A$M*
Primary geographical markets			
Australia (the Company's country of domicile)	117	1	118
Singapore	110	51	161
South Korea	126	55	181
China	161	35	196
Japan	37	62	99
Taiwan	12	12	24
All other foreign countries	53	3	56
Total	616	219	835

	NSW	QLD	Total
	A$M	*A$M*	*A$M*
Major product			
Thermal coal	534	11	545
Metallurgical coal	82	208	290
Total	616	219	835

Six months ended 30 June 2018

	NSW	QLD	Total
	A$M	*A$M*	*A$M*
Primary geographical markets			
Australia (the Company's country of domicile)	220	8	228
Singapore	421	30	451
South Korea	289	44	333
China	447	32	479
Japan	374	66	440
Taiwan	200	10	210
All other foreign countries	100	9	109
Total	2,051	199	2,250
Major product			
Thermal coal	1,690	8	1,698
Metallurgical coal	361	191	552
Total	2,051	199	2,250

8. OTHER INCOME

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
Gain on change in fair value of royalty receivable	2	–	8	2	2
Net gain on foreign exchange	15	12	–	–	30
Receipts from joint venture participants	–	–	5	5	–
Gain on non-substantial loan modification *(Note)*	–	–	31	–	–
Gain on bargain purchase *(note 35)*	–	–	177	–	–
Impairment reversal of mining tenements	–	–	100	–	–
Gain on acquisition of additional interests in joint operation and subsidiaries *(note 35)*	6	–	–	–	–
Gain on disposal of interest in joint operation	–	–	–	–	78
Others	11	3	4	1	5
	34	15	325	8	115

Note: On the adoption of IFRS 9 Financial Instruments, the secured bank loans were adjusted as a result of refinancing the secured bank loan at a lower margin during 2017. Such refinancing is considered as a non-substantial modification of the terms of the secured bank loans and resulted in a gain of A$31 million at the time of modification in 2017. This amount will continue to amortise up to the date of maturity, at which time the full face value of the secured bank loans will be recognised. During 2017 and 2018, A$7 million and A$7 million were amortised in finance cost respectively.

9. FINANCE COSTS

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
Interest expenses on:					
– Bank borrowings	116	139	138	66	80
– Loan from related parties	44	76	91	41	57
– Finance lease charges	2	4	4	2	2
– Amortisation of loan refinance fair value	–	–	7	–	7
– Unwinding of discount on provisions and deferred payables	6	5	63	2	6
	168	224	303	111	152
Less: interest expenses capitalised into assets under construction	(6)	(15)	(9)	(6)	–
	162	209	294	105	152

Note: The borrowing costs capitalised arose from the general borrowing pool are calculated by applying a capitalisation rate of 7% per annum to expenditure on qualifying assets for the years ended 2015, 2016 and 2017 and for the six months ended 30 June 2017 and 2018.

10. INCOME TAX BENEFIT/(EXPENSE)

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
(i) Net tax benefit/(expense)					
Income tax benefit/(expense)	82	73	(87)	(5)	(177)
Income tax (under)/over provision in respect of prior years	(19)	12	(2)	9	(1)
Net tax benefit/(expense)	63	85	(89)	4	(178)
(ii) Income tax benefit/(expense)					
Deferred tax benefit/(expense) included in income tax benefit comprises:					
Increase/(decrease) in deferred tax assets	214	157	(73)	8	(214)
(Increase)/decrease in deferred tax liabilities	(151)	(70)	(16)	(4)	36
Movements in other assets including assets classified as held for sale	–	(2)	–	–	–
	63	85	(89)	4	(178)

The Company and its subsidiaries are subject to the standard income tax rate of 30% on its taxable income, in accordance with the relevant Australia Income Tax Assessment Act.

The total tax benefit/(expense) for the years/periods can be reconciled to the (loss)/profit per the consolidated statements of profit or loss and other comprehensive income as follows:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
	A$M	*A$M*	*A$M*	*A$M* **(Unaudited)**	*A$M*
(Loss)/profit before income tax	(354)	(312)	335	(18)	539
Tax at applicable income tax rate of 30%	106	94	(101)	5	(162)
Tax effect of non-taxable/deductible amounts in calculating income taxes:					
Stamp duty provision expensed	–	(4)	(50)	–	(5)
Share of (loss)/profit of equity-accounted investees not (deductible)/taxable	(11)	(2)	10	(6)	10
Gain on acquisition of subsidiaries	3	–	53	–	–
(Under)/over provision in prior years	(19)	12	2	9	(1)
Denial of debt deductions	(16)	(19)	(1)	–	–
Non-deductible expense	–	–	–	(11)	(18)
Other	–	4	(2)	7	(2)
Income tax benefit/(expense)	63	85	(89)	4	(178)

11. (LOSS)/PROFIT BEFORE INCOME TAX

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
(Loss)/profit before income tax has been arrived at after charging:					
Amortisation of mining tenements and intangible assets	67	61	106	39	95
Depreciation of property, plant and equipment					
– Under finance leases	4	6	8	4	3
– Self-owned	129	66	142	37	146
Total depreciation and amortisation	200	133	256	80	244
Auditor's remuneration	1	1	2	–	–
Transaction costs[#]	–	3	33	21	10
Employee benefit expense (including directors', chief executive, supervisors' and management team's emoluments)*					
Wages, salaries, housing benefits and other allowances	210	174	281	95	230
Share-based payment expense	–	–	–	–	6
Pension scheme contribution	19	14	21	7	18
Total employee benefits	229	188	302	102	254
Cost of inventories recognised as expenses	211	194	342	99	313
Change in fair value of royalty receivable	(2)	6	(8)	(2)	(2)
Impairment of financial assets	–	–	–	–	21
Remeasurement of financial assets	–	–	–	–	29

* During the years ended 31 December 2015, 2016, 2017 and six months ended 30 June 2017 and 2018, A$45 million, A$26 million, A$17 million, A$6 million and A$1 million of employee benefits were capitalised.

\# Included listing expenses of approximately nil, nil, nil, nil and A$10 million for the years ended 31 December 2015, 2016 and 2017 and six months ended 30 June 2017 and 2018 respectively.

12. DIRECTORS', CHIEF EXECUTIVE'S AND FIVE HIGHEST PAID INDIVIDUALS' EMOLUMENTS

Directors' and chief executive's emoluments

Directors' and chief executive's emoluments are as follows:

	Year ended 31 December 2015			
	Fees	Salaries, allowance and other benefits in kind	Retirement benefit scheme contributions	Total
	A$M	*A$M*	*A$M*	*A$M*
Non-executive directors				
Xiyong Li	–	–	–	–
Cunliang Lai	–	–	–	–
Yuxiang Wu	–	–	–	–
Xinghua Ni[1]	–	–	–	–
Fuqi Wang[2]	–	–	–	–
	–	–	–	–
Independent non-executive directors				
William Randall	–	–	–	–
Geoffrey Raby	0.2	–	–	0.2
Vincent O'Rourke	0.2	–	–	0.2
Huaqiao Zhang	0.1	–	–	0.1
Gregory Fletcher	0.2	–	–	0.2
	0.7	–	–	0.7
Executive directors				
Baocai Zhang	–	1.0	–	1.0
Boyun Xu	–	–	–	–
	–	1.0	–	1.0
Chief Executive				
Reinhold Schmidt	–	4.2	–	4.2
	0.7	5.2	–	5.9

1 Resigned on 23 April 2015.

2 Appointed on 23 April 2015.

	Year ended 31 December 2016			
	Fees	Salaries, allowance and other benefits in kind	Retirement benefit scheme contributions	Total
	A$M	*A$M*	*A$M*	*A$M*
Non-executive directors				
Xiyong Li	–	–	–	–
Cunliang Lai	–	–	–	–
Yuxiang Wu	–	–	–	–
Fuqi Wang	–	–	–	–
	–	–	–	–
Independent non-executive directors				
William Randall	–	–	–	–
Geoffrey Raby	0.2	–	–	0.2
Vincent O'Rourke	0.2	–	–	0.2
Huaqiao Zhang	0.1	–	–	0.1
Gregory Fletcher	0.2	–	–	0.2
	0.7	–	–	0.7
Executive directors				
Baocai Zhang	–	0.8	–	0.8
Boyun Xu	–	–	–	–
	–	0.8	–	0.8
Chief Executive				
Reinhold Schmidt	–	4.5	–	4.5
	0.7	5.3	–	6.0

	Year ended 31 December 2017			
	Fees	Salaries, allowance and other benefits in kind	Retirement benefit scheme contributions	Total
	A$M	*A$M*	*A$M*	*A$M*
Non-executive directors				
Xiyong Li	–	–	–	–
Cunliang Lai	–	–	–	–
Yuxiang Wu[1]	–	–	–	–
Fuqi Wang	–	–	–	–
Qingchun Zhao[2]	–	–	–	–
Xiangqian Wu[2]	–	–	–	–
	–	–	–	–
Independent non-executive directors				
Gregory Fletcher	0.6	–	–	0.6
Geoffrey Raby	0.3	–	–	0.3
Xing Feng[4]	–	–	–	–
Vincent O'Rourke[5]	0.3	–	–	0.3
Huaqiao Zhang[5]	0.1	–	–	0.1
William Randall[3]	–	–	–	–
	1.3	–	–	1.3
Executive directors				
Baocai Zhang	–	1.9	–	1.9
Boyun Xu[1]	–	–	–	–
	–	1.9	–	1.9
Chief Executive				
Reinhold Schmidt	–	6.8	–	6.8
	1.3	8.7	–	10.0

1 Resigned on 28 April 2017.

2 Appointed on 28 April 2017.

3 Resigned on 9 November 2017.

4 Appointed on 15 December 2017.

5 Resigned on 30 January 2018.

	Six months ended 30 June 2017 (unaudited)			
	Fees	Salaries, allowance and other benefits in kind	Retirement benefit scheme contributions	Total
	A$M	*A$M*	*A$M*	*A$M*
Non-executive directors				
Xiyong Li	–	–	–	–
Cunliang Lai	–	–	–	–
Yuxiang Wu[1]	–	–	–	–
Fuqi Wang	–	–	–	–
Qingchun Zhao[2]	–	–	–	–
Xiangqian Wu[2]	–	–	–	–
	–	–	–	–
Independent non-executive directors				
Gregory Fletcher	0.3	–	–	0.3
Geoffrey Raby	0.2	–	–	0.2
Vincent O'Rourke	0.2	–	–	0.2
Huaqiao Zhang	0.1	–	–	0.1
William Randall[3]	–	–	–	–
	0.8	–	–	0.8
Executive directors				
Baocai Zhang	–	0.2	–	0.2
Boyun Xu[1]	–	–	–	–
	–	0.2	–	0.2
Chief Executive				
Reinhold Schmidt	–	0.6	–	0.6
	0.8	0.8	–	1.6

1 Resigned on 28 April 2017.

2 Appointed on 28 April 2017.

3 Resigned on 9 November 2017.

	Six months ended 30 June 2018			
	Fees	Salaries, allowance and other benefits in kind	Retirement benefit scheme contributions	Total
	A$M	*A$M*	*A$M*	*A$M*
Non-executive directors				
Baocai Zhang[2]	–	–	–	–
Xiyong Li[3]	–	–	–	–
Cunliang Lai	–	–	–	–
Fuqi Wang	–	–	–	–
Qingchun Zhao	–	–	–	–
Xiangqian Wu	–	–	–	–
	–	–	–	–
Independent non-executive directors				
Gregory Fletcher	0.2	–	–	0.2
Helen Gillies	0.1	–	–	0.1
David Moult	0.1	–	–	0.1
Geoffrey Raby	0.1	–	–	0.1
Xing Feng	–	–	–	–
Vincent O'Rourke[4]	–	–	–	–
Huaqiao Zhang[4]	–	–	–	–
	0.5	–	–	0.5
Executive directors				
Fucun Wang[1]	–	–	–	–
Baocai Zhang[2]	–	0.2	–	0.2
	–	0.2	–	0.2
Chief Executive				
Reinhold Schmidt	–	0.8	–	0.8
	0.5	1.0	–	1.5

The executive directors' and the Chief Executive's emoluments show above were for their services to the management of the affairs of the Company and the Group.

The non-executive directors' emoluments show above were for their services as directors of the Company throughout the Track Record Period.

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1 Appointed on 8 June 2018.

2 Resigned on 8 June 2018 as an executive director and Chair of Executive Committee and reappointed as a non-executive director and Chairman.

3 Resigned on 8 June 2018.

4 Resigned on 30 January 2018.

Employees' emoluments

The five highest paid individuals in the Group included one director and the Chief Executive for each of the years ended 31 December 2015, 2016 and 2017 and six months ended 30 June 2017 and 2018, details of whose remuneration are set out above. Details of emoluments of the remaining three highest paid individuals who are neither a director nor chief executive of the Company for the years ended 31 December 2015, 2016 and 2017 and six months ended 30 June 2017 and 2018 are as follows:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
Salaries, allowance and other benefits in kind	1	1	1	1	1
Retirement benefit scheme contributions	–	–	–	–	–
Discretionary bonuses	1	1	3	–	–
	2	2	4	1	1

Their emoluments were within the following bands:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
				(Unaudited)	
HKD1,000,001 to HKD1,500,000	–	–	–	3	–
HKD1,500,001 to HKD2,000,000	–	–	–	–	3
HKD3,500,001 to HKD4,000,000	2	1	–	–	–
HKD4,000,001 to HKD4,500,000	–	1	–	–	–
HKD4,500,001 to HKD5,000,000	1	1	–	–	–
HKD7,000,001 to HKD7,500,000	–	–	2	–	–
HKD8,000,001 to HKD8,500,000	–	–	1	–	–

None of the directors, chief executive director, supervisors, management team and the five highest and individuals waived any emoluments in the years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018. No emoluments were paid by the Group to any of the directors as an inducement to joining the Group or as compensation for loss of office.

13. DIVIDEND

No dividend has been distributed by the Company for the years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2017 and 2018.

On 15 August 2018, the Directors announced an unfranked dividend of A$130 million, with a record date of 7 September 2018 and payment date of 21 September 2018, which represents 36% of profit after tax consistent with the 25% – 40% range detailed in the Company's Constitution.

14. (LOSS)/EARNINGS PER SHARE

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
Basic (loss)/profit per share (A$)	(9.30)	(7.26)	0.54	(0.44)	0.29
Diluted (loss)/profit per share (A$)	(9.30)	(7.26)	0.31	(0.44)	0.29
a) Reconciliation of (loss)/profit used in calculating (loss)/earnings per share					
Basic and diluted (loss)/earnings per share					
(Loss)/profit used in calculating the basic and diluted (loss)/earnings per share:	(291)	(227)	246	(14)	361
Weighted average number of shares used in calculating (loss)/earnings per share					
Adjustments to calculation of basic earnings per share					
Bonus factor restatement associated with rights issue dated 31 August 2017	10%	10%	10%	10%	–
Number of shares associated with bonus factor	2,889,295	2,889,295	1,926,313	2,889,469	–
Weighted average number of ordinary shares in issue during the year used in the basic earnings per share calculation	31,295,485	31,295,490	458,131,808	31,297,374	1,256,055,998
Adjustments to denominator used in calculating the diluted (loss)/earnings per share	–	–	325,045,691	–	23,333
Weighted average number of shares used as the denominator in calculating the diluted (loss)/earnings per share	31,295,485	31,295,490	783,177,499	31,297,374	1,256,079,331

In 2015 and 2016, the potential conversion of SCN into ordinary shares has an anti-dilutive impact as the Group was loss making and was therefore excluded from the weighted average number of ordinary shares for the purpose of diluted loss per share.

As disclosed in note 32, 18,000,181,943 shares were issued during 2017 for the conversion of SCN's and are included in the basic and diluted weighted average calculation for 2017. At 31 December 2017 there are 4,900 SCN on issue. The SCN's were redeemed on 31 January 2018 already included from the above calculation.

Additionally as required by IAS 33 when there is a rights issue, shares on issue prior to the rights issue need to be increased by a bonus factor equal to the fair value per share immediately before the exercise of rights and the rights issue price. In the calculation above this factor accounts to 10%.

A share consolidation of 35 shares into 1 share of the Company had been completed on 28 September 2018. The weighted average number of ordinary shares for the purpose of basic and diluted (loss)/earnings per share has been adjusted for the share consolidation in 28 September 2018.

15. CASH AND CASH EQUIVALENTS

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Cash at bank and in hand	89	190	207	444
Deposits at call	70	–	–	41
	159	190	207	485
Transfer to assets classified as held for sale	(5)	–	–	–
	154	190	207	485

The Company

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Cash at bank and in hand	57	63	112	242
Deposits at call	70	–	–	41
	127	63	112	283

16. TRADE AND OTHER RECEIVABLES

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Trade receivables	157	278	540	424
Current promissory note receivable *(i)*	21	21	36	38
Restricted cash	4	32	1	–
Receivables from joint venture *(ii)*	331	347	332	274
Investment in securities *(iii)*	47	60	61	14
Long service leave receivables	–	–	80	62
Others*	44	104	81	97
	447	564	591	485
	604	842	1,131	909
Presented as:				
Current Portion	225	435	658	561
Non-current portion	379	407	473	348
	604	842	1,131	909

* Included impairment provision of nil, nil, nil and A$3 million as at 31 December 2015, 2016 and 2017 and 30 June 2018.

The Company

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Trade receivables	–	11	–	–
Current promissory note receivable *(i)*	21	21	36	38
Advances to related entities	5,910	822	880	901
Investment in securities *(iii)*	32	32	32	14
Restricted cash	2	31	–	–
Others	–	–	29	9
	5,965	906	977	962
	5,965	917	977	962
Presented as:				
Current portion	1,014	168	240	242
Non-current portion	4,951	749	737	720
	5,965	917	977	962

(i) Promissory notes to the value of A$674 million were issued to the Group by the Parent Company on 22 June 2012 on the disposal of certain mining assets, including promissory notes of A$21 million with regard to the expected tax on the disposal. During 2017 the promissory notes of A$21 million with the Parent Company was settled against related party loan interest payable by the Company. In addition as part of the equity raising completed on 1 September 2017, US$28 million (approximately A$36 million and A$38 million as at 31 December 2017 and 30 June 2018 respectively)) was deposited to Yankuang Ozstar (Ningbo) Trading Co Limited, a related party, and a promissory note was issued to the Company. Management believe that this will be settled within the next 12 months.

(ii) Receivables from joint venture includes a loan provided to Middlemount Coal Pty Ltd ("Middlemount JV") with a face value of A$350 million as at 31 December 2015, 2016 and 2017 and a face value of A$281 million as at 30 June 2018. On 1 July 2015, the shareholders of Middlemount JV agreed to make the loan interest-free for 18 months.

At 31 December 2016, this loan was further extended on an interest free basis for two months.

On 1 July 2017, the shareholders of Middlemount JV agreed to make the loan interest free for 18 months.

This loan has been revalued using the effective interest rate method to A$331 million, A$347 million, A$332 million and A$274 million at 31 December 2015, 2016 and 2017 and 30 June 2018 respectively with the difference being recognised as a contribution to the joint venture.

(iii) Investments in securities represent the Group's investment in securities issued by WICET. These include E Class WIPS of A$15 million, A$28 million, A$29 million and nil and GiLTS of A$32 million, A$32 million, A$32 million and A$14 million as at 31 December 2015, 2016 and 2017 and 30 June 2018 respectively.

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
GiLTS				
Opening balance	32	32	32	32
Impairment	–	–	–	(18)
Closing balance	32	32	32	14

The Group does not have a standardised and universal credit period granted to its customers, and the credit period of individual customer is considered on a case-by-case basis, as appropriate. The following is an aged analysis of trade receivables based on the invoice dates at the reporting dates:

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
0-90 days	116	198	531	410
91-180 days	9	19	4	2
181-365 days	9	13	1	5
Over 1 year	23	48	4	7
	157	278	540	424

The Company

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
0-90 days	–	9	–	–
91-180 days	–	1	–	–
181-365 days	–	1	–	–
	–	11	–	–

Before accepting any new customer, the Group and the Company assess the potential customer's credit quality and defines credit limits by customer. Limits attributed to customers are reviewed once a year.

The ageing analysis of the Group's and the Company's trade receivables, that were past due but not yet impaired as at 31 December 2015, 2016 and 2017 and 30 June 2018, is as follows:

The Group

	At 31 December			At 30 June
	2015	**2016**	**2017**	**2018**
	A$M	*A$M*	*A$M*	*A$M*
1-90 days	31	45	23	28
91-180 days	9	19	4	2
181-365 days	9	13	1	5
Over 1 year	23	48	4	7
	72	125	32	42

The Company

	At 31 December			At 30 June
	2015	**2016**	**2017**	**2018**
	A$M	*A$M*	*A$M*	*A$M*
91-180 days	–	1	–	–

The Group and the Company does not hold any collateral over these balances. The management closely monitors the credit quality of trade receivable and consider the balance that are neither past due nor impaired are of good credit quality.

17. ROYALTY RECEIVABLE

The Group

	At 31 December			At 30 June
	2015	**2016**	**2017**	**2018**
	A$M	*A$M*	*A$M*	*A$M*
As at 1 January	200	205	199	199
Cash received	(18)	(21)	(29)	(13)
Unwinding discount	21	21	21	10
Change in fair value	2	(6)	8	2
As at 31 December/30 June	205	199	199	198
Presented as:				
Current portion	20	31	24	28
Non-current portion	185	168	175	170
	205	199	199	198

A right to receive a royalty of 4% of Free on Board Trimmed sales from the Middlemount mine was acquired as part of the merger with Gloucester Coal Ltd ("Gloucester"). This financial asset has been determined to have a finite life being the life of the Middlemount mine and is measured at fair value basis.

18. INVENTORIES

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Work in progress	15	13	19	23
Finished goods	34	34	68	100
	49	47	87	123
Fuel	1	1	4	5
Tyres and spares – at cost	26	27	59	77
	76	75	150	205

(a) Inventory expense

Write downs of inventories to net realisable value recognised as a provision at 31 December 2015, 2016 and 2017 and 30 June 2017 and 2018 amounted to A$12 million, A$1 million, A$1 million, A$4 million and A$1 million respectively. The movement in the provision has been included in "Changes in inventories of finished goods and work in progress" in the consolidated statements of profit or loss and other comprehensive income.

19. MINING TENEMENTS

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Opening net book amount	2,467	2,085	2,128	4,296
Acquisition through business combination and changes interest in joint operations *(note 35)*	25	–	2,456	127
Transfers from exploration and evaluation assets *(note 20)*	–	101	26	2
Impairment reversal	–	–	100	–
Amortisation	(64)	(58)	(103)	(93)
Transfer to assets classified as held for sale *(note 25)*	(343)	–	(311)	(24)
Closing net book amount	2,085	2,128	4,296	4,308

The mining tenements are recognised at cost less accumulated amortisation and impairment based on units of production method.

(i) Impairment of assets

(a) CGU assessment

The Group operates on a regional basis within NSW and as such the NSW mines are considered to be one CGU. In 2015, due to the classification of the three NSW underground mines as assets classified as held for sale, the NSW regional CGU comprises the open cut mines Moolarben and Stratford/Duralie. In 2017, Hunter Valley Operations and Mount Thorley Warkworth have been included in the NSW regional CGU alongside Moolarben and Stratford/Duralie. Yarrabee and Middlemount are considered separate CGU due to location and ownership structure.

(b) Assessment of fair value

Each CGU's fair value less costs of disposal has been determined using a discounted cash flow model over the expected life of mine (10 – 43 years). The expected life of mine is based on the coal reserves and resources (see discussion at note 5) and the expected production that will deplete the reserves and resources, in accordance with the current life of mine plan, to the point where further extraction is either no longer economic or requires further work to attend the life of mine. The fair value model adopted has been categorised as level 3 in the fair value hierarchy.

The key assumptions in the model include:

Key assumptions Description	**Description**
Coal prices	The Group's cash flow forecasts are based on estimates of future coal prices, which assume benchmark prices will revert to the Group's assessment of the long term real coal prices of US$55 – US$109 per tonne, US$66 – US$100 per tonne and US$65 – US$101 per tonne and US$67 – US$102 per tonne for thermal coal and US$91 – US$166 per tonne, US$104 – US$165 per tonne, US$110 – US$190 per tonne and US$112 – US$176 per tonne for metallurgical coal for the years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 respectively. The Group receives long term forecast coal price data from multiple external sources when determining its benchmark coal price forecasts and then makes adjustments for specific coal qualities. For both thermal and metallurgical coal the Group's forecast coal price is within the range of external price forecasts.
Foreign exchange rates	The long term A$/US$ forecast exchange rate of US$0.73, US$0.73, US$0.75 and US$0.75 is based on external sources and the year-end A$/US$ exchange rate was US$0.73, US$0.72, US$0.78 and US$0.74 per the Reserve Bank of Australia at 31 December 2015, 2016 and 2017 and 30 June 2018 respectively.
Production and capital costs	Production and capital costs are based on the Group's estimate of forecast geological conditions, stage of existing plant and equipment and future production levels. This information is obtained from internally maintained budgets, the five year business plan, life of mine models, life of mine plans, JORC reports, and project evaluations performed by the Group in its ordinary course of business.
Coal reserves and resources	See discussion at note 5 for how the coal reserves and resources are determined.

Key assumptions Description	Description
Discount rate	The Group has applied a post-tax discount rate of 10.5%, 10.5%, 10.5% and 10.5% to discount the forecast future attributable post-tax cash flows for the years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 respectively. The post-tax discount rate applied to the future cash flow forecasts represents an estimate of the rate the market would apply having regard to the time value of money and the risks specific to the asset for which the future cash flow estimates have not been adjusted. This rate is also consistent with the Group's five year business plan, life of mine models and project evaluations performed in ordinary course of business.

Based on the above assumptions at 31 December 2015, 2016, 2017 and 30 June 2018 the recoverable amount is determined to be above book value for all CGU resulting in no further impairment.

Impairment provision recorded as at 31 December 2015 and 2016 is A$108 million and A$105 million respectively for Moolarben. At 31 December 2017, the recoverable amount for Moolarben was determined to be approximately A$12,294 million and the remaining impairment provision at Moolarben of A$100 million has been reversed. Management have assessed the following as being reasons for the reversal:

- both the NSW CGU and Moolarben standalone recoverable amounts are above book value;
- completion of open-cut expansions and commencement of underground mining operations during 2017 have derisked future cash flows and increased production from 8 million tones ("Mt") in 2014 to approximately 17Mt of Run of mines ("ROM") coal; and
- current and life of mine operating costs and capital expenditure have decreased.

The impairment reversal has been recognised through the profit and loss.

Impairment provision recorded as at 31 December 2015, 2016, 2017 and 30 June 2018 is A$73 million, A$73 million, A$73 million and A$73 million respectively for Stratford and Duralie. Stratford and Duralie is included in the NSW region CGU. Management may consider reversals of the impairment provision previously recognised if there is either an increase in the average long term real revenue over the life of the mine due to either an increase in US$ coal prices, or a further weakening of the A$/US$ foreign exchange rate or a combination of both, or further reductions in the current and life of mine operating costs, capital expenditure requirements, or an increase in the reserves.

In determining the value assigned to each key assumption, management has used: external sources of information; the expertise of external consultants; as well as the experience of experts within the Group to validate entity specific assumptions such as coal reserves and resources. Additionally various sensitivities have been determined and considered with respect to each of the key assumptions, further supporting the above fair value conclusions.

(c) Key sensitivity

The most sensitive input in the fair value model is forecast revenue, which is primarily dependent on estimated future coal prices and the A$/US$ forecast exchange rate.

For the year ended 31 December 2015, if coal prices were -10% life of mine ("LOM") the NSW CGU recoverable amount would exceed book value however for Yarrabee the book value would exceed the recoverable amount by A$267 million and for Middlemount by A$103 million. If the A$/US$ long-term forecast exchange rate was A$0.80 the NSW CGU recoverable amount would exceed book value however for Yarrabee the book value would exceed the recoverable amount by A$184 million and for Middlemount by A$30 million.

For the year ended 31 December 2016, if coal prices were -10% LOM the recoverable amount would exceed book value for all CGUs. If the AU$/US$ long term forecast exchange rate was A$0.80 the recoverable amount would exceed book value for all CGUs.

For the year ended 31 December 2017, if coal prices were-10% LOM the recoverable amount would exceed book value for all CGUs with the exception of Yarrabee who exceeded the recoverable amount by A$15 million. If the A$/US$ long term forecast exchange rate was A$0.80 the recoverable amount would exceed book value for all CGUs.

For the six months ended 30 June 2018, if coal prices were -10% LOM the recoverable amount would exceed book value for all CGUs with the exception of Yarrabee who exceeded the recoverable amount by A$149 million. If the A$/US$ long term forecast exchange rate was A$0.80 the recoverable amount would exceed book value for all CGUs.

20. EXPLORATION AND EVALUATION ASSETS

The Group

	At 31 December			At 30 June
	2015	**2016**	**2017**	**2018**
	A$M	*A$M*	*A$M*	*A$M*
Opening net book amount	896	591	498	565
Acquisition through business combination *(note 35)*	3	–	108	12
Other additions	3	–	3	–
Transfers to mining tenements *(note 19)*	–	(101)	(26)	(2)
Transfers from assets under construction	–	8	–	2
Transfer to assets classified as held for sale *(note 25)*	(311)	–	(18)	–
Closing net book amount	591	498	565	577

21. INTANGIBLE ASSETS

The Group

	Goodwill	Computer software	Water rights	Other	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
As at 1 January 2015					
Cost	60	21	–	5	86
Accumulated amortisation	–	(7)	–	–	(7)
Closing Net book amount	60	14	–	5	79
Year ended 31 December 2015					
Opening net book amount	60	14	–	5	79
Transfers from assets under construction *(note 22)*	–	2	–	–	2
Amortisation charge	–	(3)	–	–	(3)
Transfer to assets classified as held for sale *(note 25)*	–	(1)	–	(5)	(6)
Closing net book amount	60	12	–	–	72
At 31 December 2015					
Cost	60	22	–	–	82
Accumulated amortisation	–	(10)	–	–	(10)
Net book amount	60	12	–	–	72

	Goodwill	Computer software	Water rights	Other	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
Year ended 31 December 2016					
Opening net book amount	60	12	–	–	72
Transfers from assets under construction *(note 22)*	–	1	–	–	1
Amortisation charge	–	(3)	–	–	(3)
Closing net book amount	60	10	–	–	70
At 31 December 2016					
Cost	60	25	–	–	85
Accumulated amortisation	–	(15)	–	–	(15)
Net book amount	60	10	–	–	70

	Goodwill	Computer software	Water rights	Other	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
Year ended 31 December 2017					
Opening net book amount	60	10	–	–	70
Acquisition through business combination *(note 35)*	–	–	22	13	35
Transfers from assets under construction *(note 22)*	–	–	–	1	1
Transfer to asset classified as held for sale *(note 25)*	–	–	(4)	–	(4)
Amortisation charge	–	(2)	–	(1)	(3)
Closing net book amount	60	8	18	13	99
At 31 December 2017					
Cost	60	25	18	14	117
Accumulated amortisation	–	(17)	–	(1)	(18)
Net book amount	60	8	18	13	99

	Goodwill	Computer software	Water rights	Other	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
Six months ended 30 June 2018					
Opening net book amount	60	8	18	13	99
Acquisition through business combination *(note 35)*	–	2	–	–	2
Other addition	–	–	1	–	1
Other disposal	–	–	(2)	–	(2)
Amortisation charge	–	(1)	–	(1)	(2)
Closing net book amount	60	9	17	12	98
At 30 June 2018					
Cost	60	27	17	14	118
Accumulated amortisation	–	(18)	–	(2)	(20)
Net book amount	60	9	17	12	98

The goodwill at 31 December 2015, 2016, 2017 and 30 June 2018 relates to the acquisition of Yancoal Resources Limited (formerly known as Felix Resources Limited) from an independent third party in an arm's length transaction and was allocated to Yarrabee mine.

The Yarrabee goodwill and water rights were not subject to impairment charges as the recoverable amounts were greater than the carrying value for these CGUs. Refer to note 19(i) for the details regarding the fair value less cost to sell calculation performed for goodwill and water rights.

The Company

Computer software

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Opening net book amount	3	3	2	2
Amortisation charge	–	(1)	–	(1)
Closing net book amount	3	2	2	1
At end of the year/period				
Cost	5	5	5	5
Accumulated depreciation	(2)	(3)	(3)	(4)
Net book amount	3	2	2	1

At 1 January 2015, the cost and accumulated amortisation were A$5 million and A$3 million respectively.

22. PROPERTY, PLANT AND EQUIPMENT

The Group

	Assets under construction	Freehold land & buildings	Mine development	Plant and equipment	Leased plant and equipment	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
At 1 January 2015						
Cost	303	259	624	1,334	56	2,576
Accumulated depreciation	–	(11)	(149)	(499)	(11)	(670)
Net book amount	303	248	475	835	45	1,906
Year ended 31 December 2015						
Opening net book amount	303	248	475	835	45	1,906
Transfer (to)/from assets under construction	(306)	8	186	110	–	(2)
Transfer – reclassification	–	(1)	1	–	–	–
Acquisition through business combination *(note 35)*	1	1	1	4	–	7
Other additions	281	–	47	5	–	333
Other disposals	–	–	–	(3)	–	(3)
Depreciation	–	(3)	(46)	(94)	(4)	(147)
Transfer to assets classified as held for sale *(note 25)*	(44)	(81)	(361)	(355)	(3)	(844)
Closing net book amount	235	172	303	502	38	1,250
At 31 December 2015						
Cost	235	182	374	766	53	1,610
Accumulated depreciation	–	(10)	(71)	(264)	(15)	(360)
Net book amount	235	172	303	502	38	1,250
Year ended 31 December 2016						
Opening net book amount	235	172	303	502	38	1,250
Transfer (to)/from assets under construction	(227)	–	92	126	–	(9)
Other additions	316	–	14	3	50	383
Other disposals	–	–	–	(14)	–	(14)
Depreciation	–	(2)	(28)	(48)	(6)	(84)
Closing net book amount	324	170	381	569	82	1,526
At 31 December 2016						
Cost	324	182	480	869	103	1,958
Accumulated depreciation	–	(12)	(99)	(300)	(21)	(432)
Net book amount	324	170	381	569	82	1,526

	Assets under construction	Freehold land & buildings	Mine development	Plant and equipment	Leased plant and equipment	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Year ended 31 December 2017						
Opening net book amount	324	170	381	569	82	1,526
Transfer (to)/from assets under constructions	(576)	27	308	240	–	(1)
Other additions	303	–	21	12	9	345
Acquisition through business combination *(note 35)*	33	96	353	844	–	1,326
Other disposals	–	–	–	(17)	(7)	(24)
Depreciation	–	(4)	(45)	(98)	(8)	(155)
Transfer to assets classified as held for sale *(note 25)*	(3)	(15)	(51)	(116)	–	(185)
Closing net book amount	81	274	967	1,434	76	2,832
At 31 December 2017						
Cost	81	330	1,310	2,910	105	4,736
Accumulated depreciation	–	(56)	(343)	(1,476)	(29)	(1,904)
Net book amount	81	274	967	1,434	76	2,832
Six months ended 30 June 2018						
Opening net book amount	81	274	967	1,434	76	2,832
Transfer (to)/from assets under construction	(41)	5	138	(102)	–	–
Other additions	69	–	10	–	5	84
Acquisition through business combination *(note 35)*	6	19	39	114	–	178
Other disposals	–	–	(1)	(6)	–	(7)
Depreciation	–	(2)	(57)	(87)	(3)	(149)
Closing net book amount	115	296	1,096	1,353	78	2,938
At 30 June 2018						
Cost	115	356	1,489	2,926	110	4,996
Accumulated depreciation	–	(60)	(393)	(1,573)	(32)	(2,058)
Net book amount	115	296	1,096	1,353	78	2,938

The Company

	Assets under construction	Mine development	Plant and equipment	Total
	A$M	*A$M*	*A$M*	*A$M*
At 1 January 2015				
Cost	–	–	75	75
Accumulated depreciation	–	–	(50)	(50)
Net book amount	–	–	25	25
Year ended 31 December 2015				
Opening net book amount	–	–	25	25
Additions	7	–	–	7
Depreciation	–	–	(4)	(4)
Closing net book amount	7	–	21	28
At 31 December 2015				
Cost	7	–	75	82
Accumulated depreciation	–	–	(54)	(54)
Net book amount	7	–	21	28
Year ended 31 December 2016				
Opening net book amount	7	–	21	28
Transfers	(1)	1	–	–
Additions	–	15	–	15
Depreciation	–	–	(4)	(4)
Closing net book amount	6	16	17	39
At 31 December 2016				
Cost	6	16	75	97
Accumulated depreciation	–	–	(58)	(58)
Net book amount	6	16	17	39
Year ended 31 December 2017				
Opening net book amount	6	16	17	39
Additions	10	1	–	11
Depreciation	–	–	(4)	(4)
Closing net book amount	16	17	13	46
At 31 December 2017				
Cost	16	17	75	108
Accumulated depreciation	–	–	(62)	(62)
Net book amount	16	17	13	46
Six months ended 30 June 2018				
Opening net book amount	16	17	13	46
Depreciation	–	–	(2)	(2)
Closing net book amount	16	17	11	44
At 30 June 2018				
Cost	16	17	75	108
Accumulated depreciation	–	–	(64)	(64)
Net book amount	16	17	11	44

During the years ended 31 December 2015, 2016, 2017 and six months ended 2017 and 30 June 2018, A$14 million, A$12 million, A$5 million, A$2 million and nil of depreciation and amortisation were capitalised respectively and A$6 million, A$15 million, A$9 million, A$6 million and nil of interest were capitalised in property, plant and equipment respectively.

The following estimated useful lives are used for the depreciation of property, plant and equipment, other than freehold land:

– Buildings 10 – 25 years

– Mine development 10 – 40 years

– Plant and equipment 2.5 – 40 years

– Leased plant and equipment 2 – 20 years

Mine development assets include all mining related development expenditure that is not included under land, buildings and plant and equipment. Mine development costs are capitalised net of the coal sales revenue earned from coal extracted as part of the mains development process. These capitalised costs are amortised over the life of the mine if the roads service the entire mine or over the life of the panels accessible from those mains if shorter than the mine life.

At 31 December 2015, 2016 and 2017 and 30 June 2018, mines assets with carrying amount of approximately A$303 million, A$381 million, A$967 million and A$1,096 million respectively have been pledged to secure bank borrowings of the Group.

At 31 December 2015, 2016 and 2017 and 30 June 2018, the carrying amount of property, plant and equipment held under finance leases was A$38 million, A$82 million, A$76 million and A$78 million respectively.

23. INTERESTS IN OTHER ENTITIES

(a) Interests in associates

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Share of net assets of associates	–	–	191	192

Information of major associates is as follows:

Name of associate	Place of establishment and operation	Class of shares held	Principal activities	Interest held at 31 December			Interest held at 30 June
				2015	2016	2017	2018
Watagan *(note (i))*	Australia	Ordinary shares	Coal Mining and sales	N/A	100%	100%	100%
Port Waratah Coal Services ("PWCS") *(note (ii))*	Australia	Ordinary shares	Coal terminal	N/A	N/A	36.5%	30%
NCIG *(note (iii))*	Australia	Registered capital	Coal terminal	27%	27%	27%	27%

All of the above associates have been accounted for using equity method in the consolidated financial statements.

(i) During 2015 the Group established a 100% owned subsidiary, Watagan. On 18 February 2016, the Group executed a bond subscription agreement, together with other agreements (the "Watagan Agreements") that, on completion, transferred the Group's interest in three of its 100% owned coal mining operations in Australia, being the Austar, Ashton and Donaldson coal mines (the "Three Mines"), to Watagan. On completion, under the terms of the Watagan Agreements, upon issuance of the bonds, the Group was determined to lose control of Watagan. These powers were transferred to the bondholders under the terms of the Watagan Agreements as the bond holders were given control of Watagan's board of directors' via appointment of the majority of directors. Given the Group maintains one seat on the board of directors of Watagan and had ongoing involvement under the terms of the Watagan Agreements, the Group could exercise significant influence over Watagan.

(ii) The Group through the acquisition of Coal & Allied during 2017, acquired 36.5% equity interest in PWCS of which 6.5% is classified as held for sale as at 31 December 2017 (note 25(b)(i)).

(iii) The Group holds 27% (2017: 27%) of the ordinary shares of NCIG. Under the shareholder agreement between the Group and other shareholders, the Group has 27% of the voting power of NCIG. The Group has the right to appoint a director and is currently represented on the Board to partake in policy-making processes.

(iv) All of the associates are private companies whose quoted market price is not available.

The information below reflects the summarized financial in respect of each of the associates that is material to the Group and are accounted for using equity method. They have been amended to reflect adjustments made by the Group when using the equity method, including fair value adjustments and modifications for differences in accounting policy:

	PWCS			
	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Current assets	N/A	N/A	79	103
Non-current assets	N/A	N/A	1,574	1,527
Current liabilities	N/A	N/A	(351)	(350)
Non-current liabilities	N/A	N/A	(665)	(640)
Revenue	N/A	N/A	101	183
Expenses	N/A	N/A	(101)	(170)
(Loss)/profit for the year/period	N/A	N/A	–	13
Dividend shared by the Group and received from the associate during the year/period	N/A	N/A	20	17

Statement of profit or loss of Watagan

	Watagan				
	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (unaudited)	*A$M*
Revenue	N/A	282	569	255	189
Other income	N/A	1	56	47	1
Changes in inventories of finished goods and work in progress	N/A	8	(13)	8	(6)
Coal purchases	N/A	(61)	(76)	(48)	(38)
Raw materials and consumables used	N/A	(44)	(62)	(30)	(26)
Employee benefits	N/A	(23)	(43)	(20)	(8)
Depreciation and amortisation	N/A	(90)	(136)	(59)	(37)
Transportation	N/A	(17)	(34)	(14)	(18)
Contractual services and plant hire expense	N/A	(26)	(45)	(19)	(24)
Government royalties expense	N/A	(14)	(31)	(13)	(9)
Finance costs	N/A	(134)	(174)	(74)	(71)
Service fee	N/A	(38)	(56)	(32)	(28)
Other operating expenses	N/A	(53)	(23)	(7)	(50)
Total expenses	**N/A**	**(492)**	**(693)**	**(308)**	**(315)**
Loss before income tax	N/A	(209)	(68)	(6)	(125)
Income tax benefit/(expense)	**N/A**	**47**	**10**	**(1)**	**35**
Loss for the year/period	**N/A**	**(162)**	**(58)**	**(7)**	**(90)**
Total comprehensive expense for the year/period	**N/A**	**(162)**	**(58)**	**(7)**	**(90)**

Asset and liabilities of Watagan

	Watagan			
	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Cash and cash equivalents	N/A	100	103	100
Trade and other receivables	N/A	263	151	66
Inventories	N/A	45	30	23
Other current assets	N/A	3	3	4
Total current assets	**N/A**	**411**	**287**	**193**
Trade and other receivables	N/A	–	43	70
Property, plant and equipment	N/A	884	844	853
Mining tenements	N/A	332	330	324
Deferred tax assets	N/A	31	–	29
Intangible assets	N/A	6	5	5
Exploration and evaluation assets	N/A	311	298	298
Other non-current assets	N/A	3	10	11
Non-current assets	**N/A**	**1,567**	**1,530**	**1,590**
Trade and other payables	N/A	(40)	(97)	(62)
Interest-bearing liabilities	N/A	(1)	(1)	(1)
Provisions	N/A	(2)	(1)	(1)
Current liabilities	**N/A**	**(43)**	**(99)**	**(64)**
Interest-bearing liabilities	N/A	(1,843)	(1,704)	(1,777)
Deferred tax liabilities	N/A	(214)	(183)	(201)
Provisions	N/A	(34)	(47)	(47)
Other non-current liabilities	N/A	(6)	(5)	(5)
Non-current liabilities	**N/A**	**(2,097)**	**(1,939)**	**(2,030)**
Net liabilities	N/A	(162)	(221)	(311)

Reconciliation of the above summarised financial information to the carrying amount of the interests in the associates in respect of material associates recognised in the consolidated financial statements:

	PWCS			
	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Net assets of the associate's attributable to owners	N/A	N/A	637	640
Proportion of the Group's ownership interest	N/A	N/A	30%	30%
Carrying amount of the Group's interest in the associate	N/A	N/A	191	192

	Watagan			
	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Net liabilities of the associate's attributable to owners	N/A	(162)	(221)	(311)
Proportion of the Group's ownership interest	N/A	100%	100%	100%
Carrying amount of the Group's interest in the associate	N/A	–	–	–

The carrying amount, in aggregate, of the Group's interests in associates that are not individually material and are accounted for using the equity method are set out below:

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Carrying amount of the Group's interests in immaterial associates	–	–	–	–

For the associates not individually material, no profit or loss was recognised during the Track Record Period because the accumulated losses exceeds its interest.

Movements of carrying amounts

The Group's share of NCIG's loss after tax of A$93 million, A$10 million, profit after tax of A$36 million and loss after tax of A$37 million has not been recognised for the years ended 31 December 2015, 2016 and 2017 and 30 June 2018 respectively since the Group's share of NCIG's accumulated losses exceeds its interest in NCIG at 31 December 2015, 2016 and 2017 and 30 June 2018.

As at 31 December 2015, 2016 and 2017 and 30 June 2018, the cumulative unrecognised losses of NCIG are A$301 million, A$311 million and A$275 million and A$313 million respectively.

Apart from the initial A$100 invested, the Group's share of Watagan's loss after tax of A$162 million, A$58 million and A$90 million has not been recognised for the years ended 31 December 2016 and 2017 and six months ended 30 June 2018 as the Group's share of Watagan's accumulated losses exceeds its interest in Watagan at 31 December 2016 and 2017 and six months ended 30 June 2018.

As at 31 December 2015, 2016 and 2017 and 30 June 2018, the cumulative unrecognised losses of Watagan are nil, A$162 million and A$220 million and A$310 million respectively.

(b) Interests in joint ventures

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Share of net assets of joint ventures	8	5	60	88

Name of joint venture	Place of establishment and operation	Class of shares held	Principal activities	At 31 December 2015 Voting power	At 31 December 2015 Interest held	At 31 December 2016 Voting power	At 31 December 2016 Interest held	At 31 December 2017 Voting power	At 31 December 2017 Interest held	At 30 June 2018 Voting power	At 30 June 2018 Interest held
Middlemount JV	Australia	Ordinary shares	Coal mining and sales	50%	50%	50%	50%	50%	50%	50%	50%
HVO Coal Sales Pty Ltd (note (i))	Australia	Ordinary shares	Coal sales	N/A	N/A	N/A	N/A	N/A	N/A	50%	51%
HVO Operations Pty Ltd (note (i))	Australia	Ordinary shares	Coal management	N/A	N/A	N/A	N/A	N/A	N/A	50%	51%
HVO Services Pty Ltd (note (i))	Australia	Ordinary shares	Employment company for HVO	N/A	N/A	N/A	N/A	N/A	N/A	50%	51%

(i) Through the acquisition of Coal & Allied as detailed in note 35(ii), the Company acquired 67.6% of the Hunter Valley Operations ("HVO JV"), and HVO Coal Sales Pty Ltd, HVO Operations Pty Ltd and HVO Services Pty Ltd ("HVO entities"). HVO entities are used to manage sales and costs on behalf of the HVO JV. On 27 July 2017, the Group entered into an agreement with Glencore Coal Pty Ltd ("Glencore") to dispose of 16.6% interest in HVO. Upon completion of the transaction on 4 May 2018, the operation of HVO entities by the Group ceased. Even though the Group holds 51% of the shares in HVO entities, those entities are governed by shareholder agreements whereby it is required that decisions are made jointly. Accordingly, the Group has determined that from 4 May 2018 it jointly controls these companies and has accounted for the HVO entities as joint ventures.

The following table provides summarised financial information for Middlemount JV. They have been amended to reflect adjustments made by the Group when using the equity method, including fair value adjustments and modifications for differences in accounting policy.

	Middlemount JV			
	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Cash and cash equivalents	20	12	4	18
Other current assets	68	118	156	90
Current assets	88	130	160	108
Non-current assets	1,194	1,092	976	922
Current liabilities	(244)	(226)	(126)	(102)
Non-current financial liabilities	(748)	(780)	(680)	(546)
Other non-current liabilities	(274)	(206)	(210)	(206)
Non-current liabilities	(1,022)	(986)	(890)	(752)
Net assets	16	10	120	176
Revenue	426	498	664	352
Depreciation and amortisation	(82)	(42)	(62)	(20)
Other expense	(376)	(410)	(458)	(226)
Interest expense	(50)	(48)	(42)	(22)
Income tax benefit/(expense)	8	(8)	(38)	(28)
(Loss)/profit for the year/period	(74)	(10)	64	56

As at 31 December 2015, 2016 and 2017 and 30 June 2018, the Group did not have any share of contingent liabilities or commitment of the joint ventures.

The joint ventures are accounted for using equity method in the consolidated financial statements. All of the joint ventures are private companies whose quoted market price is not available.

	Middlemount JV			
	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Net assets of the joint venture's attributable to owners	16	10	120	176
Proportion of the Group's ownership interest	50%	50%	50%	50%
Carrying amount of the Group's interest in the joint venture	8	5	60	88

Reconciliation of the above summarised financial information to the carrying amount of the interests in the joint venture in respect of joint ventures recognised in the consolidated financial statements.

The liabilities of Middlemount JV include an interest bearing liability of A$331 million (face value of A$350 million), A$347 million (face value of A$350 million), A$331 million (face value of A$350 million) and A$274 million (face value of A$281 million) due to the Group at 31 December 2015, 2016 and 2017 and 30 June 2018 respectively. The repayment of the loan due to the Group can only be made by Middlemount JV after the full settlement of all external borrowings (bank loans) and the Priority Loans owed to the other shareholder of Middlemount JV amounting to A$130 million, A$130 million, A$16 million and A$69 million at 31 December 2015, 2016 and 2017 and 30 June 2018 respectively. The liabilities of Middlemount JV also include a royalty payable of A$51 million, A$74 million, A$11 million and A$8 million due to the Group at 31 December 2015, 2016 and 2017 and 30 June 2018 respectively.

During 2018, Middlemount JV settled the priority loan owed to the other shareholder of Middlemount JV amounting to A$42 million and has made A$69 million of loan repayments to the Group. From 1 July 2017, the shareholders of Middlemount JV agreed to make the loan interest free for 18 months revaluing this loan using the effective interest rate method with the difference being recognised as an equity contribution to the joint venture.

The carrying amount, in aggregate, of the Group's interests in HVO Coal Sales Pty Ltd, HVO Operations Pty Ltd and HVO Services Pty Ltd joint ventures which are not individually material and are accounted for using the equity method are set out below:

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Carrying amount of the Group's interests in joint venture	–	–	–	–

For the joint ventures not individually material, no profit or loss was recognised during the Track Record Period because the accumulated losses exceeds its interest.

(c) Interests in joint operations

Information on major joint operations is as follows:

Name of joint operation	Place of establishment and operation	Principal activities	At 31 December			At 30 June
			2015	2016	2017	2018
			Interest held	Interest held	Interest held	Interest held
Boonal joint operation *(note (i))*	Australia	Provision of a coal haul road and train load out facilities	50%	50%	50%	50%
Moolarben joint venture *(note (ii))*	Australia	Development and operation of open-cut and underground coal mines	81%	81%	81%	81%
Warkworth joint venture *(note (iii))*	Australia	Development and operation of open-cut mines	N/A	N/A	55.6%	84.5%
Mount Thorley joint venture *(note (iv))*	Australia	Development and operation of open-cut mines	N/A	N/A	80%	80%
HVO joint venture *(note (v))*	Australia	Development and operation of open-cut mines	N/A	N/A	67.6%	51%

The above joint operations are established and operated as unincorporated businesses and are held indirectly by the Company.

Notes:

(i): The Company, through the subsidiary of Yarrabee Coal Company Pty. Limited, has an 50% interest in Boonal Joint Venture.

(ii): The Company, through the subsidiary of Moolarben Coal Mines Pty Limited, has an 81% interest in Moolarben Joint Venture.

(iii): The Company, through the acquisition of Coal & Allied in 2017, through CNA Warkworth Associates Pty Ltd and CNA Resources Ltd, have an combined interest of 55.6% in Warkworth Joint Venture. On 7 March 2018, the Group acquired an additional 28.898% from Mitsubishi Development Pty Ltd ("Mitsubishi") resulting in interest of 84.5%.

(iv): The Company, through the acquisition of Coal & Allied in 2017, through Mount Thorley Pty Ltd, acquired an 80% interest in the Mount Thorley Joint Venture.

(v): The Company, through the acquisition of Coal & Allied in 2017, through Coal & Allied Operations Pty Ltd, acquired 67.6% interest in HVO JV of which 16.6% was classified as held for sale. On 4 May 2018, the 16.6% interest was disposed of.

24. INTEREST BEARING LOAN TO AN ASSOCIATE

The Group and the Company

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Non-current assets				
– Loan to an associate	–	775	712	730

On 31 March 2016 the Group transferred its interest in three of its 100% owned NSW coal mining operations, being the Austar, Ashton and Donaldson coal mines, to Watagan for a purchase price of A$1,363 million. The purchase price was funded by way of a A$1,363 million loan from the Company to Watagan bearing interest of Bank Bill Swap Bid Rate ("BBSY") plus 7.06% with a maturity date of 1 April 2025. The outstanding interest and principal of this loan is guaranteed by Yankuang Group Co. Ltd, the Group's ultimate parent entity. Watagan can make prepayments of the outstanding loan balance with any such prepayment capable of redraw in the future.

25. ASSETS/DISPOSAL GROUP CLASSIFIED AS HELD FOR SALE

During 2015, the Group established a 100% owned subsidiary, Watagan Mining Company Pty Ltd ("Watagan"). The management of the Company had been in active discussion with the potential bond subscribers for the proposed transaction before 31 December 2015 and from the discussion held, management noted that it is appropriate to classified as held for sale.

On 18 February 2016, the Group executed a Bond Subscription Agreement, together with other agreements (the "Watagan Agreements") that, on completion, transferred the Group's interest in three of its 100% owned NSW coal mining operations, being the Austar, Ashton and Donaldson coal mines (the "three mines"), to Watagan for a purchase price of approximately A$1.3 billion (an amount equal to the book value of the three mines at completion). The purchase price was funded by way of an approximate A$1.3 billion loan from Yancoal to Watagan bearing interest at BBSY plus 7.06% with a maturity date of 1 April 2025. The outstanding interest and principal of this loan is guaranteed by Yankuang Group Co., Ltd (Yankuang), the Group's ultimate parent entity. The completion date of the transaction was 31 March 2016.

On completion Watagan issued US$775 million of debt bonds with a term of approximately 9 years to three external financiers ("Bondholders"). The Bondholders received interest on the face value outstanding on the bonds comprising a fixed interest component, as well as a variable interest component that was tied to the EBITDA performance of Watagan. Under the terms of the Watagan Agreements, it was determined that upon issuance of the bonds the Group lost control of Watagan. This loss of control was determined to occur on the issuance date of the bonds on the basis that the power over the key operating and strategic decisions of Watagan no longer resided with the Group. Specifically, these powers were transferred to the Bondholders under the terms of the Watagan Agreements as the Bondholders were given control of Watagan's board of directors via appointment of the majority of directors. This loss of control resulted in the Group de-consolidating the consolidated results of Watagan from the transaction completion date. Due to the Watagan transaction being near completion and the transaction considered to be highly likely at 31 December 2015, the three mines are disclosed as Disposal Group Held for Sale. While Watagan was deconsolidated for accounting purposes, as a result of the Group's ongoing 100% equity ownership in Watagan, Watagan remains within the Group's tax consolidated group.

The following table provides summarised financial information for the Three Mines that are held for sale as at 31 December 2015.

	31 December 2015
	A$M
Cash and cash equivalents	5
Other current assets	95
Current assets	100
Property, plant and equipment	844

	31 December 2015
	A$M
Mining tenements	343
Exploration and evaluation assets	311
Deferred tax assets	21
Intangible assets	6
Other non-current assets	12
Non-current assets	1,537
Assets classified as held for sale	1,637
Current liabilities	75
Deferred tax liability	207
Other non-current liabilities	40
Non-current liabilities	247
Liabilities associated with assets classified as held for sale	322
Net assets classified as held for sale	1,315

(a) As at 31 December 2017 and 30 June 2018, the Group had net assets classified as held for sale for which the relevant sales are expected to be completed in 2018 as follows:

	31 December 2017	30 June 2018
	A$M	*A$M*
Current assets		
Interest in an associate *(note (i))*	25	–
Land held for sale *(note (ii))*	57	57
Interest in a joint operation *(note (iii))*	531	–
Total current assets	613	57
Current liabilities		
Interest in a joint operation *(note (iii))*	67	–
Total current liabilities	67	–

(i) Investment in an associate

The investment in an associate was included in the asset sale agreement with Glencore. An indirect interest in PWCS of 6.5%, held via shares in Newcastle Coal Shippers Pty Ltd, was sold for US$20 million (equivalent to A$25.6 million) and was complete in May 2018.

(ii) Land held for sale

The land held for sale refers to parcels of non-mining land located in the Lower Hunter Valley that is held for development or future sale. These were acquired as part of the acquisition of Coal & Allied at fair value.

(iii) Interest in joint operation

On 27 July 2017, the Group entered into an agreement with Glencore, for the disposal of 16.6% interest in HVO for a cash consideration of US$429 million (equivalent to A$550 million), subject to certain adjustments on completion. This amount is reduced by the net cash flows generated by the 16.6% HVO interest from 1 September 2017 to the date of completion. The consideration will also include a 27.9% share of US$240 million of non-contingent royalties and 49% of HVO contingent royalties payable by the Group and a net debt and working capital adjustment in respect of the Coal & Allied acquisition. The US$429 million includes US$20 million associated with the sale of shares in Newcastle Coal Shippers Pty Ltd held by Coal & Allied to Glencore noted above. The assets and liabilities disclosed below, refers to the share of assets and liabilities associated with the 16.6% interest in HVO. The transaction was completed in May 2018.

	31 December 2017
	A$M
Current assets	13
Property, plant and equipment	185
Mining tenements	311
Exploration and evaluation assets	18
Intangible assets	4
Non-current assets	518
Total assets classified as held for sale	531
Current liabilities	38
Non-current liabilities	29
Total liabilities associated with assets classified as held for sale	67
Net assets classified as held for sale	464

There was no gain/loss arising from classification of the assets/disposal group held for sale during the Track Record Period.

26. TRADE AND OTHER PAYABLES

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Trade payable	200	257	496	371
Accrued staff costs	36	53	112	85
Advances from related entities	–	45	44	70
Others	56	114	106	257
	292	469	758	783

The Company

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Trade payable	11	1	–	1
Accrued staff costs	7	7	32	13
Advances from related entities	109	103	989	1,997
Others	29	52	113	126
	156	163	1,134	2,137

The following is an aged analysis of trade payable based on the invoice dates at the reporting date:

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
0 – 90 days	200	257	495	370
91 – 180 days	–	–	1	1
	200	257	496	371

The Company

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
0 – 90 days	11	1	–	1
	11	1	–	1

The average credit period for trade payable is 90 days. The Group has financial risk management policies in place to ensure that all payables are within the credit timeframe.

27. INTEREST-BEARING LIABILITIES

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Current liabilities				
Bank borrowings				
– Secured borrowings *(i)*	7	–	–	–
Finance lease liabilities *(iii)*	4	20	17	17
	11	20	17	17
Non-current liabilities				
Bank borrowings				
– Secured borrowings *(i)*	3,751	3,593	3,117	2,622
Finance lease liabilities *(iii)*	27	47	38	34
Unsecured loans from related parties *(ii) (note)*	943	1,290	1,527	1,611
	4,721	4,930	4,682	4,267
Interest-bearing liabilities	4,732	4,950	4,699	4,284

Note: A$137 million of SCN distributions to related parties was included in the balance at 31 December 2017.

The Company

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Non-current liabilities				
Bank borrowings				
– Secured borrowings *(i)*	3,750	3,593	3,117	2,622
Unsecured loans from related parties *(ii)*	943	1,632	1,527	1,611
	4,693	5,225	4,644	4,233
Interest-bearing liabilities	4,693	5,225	4,644	4,233

(i) Secured borrowings

Secured borrowings are repayable as follows:

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Within one year	7	–	–	–
More than one year, but not exceeding two years	62	–	–	406
More than two years, but not more than five years	1,320	2,404	3,117	2,232
More than five years	2,369	1,189	–	–
Total	3,758	3,593	3,117	2,638*

* Excludes fair value adjustment of A$16 million.

The Company

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Within one year	–	–	–	–
More than one year, but not exceeding two years	62	–	–	406
More than two years, but not more than five years	1,320	2,404	3,117	2,232
More than five years	2,368	1,189	–	–
Total	3,750	3,593	3,117	2,638*

* Excludes fair value adjustment of A$16 million.

The secured bank borrowings are made up of the following facilities:

		At 31 December 2015		At 31 December 2016		At 31 December 2017		At 30 June 2018	
	Facility	Facility	Utilised	Facility	Utilised	Facility	Utilised	Facility	Utilised
	US$/A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Syndicated Facility	US$2,450	3,559	3,559	3,593	3,593	3,117	3,117	2,638	2,638
Bi-lateral facility	US$140	192	192	–	–	–	–	–	–
Chattel mortgage	US$22	29	7	–	–	–	–	–	–
Working capital facility	A$50	50	–	–	–	–	–	–	–
		3,830	3,758	3,593	3,593	3,117	3,117	2,638	2,638

Syndicated facility and bi-lateral facility

In 2009, a syndicated loan facility ("Syndicated Facility") of US$2,600 million and bi-lateral loan facility ("Bi-lateral Facility") of US$140 million were taken out and fully drawn down to fund the acquisition of the Felix Resources Group. During 2014, the Syndicated Facility was extended with repayments due in 2020, 2021 and 2022. During 2016, the Bi-lateral facility of US$140 million was repaid in full and restructured to a bank guarantee facility with the same limit. During 2017 and 2018 US$150 million and US$500 million was repaid respectively reducing the facility to US$1,950 million.

Security is held over the Syndicated Facility and Bi-lateral Facility in the form of a corporate guarantee issued by the Parent Company, for the full amount of the facility. As part of the acquisition of Coal & Allied the financial covenants were adjusted from 1 September 2017. The Syndicated Facility and Bi-lateral Facility includes the following financial covenants to be tested half-yearly:

(a) The interest cover ratio will not be less than 1.15 for the twelve month period ended 30 June 2017 and 1.40 period from 1 September 2017 to 31 December 2017.

(b) The gearing ratio of the Group will not exceed 0.9, 0.8, 0.75 and 0.75 for the years ended 31 December 2015, 2016 and 2017 and the six months ended 30 June 2018 respectively.

(c) The consolidated net worth of the Group is not less than A$1,600 million for the years ended 31 December 2015 and 2016, A$3,000 million for the year ended 31 December 2017 and six months ended 30 June 2018.

The calculation of the above covenants include certain exclusions with regard to unrealised gains and losses including foreign exchange gains and losses.

The Syndicated Facility include the following minimum balance requirements to be satisfied daily and at each end of month:

(a) The Company is to maintain in the Lender Accounts an aggregate daily average balance of not less than A$25 million, this is tested at the end of each month, and;

(b) The Company is to maintain in the Lender Accounts an aggregate end of month balance of not less than A$50 million.

There was no breach of covenants at 31 December 2015, 2016, 2017 and 30 June 2018.

At 31 December 2015, 2016 and 2017 and 30 June 2018, mine assets (mining tenements, exploration and evaluation assets, intangible assets, property, plant and equipment and etc.) with carrying amount of approximately A$3,247 million, A$3,024 million, A$7,482 million and A$6,008 million respectively have been pledged to secure bank borrowings of the Group.

Chattel mortgage facility

As a result of the Gloucester Coal Ltd acquisition during 2012, the Group acquired a chattel mortgage facility of US$22 million. During 2016, the outstanding balance was repaid and the facility was cancelled. Security in the form of a bank guarantee issued by Westpac Banking Corporation and eleven trucks was also released.

Working capital facility

During 2015, a working capital facility was taken out to fund working capital and capital expenditure. The facility was for A$50 million. In March 2016, this facility was repaid in full and the facility was terminated. Security was held in the form of a corporate guarantee issued by the Parent Company for the full amount of the facility.

(ii) Unsecured loans from related parties

In December 2014, the Company successfully arranged two long term loan facilities from its majority shareholder, the Parent Company. repayable on 31 December 2024.

Facility 1: A$1,400 million – the purpose of the facility is to fund working capital and capital expenditure. The facility can be drawn in both A$ and US$.

During 2015, US$300 million (A$402 million) was drawn down. In total US$500 million (A$684 million) was drawn down as at 31 December 2015.

During 2016, US$191 million (A$251 million) was drawn down. In total US$682 million (A$942 million) was drawn down as at 31 December 2016.

During 2017, US$150 million (A$188 million) had been drawn. In total US$832 million (A$1,066 million) was drawn down as at 31 December 2017.

During 2018, no additional amounts have been drawn down. In total US$832 million (A$1,125 million) was drawn down as at 30 June 2018.

Facility 2: US$807 million – the purpose of the facility is to fund the coupon payable on subordinated capital notes.

During 2015, US$73 million was drawn down. In total US$73 million (A$100 million) was drawn down as at 31 December 2015.

During 2016, US$63 million was drawn down. In total US$136 million (A$188 million) was drawn down as at 31 December 2016.

During 2017, US$107 million was drawn down. In total US$243 million (A$312 million) was drawn down as at 31 December 2017.

During 2018, no amounts have been drawn down. In total US$243 million (A$329 million) was drawn down as at 30 June 2018. On 31 January 2018 all remaining SCN were redeemed limiting the facility to the current drawn amount US$243 million.

Both the facilities have a term of ten years (with the principal repayable at maturity) and are provided on an unsecured and subordinated basis with no covenants.

In August 2012, the Company successfully arranged a long term loan facility from Yancoal International Resources Development Co., Ltd, a wholly-owned subsidiary of the Parent Company. The facility was for US$550 million and was provided on an unsecured basis with no covenants. The purpose of the facility was to fund the acquisition of Gloucester Coal Limited. In December 2014 US$434 million was repaid, leaving an outstanding balance of US$116 million (A$160 million) which remains outstanding as at 31 December 2015, 2016 and 2017 and 30 June 2018 which is repayable on 12 May 2022.

(iii) Finance lease liabilities are repayable as follows:

The Group

	At 31 December			At 30 June
	2015	**2016**	**2017**	**2018**
	A$M	*A$M*	*A$M*	*A$M*
Minimum lease payments				
Within one year	11	24	19	19
More than one year, but not exceeding two years	15	14	13	10
More than two years, but not more than five years	9	38	29	27
	35	76	61	56
Less: Future finance charges	(4)	(9)	(6)	(5)
Present value of lease payments	31	67	55	51

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Present value of minimum lease payments				
Within one year	4	20	17	17
More than one year, but not exceeding two years	13	12	12	8
More than two years, but not more than five years	14	35	26	26
Present value of lease payments	31	67	55	51
Less: Amounts due within one year and included in current liabilities	(4)	(20)	(17)	(17)
Amounts due after one year and included in non-current liabilities	27	47	38	34

Finance lease liabilities of A$31 million, A$67 million, A$55 million and A$51 million carried interest at an effective interest rate of 5.22%, 5.13%, 5.10% and 5.00% per annum for the years ended 31 December 2015, 2016 and 2017 and six months ended 30 June 2018 respectively.

(iv) Bank guarantee facilities as follows:

The Group are party to the following bank guarantee facilities which have been issued for operational purposes in favour of port, rail, government departments and other operational functions:

For the year ended 31 December 2015

Providers	Facility	Utilised	Security
	A$M	*A$M*	
Syndicate of Australian Financiers	350	299	Yarrabee, Ashton, and Moolarben mine assets with a carrying value of A$3,247 million.
Bank of China	47	37	Letter of comfort from the Parent Company to Bank of China for the full amount of the facility.
Industrial and Commercial Bank of China ("ICBC")	125	122	Cash deposit of A$3 million on A$25 million of the facility, included in restricted cash and a corporate guarantee provided by the Parent Company to ICBC for the remaining A$100 million.
Total	522	458	

For the year ended 31 December 2016

Providers	Facility	Utilised	Security
	A$M	*A$M*	
Syndicate of Australian Financiers	93	92	A$1 million 100% cash deposit provided by Yancoal Resources Limited, and A$91.3 million is secured by Yarrabee and Moolarben mine assets with carrying value of A$3,024 million.
Bank of China	268	228	A$47 million is supported by Letter of Comfort from the Parent Company, US$140 million (A$194 million) is secured by the Parent Company's corporate guarantees, and A$28 million is secured by 100% cash collateral from the Company.
ICBC	125	121	A$3 million is secured by cash (10% of the guaranteed amount, and A$100 million is supported by the Parent Company's Corporate Guarantee.
Total	486	441	

For the year ended 31 December 2017

Providers	US$M	A$M	Utilised A$M	Security
Syndicate of seven domestic and international banks	–	1,000	935	Secured by Yarrabee and Moolarben mine assets with carrying value of A$3,159 million, and Coal & Allied Group assets with carrying value of A$4,323 million. Facility expires on 31 August 2020.
Bank of China*	95	122	106	Parent corporate guarantees from the Parent Company to Bank of China for the full amount of the facility. Expiry dates are as follow: – US$45 million expires on 16 December 2018 – US$50 million expires on 16 December 2019
Total	95	1,122	1,041	

For the six months ended 30 June 2018

Providers	US$M	A$M	Utilised A$M	Security
Syndicate of seven domestic and international banks	–	1,000	793	Secured by the assets of the consolidated group of Yancoal Resources Ltd and Coal & Allied with carrying value of A$6,008 million. Facility expires on 31 August 2020.
Bank of China*	95	129	101	Parent corporate guarantees from the Parent Company to Bank of China for the full amount of the facility. Expiry dates are as follow: – US$45 million expires on 16 December 2018 – US$50 million expires on 16 December 2019
Total	95	1,129	894	

* This facility can be drawn in both A$ and US$. As at 31 December 2017 and 30 June 2018, all bank guarantees outstanding under this facility were denominated in A$.

The syndicated guarantee facility includes the following financial covenants based on consolidated results of Yancoal Resources Ltd Group and Coal & Allied Group to be tested half-yearly. As part of the acquisition of Coal & Allied syndicated guarantee facility was increased to A$1 billion and the financial covenants were adjusted from 1 September 2017:

(a) The interest cover ratio is greater than 5.0 times in 2016 and 2017;

(b) The finance debt to EBITDA ratio is less than 3.0 times in 2016 and 2017; and

(c) The net tangible assets are greater than A$600 million and A$1,500 million in 2016 and 2017 respectively.

There was no breach of covenants at 31 December 2015, 2016 and 2017 and 30 June 2018.

28. PROVISIONS

The Group

	Employee benefits (note (iii))	Rehabilitation (note (iv))	Take or pay (note (i))	Other provisions (note (v))	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
Year ended 31 December 2015					
Opening net book amount	1	73	56	30	160
Charged/(credit) to profit or loss					
– Unwinding of discount	–	2	4	–	6
– Release of the provision	–	–	(14)	(22)	(36)
– Rehabilitation expenditure incurred	–	(1)	–	(2)	(3)
Re-measurement of provisions	–	42	–	–	42
Additions on business combination	–	–	5	–	5
Asset as held for sale	–	(31)	–	–	(31)
Closing net book amount	1	85	51	6	143
Split between:					
Current	1	–	10	1	12
Non-current	–	85	41	5	131
Total	1	85	51	6	143

	Employee benefits (note (iii))	Rehabilitation (note (iv))	Take or pay (note (i))	Other provisions (note (v))	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
Year ended 31 December 2016					
Opening net book amount	1	85	51	6	143
Charged/(credit) to profit or loss					
– Unwinding of discount	–	2	3	–	5
– Release of the provision	–	–	(13)	(1)	(14)
Re-measurement of provisions	–	(4)	–	–	(4)
Transfer to asset classified as held for sale	–	–	(3)	–	(3)
Closing net book amount	1	83	38	5	127
Split between:					
Current	1	–	8	1	10
Non-current	–	83	30	4	117
Total	1	83	38	5	127

Year ended 31 December 2017

	Employee benefits (note (iii))	Sales contract provision	Rehabilitation (note (iv))	Take or pay (note (i))	Other provisions (note (v))	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Opening net book amount	1	–	83	38	5	127
Charged/(credit) to profit or loss						
– Unwinding of discount	–	41	3	6	–	50
– Release of the provision	–	(62)	–	(24)	(1)	(87)
Acquired through business combination	64	149	129	50	44	436
Re-measurement of provisions	35	–	20	–	–	55
Transfer to asset classified as held for sale	–	(7)	(17)	(8)	(2)	(34)
Closing net book amount	100	121	218	62	46	547
Split between:						
Current	8	34	–	16	1	59
Non-current	92	87	218	46	45	488
Total	100	121	218	62	46	547

Six months ended 30 June 2018

	Employee benefits (note (iii))	Sales contract provision	Rehabilitation (note (iv))	Take or pay (note (i))	Other provisions (note (v))	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Opening net book amount	100	121	218	62	46	547
Charged/(credit) to profit or loss						
– Unwinding of discount	–	1	3	2	–	6
– Release of the provision	–	(19)	–	(12)	(1)	(32)
Acquired through business combination	–	–	16	–	–	16
Disposal of share in HVO	(24)	(15)	(17)	–	–	(56)
Re-measurement of provisions	(3)	–	24	–	–	21
Closing net book amount	73	88	244	52	45	502
Split between:						
Current	5	24	–	12	1	42
Non-current	68	64	244	40	44	460
Total	73	88	244	52	45	502

(i) Take or pay provision, which arose from business combination, is the assessment of forecast excess capacity for port and rail contracts. A provision was recognised for the discounted estimated excess capacity for the contracted rail or port tonnage utilised. The provision has a finite life and will be released to profit or loss over the period in which excess capacity is realised.

(ii) In acquiring part of a business or operation, an assessment is made on the fair value of the assets and liabilities under IFRS 3 Business Combinations. The sales contract provision is the assessment of a coal supply and transportation agreement to supply coal to BLCP Power Limited in Thailand at below market prices. A provision was recognised for the discounted estimated variance between contract and market prices. The provision has a finite life and will be released to profit or loss over the contract term.

(iii) The balance mainly included provision for long-term employee entitlements and other employee incentives, which arose mainly from the acquisition of Coal & Allied.

(iv) Mining lease agreements and exploration permits impose obligations on the Group to rehabilitate areas where mining activity has taken place. Rehabilitation of these areas is ongoing and in some cases will continue until 2060. The provision for rehabilitation costs has been calculation based on the present value of the future costs expected to be incurred in restoring affected mining areas, assuming current technologies.

(v) Other provision includes R&D provision, marketing services fee payable to Noble Group Limited deemed above market norms, contingent royalties payable to Rio Tinto assessed as part of the Coal & Allied acquisition in 2017 which will be amortised over the contract term, and reinstatement cost for any hired equipment, in case any major overhaul costs are incurred at the end of the lease period.

The coal price linked contingent royalty is based on US$2.0/tonne of attributable saleable production from Coal & Allied for a period of 10 years commencing on 1 September 2020 which will be payable if the Newcastle benchmark thermal coal price exceeds US$75/tonne.

(vi) The provision for employee benefits represents long service leave and annual leave entitlements and other incentives accrued by employees.

29. NON-CONTINGENT ROYALTY PAYABLE

The Group and the Company

Non-contingent royalty receivable

	Year ended 31 December			Six months ended 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Opening balance	–	–	–	–
Initial recognition	–	–	–	87
Payments	–	–	–	(65)
Foreign exchange	–	–	–	3
Non-contingent royalty receivable	–	–	–	25
Analysed for financial reporting purpose:				
Current portion	–	–	–	18
Non-current portion	–	–	–	7
Total	–	–	–	25

Non-contingent royalty receivable represented part of the consideration for the disposal of Hunter Valley Operation, details please refer to note 35.

As part of the Glencore acquisition of the 16.6% interest in HVO, Glencore will pay to the Group and the Company 27.9% of the paid and the future payable non-contingent royalty payments.

Non-contingent royalty payable

	Year ended 31 December			Six months ended 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Opening balance	–	–	–	160
Initial recognition	–	–	283	–
Payments	–	–	(142)	(78)
Unwind of discount	–	–	13	2
Foreign exchange	–	–	6	4
Non-contingent royalty payable	–	–	160	88
Analysed for financial reporting purpose:				
Current portion	–	–	112	64
Non-current portion	–	–	48	24
Total	–	–	160	88

Non-contingent royalty payable represents part of the consideration for the acquisition of Coal & Allied on 1 September 2017. The amount is payable by the Group by installments from 2017 to 2021.

30. DEFERRED TAXATION

Deferred tax assets and the movements thereon for the Track Record Period are:

The Group

Deferred tax assets movements	Tax losses and offsets	Provisions	Cash flow hedges	Others	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
At 1 January 2015	511	41	244	41	837
Under/(over) – provision in prior year					
– to profit or loss	171	–	(127)	16	60
– other	–	–	–	(3)	(3)
(Charged)/credited					
– to profit or loss	152	13	–	(11)	154
– directly to equity	–	–	134	–	134
– other	–	–	–	5	5
Transfer to assets classified as held for sale	–	(10)	–	(11)	(21)
At 31 December 2015	834	44	251	37	1,166
At 1 January 2016	834	44	251	37	1,166
(Over)/under – provision in prior year					
– to profit or loss	(14)	–	24	–	10
(Charged)/credited					
– to profit or loss	148	(4)	–	3	147
– directly to equity	(40)	–	13	–	(27)
– tax loss recorded on behalf of Watagan Group	45	–	–	–	45
– Re-recognised from Assets classified as held for sale	–	(2)	–	–	(2)
At 31 December 2016	973	38	288	40	1,339

Deferred tax assets and the movements thereon for the Track Record Period are:

The Group

Deferred tax assets movements	Tax losses and offsets	Provisions	Cash flow hedges	Others	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
At 1 January 2017	973	38	288	40	1,339
(Over)/under – provision in prior year	(44)	1	–	–	(43)
(Charged)/credited					
– to profit or loss	(73)	49	–	(6)	(30)
– directly to equity	(20)	–	(153)	20	(153)
– tax loss recorded on behalf of Watagan Group	1	–	–	–	1
Acquisition of subsidiaries	2	89	–	14	105
At 31 December 2017	839	177	135	68	1,219
At 1 January 2018	839	177	135	68	1,219
Over – provision in prior year	(1)	–	–	–	(1)
(Charged)/credited					
– to profit or loss	(152)	(26)	–	(36)	(214)
– directly to equity	–	(7)	60	–	53
– tax loss recorded on behalf of Watagan Group	26	–	–	–	26
Acquisition of subsidiaries	–	7	–	(4)	3
At 30 June 2018	712	151	195	28	1,086

Deferred tax liabilities and the movements thereon for the Track Record Period are:

The Group

Deferred tax liabilities movements	Property, plant and equipment	Mining tenements and exploration and evaluation assets	Unrealised foreign exchange gains/(loss)	Others	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
At 1 January 2015	56	481	180	31	748
(Under)/over – provision in prior year	(1)	207	(127)	–	79
Charged/(credited)					
– to profit or loss	49	16	4	3	72
Transfer to liabilities associated with assets classified as held for sale	(42)	(157)	(1)	(7)	(207)
At 31 December 2015	62	547	56	27	692
At 1 January 2016	62	547	56	27	692
Under – provision in prior year	(2)	–	–	–	(2)
Charged/(credited)					
– to profit or loss	20	4	41	7	72
At 31 December 2016	80	551	97	34	762
At 1 January 2017	80	551	97	34	762
Under/over – provision in prior year	(6)	(4)	(31)	–	(41)
Charged/(credited)					
– to profit or loss	78	3	(71)	47	57
– other	–	–	–	(11)	(11)
Acquisition of subsidiaries	(9)	300	2	(23)	270
At 31 December 2017	143	850	(3)	47	1,037
At 1 January 2018	143	850	(3)	47	1,037
Charged/(credited)					
– to profit or loss	82	(134)	3	12	(37)
– other	–	–	–	(6)	(6)
Acquisition of additional interest in joint operation	(11)	6	–	1	(4)
At 30 June 2018	214	722	–	54	990

The Company

Deferred tax assets movements	Tax losses and tax offsets	Unrealised foreign exchange losses	Cash flow hedges	Others	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
At 1 January 2015	692	(149)	244	(107)	680
Under/(over) – provision in prior year					
– to profit or loss	37	(136)	(127)	125	(101)
(Charged)/credited					
– to profit or loss	–	–	–	140	140
– directly to equity	105	–	134	(122)	117
At 31 December 2015	834	(285)	251	36	836
At 1 January 2016	834	(285)	251	36	836
Under/(over) – provision in prior year					
– to profit or loss	(16)	–	24	(11)	(3)
(Charged)/credited					
– to profit or loss	150	196	–	(9)	337
– directly to equity	(40)	–	13	–	(27)
– tax loss recorded on behalf of Watagan Group	45	–	–	–	45
At 31 December 2016	973	(89)	288	16	1,188
At 1 January 2017	973	(89)	288	16	1,188
Under/(over) – provision in prior year					
– to profit or loss	(44)	31	–	3	(10)
(Charged)/credited					
– to profit or loss	(71)	66	–	34	29
– directly to equity	(20)	–	(153)	–	(173)
– directly to equity issue costs	–	–	–	(21)	(21)
– tax loss recorded on behalf of Watagan Group	1	–	–	–	1
At 31 December 2017	839	8	135	32	1,014
At 1 January 2018	839	8	135	32	1,014
Over – provision in prior year					
– to profit or loss	(1)	–	–	–	(1)
(Charged)/credited					
– to profit or loss	(130)	74	–	13	(43)
– directly to equity	(30)	–	60	(13)	17
– tax loss recorded on behalf of Watagan Group	26	–	–	–	26
At 30 June 2018	704	82	195	32	1,013

The following is the analysis of the deferred tax balances for financial reporting purposes:

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Deferred tax assets	1,166	1,339	1,219	1,086
Deferred tax liabilities	(692)	(762)	(1,037)	(990)
	474	577	182	96

The Company

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Deferred tax assets	836	1,188	1,014	1,013
	836	1,188	1,014	1,013

At 31 December 2015, 2016 and 2017 and 30 June 2018, the Group and the Company has unused tax losses of A$2,781 million, A$3,243 million, A$2,799 million and A$2,373 million respectively available for offset against future profits. A$834 million, A$973 million, A$834 million and A$712 million deferred tax asset has been recognised for such tax losses for the years ended 31 December 2015, 2016 and 2017 and six months ended 30 June 2018 respectively.

By reference to financial budgets, management believes that there will be sufficient future profits for the realisation of deferred tax assets which have been recognised in respect of tax losses.

The Group's tax consolidated group includes Watagan and its controlled subsidiaries. Deferred tax assets are recognised for the carry forward of unused tax losses and unused tax credits to the extent that it is probable that taxable profits will be available against which the unused tax losses/credits can be utilised. The Group has unrecognised capital tax losses (tax effected) of A$2 million, A$2 million, A$2 million and A$13 million as at 31 December 2015, 2016, 2017 and 30 June 2018. There is no expiry date on these tax losses.

31. EQUITY

(a) Equity

	31 December 2015 Number	31 December 2016 Number	31 December 2017 Number	30 June 2018 Number	31 December 2015	31 December 2016	31 December 2017	30 June 2018
					A$M	*A$M*	*A$M*	*A$M*
(i) Share capital (note 1)								
Ordinary shares Issued and fully paid up	994,216,659	994,276,659	43,959,446,612	43,962,462,588	657	657	5,953	5,957
(ii) Other equity securities								
SCN	18,005,102	18,005,042	4,900	–	2,183	2,184	1	–
Contingent value right shares ("CVR")					263	263	263	263
					2,446	2,447	264	263
Total contributed equity					3,103	3,104	6,217	6,220

Note 1: Ordinary shares have no par value and the Company does not have a limited amount of authorised capital. During the years ended 31 December 2015, 2016 and 2017 and six months ended 30 June 2018 the Company repurchased none of its own ordinary shares.

(b) Movement of Contributed equity

	Ordinary shares *(note (b)(1))*		SCN *(note (b)(2))*		CVR *(note (b)(3))*	Total
	Number	*A$M*	*Number*	*A$M*	*A$M*	*A$M*
Balance as at 1 January 2015	994,216,659	657	18,005,102	2,186	263	3,106
Transaction costs, net of tax	–	–	–	(3)	–	(3)
Balance as at 31 December 2015 and 1 January 2016	994,216,659	657	18,005,102	2,183	263	3,103
Conversion of ordinary shares	60,000	–	(60)	1	–	1
Balance as at 31 December 2016 and 1 January 2017	994,276,659	657	18,005,042	2,184	263	3,104
Subordinated capital notes converted to ordinary shares	18,000,240,433	2,183	(18,000,142)	(2,183)	–	–
Ordinary shares issued under entitlement offer	23,464,929,520	2,971	–	–	–	2,971
Ordinary shares issued under institutional placement	1,500,000,000	190	–	–	–	190
Transaction costs, net of tax	–	(48)	–	–	–	(48)
Balance as at 31 December 2017 and 1 January 2018	43,959,446,612	5,953	4,900	1	263	6,217
Balance as at 1 January 2018	43,959,446,612	5,953	4,900	1	263	6,217
Subordinated capital note converted to ordinary shares	3,015,976	1	(1,606)	(1)	–	–
Ordinary shares issued under entitlement offer	–	–	–	–	–	–
Ordinary shares issued under institutional placement	–	–	–	–	–	–
Redemption of SCN *(note 2)*	–	–	(3,294)	–	–	–
Transaction costs, net of tax	–	3	–	–	–	3
Balance as at 30 June 2018	43,962,462,588	5,957	–	–	263	6,220

Notes:

1. Ordinary shares entitle the holder to participate in dividends and the proceeds on winding up of the Company in proportion to the number of and amounts paid on the shares held. On a show of hands, every holder of ordinary shares presents at a meeting in person or by proxy, is entitled to one vote, and upon a poll each share is entitled to one vote.

   Ordinary shares have no par value and the Company does not have a limited amount of authorised capital.

During 2016, 60,000 ordinary shares were issued on conversion of the SCNs.

During 2017, 58,490 ordinary shares were issued on conversion of the SCNs.

During 2018, 3,015,976 ordinary shares were issued on conversion of the SCNs.

On 31 August 2017, the Company issued new shares under the pro-rata renounceable entitlement offer and institutional placement as announced to ASX on 1 August 2017. 23,464,929,520 new shares were issued under pro-rata renounceable entitlement offer and 1,500,000,000 new shares under the institutional placement. In addition, the Company issued 18,000,031,000 new shares to the Parent Company on conversion of all of its SCN and 150,943 new shares on conversion of 80 other SCN by other holders. In total 42,965,111,463 new shares were issued. The total amount raised was US$2,496 million (A$3,161 million) and issue costs of A$68 million have been capitalised. US$28 million (A$36 million) was deposited in Yankuang Ozstar (Ningbo) Trading Co Limited, a related party, and a promissory note was issued to the Company.

2. On 31 December 2014, Yancoal SCN Limited, a wholly-owned subsidiary of the Company issued 18,005,102 SCN at USD100 each. Each SCN is convertible into 1,000 ordinary shares of the Company. The SCN are perpetual, subordinated, convertible, unsecured capital notes of face value US$100 per note.

   Each SCN entitled holders to receive fixed rate distribution payments, payable semi-annually in arrears unless deferred. The distribution rate is set at 7% per annum, the rate is resettable to the 5 year USD mid-swap plus the initial margin per annum every 5 years. The SCN were convertible at the option of the holders to the Company ordinary shares within 30 years.

   During 2016, 60 SCNs were converted into 60,000 ordinary shares of the Company in accordance with the terms of the SCNs. At 31 December 2016 there were 18,005,042 SCNs on issue.

   During 2017, 18,000,240,433 new shares were issued on conversion of 18,000,142 SCNs. At 31 December 2017 there were 4,900 SCN on issue. On 31 January, 1,606 SCNs were converted into 3,015,976 ordinary shares of the Company and 3,294 SCNs were redeemed for their face value of US$100 each.

3. The CVR shares provided a level of downside price protection for certain former Gloucester shareholders. The Company and the Parent Company entered into an agreement whereby the Parent Company was obligated to repurchase (or procure the repurchase of) the CVR shares. The Parent Company directed the Company that the method of satisfaction of the Repurchase Price of the CVRs was to be satisfied in cash. The CVR shares were repurchased on 4 March 2014 for cash of A$262,936,000, representing the market value of A$3.00 cash per CVR share.

(c) Reserves

	Year ended 31 December			30 June
	2015	**2016**	**2017**	**2018**
	A$M	*A$M*	*A$M*	*A$M*
Hedging reserve	880	817	413	554
Treasury shares reserve	–	–	–	6
Employee compensation reserve	–	–	–	(6)
	880	817	413	554

	Year ended 31 December			June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Movements:				
Hedging reserve – cash flow hedges:				
Opening balance	561	880	817	413
Profit/(loss) recognised on USD interest bearing liabilities	475	43	(348)	246
Transferred to profit or loss	(22)	(133)	(229)	(45)
Deferred income tax (expenses)/benefit	(134)	27	173	(60)
Closing balancing	880	817	413	554

Hedge reserve

The hedging reserve is used to record gains or losses on cash flow hedges that are recognised directly in equity through the Consolidated Statement of Profit or Loss and Other Comprehensive Income.

The closing balance relates to the effective portion of the cumulative net change in the fair value of the derivative instruments as at 31 December 2015 and natural hedge as at 31 December 2016 and 2017 and 30 June 2018 using the US dollar denominated interest-bearing liabilities to hedge against future coal sales.

During the year ended 31 December 2015, losses of A$22 million was transferred from other comprehensive income to profit or loss in respect of the hedge reserve.

During the year ended 31 December 2016, losses of A$133 million were transferred from other comprehensive income to profit or loss in respect of hedging reserve.

During the year ended 31 December 2017, losses of A$229 million were transferred from other comprehensive income to profit or loss in respect of the hedging reserve.

During the six months ended 30 June 2018, losses of A$45 million were transferred from other comprehensive income to profit or loss in respect of the hedging reserve.

Treasury shares reserve

Shares held by the Group sponsored Employee Share Plan Trust are recognised as treasury shares and deducted from equity.

Treasury shares consist of shares held in trust for the Group in relation to equity compensation plans. As at 30 June 2018, 42,574,974 shares were held in trust and classified as treasury shares. Of these shares, 41,482,104 will be distributed to employees as share-based payments as disclosed in note 43. The remaining balance will be held for future schemes.

Employee compensation reserve

The fair value of equity plans granted is recognised in the employee compensation reserve over the vesting period. This reserve will be reversed against treasury shares when the underlying shares vest and transfer to the employee at the fair value. The difference between the fair value at grant date and the amount received against treasury shares is recognised in retained earnings (net of tax).

32. SUBORDINATED CAPITAL NOTE DISTRIBUTIONS

Details of the SCN distributions throughout Track Record Period are as below:

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (unaudited)	*A$M*
Interim distribution paid on 31 July 2015, 29 July 2016 and 31 July 2017, and accured at 30 June 2017	100	84	79	82	–
Final distribution for 2015, paid on 29 January 2016, for 2016 paid on 31 January 2017 and for 2017 paid on 31 January 2018	86	87	–	–	–
	186	171	79	82	–

Due to foreign exchange the 29 January 2016 payment increased by A$2 million from the 31 December 2015 accrual, the 31 January 2017 payment decreased by A$4 million from the 31 December 2016 accrual and the 31 July 2017 payment decreased by A$3 million from the 30 June 2017 accrual. No accrual was made as 31 December 2017 for the distribution on 31 January 2018 as Yancoal SCN Ltd Board had not approved the distribution as at 31 December 2017. The Yancoal SCN Ltd Board approved the distribution for payment on 31 January 2018.

On 31 January 2018, all SCNs were either redeemed or converted into shares of the Company.

33. CAPITAL RISK MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern while maximising the return to shareholders through the optimisation of the debt and equity balance. The Group's overall strategy remains unchanged from prior year.

The capital structure of the Group consists of debt, which includes the borrowings and equity attributable to equity holders of the Company, comprising issued share capital and reserves.

The directors of the Company review the capital structure regularly. As part of this review, the directors of the Company assess the annual budget prepared by the accounting and treasury department and consider and evaluate the cost of capital and the risks associated with each class of capital. The Group will balance its capital structure through the payment of dividends, issue of new shares and new debts or the repayment of existing debts.

34. FINANCIAL INSTRUMENTS

(a) Categories of financial instruments

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Financial assets				
Loans and receivables (including cash and cash equivalents)	743	1,779	2,021	2,124
Assets at fair value through profit or loss	220	227	228	223
	963	2,006	2,249	2,347
Financial liabilities				
Amortised cost	4,993	5,352	5,562	5,104
Derivative financial instruments	1	–	–	–
	4,994	5,352	5,562	5,104

The Company

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Financial assets				
Loans and receivables (including cash and cash equivalents)	6,092	1,755	1,801	1,975
Assets at fair value through profit or loss	–	–	–	25
	6,092	1,755	1,801	2,000
Financial liabilities				
Amortised cost	4,849	5,388	5,938	6,458
Derivative financial instruments (fair value through profit or loss)	1	–	–	–
	4,850	5,388	5,938	6,458

(b) Financial risk management objectives and policies

The Group's and the Company's major financial instruments include trade and other receivables, royalty receivables, cash and cash equivalents, interest-bearing liabilities, including bank loans and finance leases, derivative financial instruments, trade and other payables. Details of these financial instruments are disclosed in respective notes. The risks associated with these financial instruments and the policies on how to mitigate these risks are set out below. The management manages and monitors these exposures to ensure appropriate measures are implemented on a timely and effective manner. There has been no significant change to the Group's exposure to market risk or the manner in which it manages and measures the risk.

Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group and the Company. As at 31 December 2015, 2016 and 2017 and 30 June 2018, the Group's and Company's maximum exposure to credit risk which will cause a financial loss to the Group and the Company due to failure to discharge an obligation by the counterparties and financial guarantees provided by the Group and the Company is arising from the carrying amount of the respective recognised financial assets as stated in the consolidated statement of financial position and the amount of contingent liabilities in relation to financial guarantees issued by the Group and the Company as disclosed in note 41.

In order to minimise credit risk, the management of the Group and the Company has delegated a team responsible for determination of credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, the Group reviews the recoverable amount of each individual trade debt at the end of the reporting period to ensure that adequate impairment losses are made for irrecoverable amounts. In this regard, the directors of the Company consider that the Group's credit risk is significantly reduced. The Group maintains its cash and cash equivalents with reputable banks. Therefore, the directors consider that the credit risk for such is minimal.

In assessing the ECL of trade receivables management assesses historical write offs of trade receivables, aging of debtors and whether sufficient credit enhancement is provided by customers (letters of credit and bank guarantees). If the aging of trade receivables significantly increased then the recognition of ECLs would need to be reassessed.

Receivables will only be written off if there is demonstrable evidence that there is no reasonable expectation of recovery.

The Group

Details of the trade receivable from the five customers with the largest gross receivable balances at 31 December 2015, 2016 and 2017 and 30 June 2018 are as follows:

	Percentage of trade receivable			
	At 31 December			At 30 June
	2015	2016	2017	2018
Customer A	31%	–	–	–
Customer B	6%	2%	7%	6%
Customer C	5%	–	–	–
Customer D	5%	–	–	–
Customer E	4%	–	–	–
Customer F	–	2%	–	–
Customer G	–	2%	–	–
Customer H	–	2%	–	–
Customer I	–	3%	–	–
Customer J	–	–	6%	–
Customer K	–	–	6%	–
Customer L	–	–	6%	–
Customer M	–	–	5%	–
Customer N	–	–	–	8%
Customer O	–	–	–	5%
Customer P	–	–	–	4%
Customer Q	–	–	–	4%
Five largest receivable balances	51%	11%	30%	27%

There was no provision for lifetime or 12 month ECL recognised for trade receivables in the Track Record Period as there are no aged debts and sufficient credit enhancement has been provided by customers which supports the recoverability of these balances in full.

Other receivables are primarily with related parties. There has been no indication of credit deterioration with related parties and no impairment provision has been recognised for these amounts.

Investments in securities (GiLTs) has required a provision of A$18 million to be recognised in the six months ended 30 June 2018. This was due to the expectation that the contractual maturity and interest payments receivable for the GiLTs was to be adjusted in the refinancing of WICET. In prior periods the securities were still paying the contractual coupon and the ECL was assessed as not being required.

The movement of the impairment provision is as follows:

	At 31 December			At 30 June
	2015	2016	2017	2018
Opening provision	–	–	–	–
Impairment recognised	–	–	–	(18)
Closing provision	–	–	–	(18)

The Company

Details of the trade receivable from the customer with the largest gross receivable balances at 31 December 2015, 2016 and 2017 and 30 June 2018 are as follows:

	Percentage of trade receivable			
	At 31 December			At 30 June
	2015	2016	2017	2018
Customer A	–	88%	–	–

The management considers the strong financial background and good creditability of the customer, and there is no significant uncovered credit risk.

Market risk

(i) Currency risk

The Group operates entirely in Australia and its costs are primarily denominated in its functional currency, the Australian dollar. Export coal sales are denominated in US dollars and a strengthening of the Australian dollar against the US dollar has an adverse impact on earnings and cash flow settlement. Liabilities for some plant and equipment purchases and loans are denominated in currencies other than the Australian dollar and a weakening of the Australian dollar against other currencies has an adverse impact on earnings and cash flow settlement.

The hedging policy of the Group aims to protect against the volatility of cash expenditures or reduced collection in the above mentioned transactions as well as to reduce the volatility of profit or loss for retranslation of US dollar denominated loans at each period end.

Hedging through bank issued instruments

Operating foreign exchange risk that arises from firm commitments or highly probable transactions are managed through the use of bank issued forward foreign currency contracts and collar option contracts. The Group hedges a portion of contracted US dollar sales and asset purchases settled in foreign currencies in each currency to mitigate the adverse impact on cash flow due to the future rise or fall in Australian dollars against the relevant currencies.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in Other Comprehensive Income in the hedging reserve until the anticipated underlying transaction occurs. Once the anticipated underlying transaction occurs, amounts accumulated in equity are recycled through the profit or loss or recognised as part of the cost of the asset to which it relates. The ineffective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised immediately in the profit or loss. The loss relating to the ineffective portion was nil for the years ended 31 December 2015, 2016 and 2017 and six months ended 30 June 2018.

Natural cash flow hedge

The Group currently does not use bank issued instruments to hedge foreign exchange risks in respect of US dollar denominated loans, however, the scheduled repayment of the principal on US dollar loans is designated to hedge the cash flow risks on the portion of forecast US dollar sales that are not hedged through bank issued instruments ("natural cash flow hedge"). US dollar loan repayments up to a six-month period are designated to hedge the forecast US dollar sales during the same period after the designation of the hedge relationship based on a dollar for dollar basis until the hedge ratio reaches one.

Hedging effectiveness is determined by comparing the changes in the hedging instruments and hedged sales. Hedge ineffectiveness will occur when cash flows generated by sales transactions are lower than the forecast sales transaction. In cases of hedge ineffectiveness, gains or losses in relation to the excess portion in the foreign exchange movement of the designated US dollar loan repayment will be recycled to profit or loss. The effective portion of changes in the hedging instruments will be recognised in the cash flow hedge reserve in Other Comprehensive Income. When the sales transactions occur, amounts accumulated in equity are recycled through the profit or loss as an increase or decrease to sales revenue.

Royalty receivable

The royalty receivable from the Middlemount JV is estimated based on expected future cash flows that are dependent on sales volumes, US dollar denominated coal prices and the US dollar foreign exchange rate.

Other assets

As at 31 December 2017, other assets include the US$10 million associated with the Warkworth Call Option as details in note 35, and the promissory note receivable. These balances are predominantly held in US dollars and expected to settle within 12 months.

Non-contingent royalty payable

The Company has agreed to make deferred non contingent royalty payments to Rio Tinto in US dollars.

The Group's exposure to foreign currency risk at the end of the reporting period, expressed in Australian dollars, was as follows:

	At 31 December			At 30 June
	2015	**2016**	**2017**	**2018**
	A$M	*A$M*	*A$M*	*A$M*
Cash and cash equivalents	30	124	139	204
Trade receivables	87	165	432	421
Other assets	–	–	49	76
Royalty receivable	205	199	199	198
Non-contingent royalty receivable	–	–	–	25
Trade and other payables	(78)	(157)	(249)	(96)
Interest bearing liabilities	(4,701)	(4,883)	(4,668)	(4,249)
Non contingent royalty payable	–	–	(160)	(88)
Net exposure	(4,457)	(4,552)	(4,258)	(3,509)

Sensitivity

The following table summarises the sensitivity of the Group's financial assets and liabilities to a reasonable possible change in the US dollar exchange rate. The Group's exposure to other foreign exchange movements is not material. The Group has used the observed range of actual historical rates for the preceding five year period, with a heavier weighting placed on recently observed market data, in determining reasonably possible exchange movements to be used for the current year's sensitivity analysis. Past movements are not necessarily indicative of future movements. A 10% depreciation/ appreciation of the Australian dollar against the US dollar would have (decreased)/increased equity and profit or loss after tax by the amounts shown below. This analysis assumes that all other variables remain constant.

The Group

	US$ Impact 10%			
	Year ended 31 December			**Six months ended 30 June**
	2015	**2016**	**2017**	**2018**
	A$M	*A$M*	*A$M*	*A$M*
(Decrease)/increase in other comprehensive income				
– if A$ weakens against respective foreign currency	(365)	(380)	(363)	(331)
– if A$ strengthens against respective foreign currency	299	311	297	270
(Decrease)/increase in profit				
– if A$ weakens against respective foreign currency	14	20	32	47
– if A$ strengthens against respective foreign currency	(11)	(15)	(56)	(38)
(Decrease)/increase in shareholders' equity				
– if A$ weakens against respective foreign currency	(351)	(360)	(331)	(284)
– if A$ strengthens against respective foreign currency	288	296	241	232

Equity movements above reflect movements in the hedge reserve due to foreign exchange movements on US$ interest bearing loans.

The Company

	US$ Impact 10%			
	Year ended 31 December			Six months ended 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
(Decrease)/increase in other comprehensive income				
– if A$ weakens against respective foreign currency	(365)	(380)	(363)	(331)
– if A$ strengthens against respective foreign currency	299	311	297	270
(Decrease)/increase in profit				
– if A$ weakens against respective foreign currency	(2)	(5)	(15)	(3)
– if A$ strengthens against respective foreign currency	2	4	12	3
(Decrease)/increase in shareholders' equity				
– if A$ weakens against respective foreign currency	(367)	(385)	(378)	(334)
– if A$ strengthens against respective foreign currency	301	315	309	273

Equity movements above reflect movements in the hedge reserve due to foreign exchange movements on US$ interest bearing loans.

(ii) Interest rate risk

The Group is subject to interest rate risk that arises from borrowings, cash and cash equivalents and restricted cash. Generally, no variable interest is receivable or payable on the Group's trade and other receivables or payables where applicable as they are fixed in nature and therefore they are not exposed to the interest rate risk.

The Group's cash flow interest rate risk for assets primarily arises from cash at bank and deposits subject to market bank rates. Floating rate borrowings bearing LIBOR rates are re-set on a quarterly basis.

Sensitivity Analysis

The following table summarises the sensitivity of the Group's significant financial assets and liabilities to changes in variable interest rates. This sensitivity is based on reasonably possible changes, determined using observed historical interest rate movements for the preceding five year period, with a heavier weighting given to more recent market data. Past movements are not necessarily indicative of future movements. For financial assets, a 25 basis point (decrease)/increase in interest rates would have (decreased)/increased equity and profit or loss after tax by the amounts shown below. For financial liabilities, a 25 basis point (decrease)/increase in interest rates would have increased/(decreased) equity and profit or loss after tax by the amounts shown below. This analysis assumes that all other variables remain constant.

The Group

	Year ended 31 December			Six months ended 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
(Decrease)/increase in profit or loss				
– if increases by 25 basis points	(6)	(4)	(5)	(2)
– if decreases by 25 basis points	6	4	5	2
Increase/(decrease) in shareholders' equity				
– if increases by 25 basis points	(6)	(4)	(5)	(2)
– if decreases by 25 basis points	6	4	5	2

The Company

	Year ended 31 December			Six months ended 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
(Decrease)/increase in profit or loss				
– if increases by 25 basis points	(6)	(4)	(5)	(2)
– if decreases by 25 basis points	6	4	5	2
(Decrease)/increase in shareholders' equity				
– if increases by 25 basis points	(6)	(4)	(5)	(2)
– if decreases by 25 basis points	6	4	5	2

Other price risk

The price risk of the Group include coal price risk.

The Group does not enter into commodity contracts other than to meet the Group's expected usage and sales requirements, such contracts are not settled net. The royalty receivables from Middlemount JV is exposed to fluctuations in coal price. The Group currently does not have any derivative hedges in place against the movement in the spot coal price.

Liquidity risk

In the management of the liquidity risk, the Group and the Company monitors and maintains a level of cash and cash equivalents deemed adequate by the management to finance the operations of the Group and the Company and mitigate the effects of fluctuations in cash flows. The management monitors the utilisation of bank borrowings and ensures compliance with loan covenants.

The following table details the Group's and the Company's remaining contractual maturity for its financial liabilities. For non-derivative financial liabilities, the table has been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group and the Company can be required to pay. The table includes both interest and principal cash flows.

Liquidity and interest risk tables

The Group

At 31 December 2015	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Greater than 5 years	Total contractual cash flows	Carrying amount
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Non-derivatives						
Trade and other payables	292	–	–	–	292	292
Interest-bearing liabilities	288	343	2,135	3,705	6,471	4,701
Total non-derivatives	580	343	2,135	3,705	6,763	4,993
Derivatives						
Gross settled (Derivative financial instruments)						
– (inflow)	(141)	–	–	–	(141)	–
– outflow	143	–	–	–	143	1
Total derivatives	2	–	–	–	2	1

At 31 December 2016	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Greater than 5 years	Total contractual cash flows	Carrying amount
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Non-derivatives						
Trade and other payables	469	–	–	–	469	469
Interest-bearing liabilities	317	318	3,263	2,786	6,684	4,883
Total non-derivatives	786	318	3,263	2,786	7,153	5,352
Derivatives						
Gross settled (Derivative financial instruments)						
– (inflow)	(93)	–	–	–	(93)	–
– outflow	93	–	–	–	93	–
Total derivatives	–	–	–	–	–	–

At 31 December 2017	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Greater than 5 years	Total contractual cash flows	Carrying amount
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Contractual maturities of financial liabilities						
Trade and other payables	758	–	–	–	758	758
Non-contingent royalty payable	115	26	26	–	167	160
Interest-bearing liabilities	350	371	4,087	1,612	6,420	4,644
Total non-derivatives	1,223	397	4,113	1,612	7,345	5,562

At 30 June 2018	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Greater than 5 years	Total contractual cash flows	Carrying amount
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Contractual maturities of financial liabilities						
Trade and other payables	783	–	–	–	783	783
Non-contingent royalty payable	67	14	14	–	95	88
Interest-bearing liabilities	351	771	3,013	1,649	5,784	4,233
Total non-derivatives	1,201	785	3,027	1,649	6,662	5,104

The Company

At 31 December 2015	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Greater than 5 years	Total contractual cash flows	Carrying amount
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Non-derivatives						
Trade and other payables	156	–	–	–	156	156
Interest-bearing liabilities	289	343	2,134	3,705	6,471	4,693
Total non-derivatives	445	343	2,134	3,705	6,627	4,849
Derivatives						
Gross settled (Derivative financial instruments)						
– (inflow)	(141)	–	–	–	(141)	–
– outflow	143	–	–	–	143	1
Total derivatives	2	–	–	–	2	1

At 31 December 2016	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Greater than 5 years	Total contractual cash flows	Carrying amount
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Non-derivatives						
Trade and other payables	163	–	–	–	163	163
Interest-bearing liabilities	317	318	3,262	2,786	6,683	5,225
Total non-derivatives	480	318	3,262	2,786	6,846	5,388
Derivatives						
Gross settled (Derivative financial instruments)						
– (inflow)	(93)	–	–	–	(93)	–
– outflow	93	–	–	–	93	–
Total derivatives	–	–	–	–	–	–

At 31 December 2017	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Greater than 5 years	Total contractual cash flows	Carrying amount
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Contractual maturities of financial liabilities						
Trade and other payables	1,134	–	–	–	1,134	1,134
Non-contingent royalty payable	115	26	26	–	167	160
Interest-bearing liabilities	349	370	4,088	1,612	6,419	4,644
Total non-derivatives	1,598	396	4,114	1,612	7,720	5,938

At 30 June 2018	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Greater than 5 years	Total contractual cash flows	Carrying amount
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Non-derivatives						
Trade and other payables	2,137	–	–	–	2,137	2,137
Interest-bearing liabilities	370	781	3,040	1,649	5,840	4,233
Non-contingent royalty payable	67	14	14	–	95	88
Total non-derivatives	2,574	795	3,054	1,649	8,072	6,458
Derivatives						
Gross settled (Derivative financial instruments)						
– (inflow)	–	–	–	–	–	–
– outflow	–	–	–	–	–	–
Total derivatives	–	–	–	–	–	–

(c) Fair values

The Group uses various methods in estimating the fair value of financial instruments. IFRS 13 Fair Value Measurement requires disclosure of fair value measurements by level in accordance with the following fair value measurement hierarchy:

(a) Quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1);

(b) Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices) (level 2); and

(c) Inputs for the asset or liability that are not based on observable market date (unobservable inputs) (level 3).

The following table presents the Group's financial assets and financial liabilities measured and recognised at fair value at 31 December 2015, 2016 and 2017 and 30 June 2018:

The Group

31 December 2015	**Level 1**	**Level 2**	**Level 3**	**Total**
	A$M	*A$M*	*A$M*	*A$M*
Assets				
WIPS *(note 1)*	–	–	15	15
Royalty receivable	–	–	205	205
Total assets	–	–	220	220
Liabilities				
Derivatives used for hedging				
Forward foreign exchange contracts	–	1	–	1
Total liabilities	–	1	–	1

31 December 2016	**Level 1**	**Level 2**	**Level 3**	**Total**
	A$M	*A$M*	*A$M*	*A$M*
Assets				
WIPS *(note 1)*	–	–	29	29
Royalty receivable	–	–	199	199
Total assets	–	–	228	228

31 December 2017	**Level 1**	**Level 2**	**Level 3**	**Total**
	A$M	*A$M*	*A$M*	*A$M*
Assets				
WIPS *(note 1)*	–	–	29	29
Royalty receivable	–	–	199	199
Total assets	–	–	228	228

30 June 2018	**Level 1**	**Level 2**	**Level 3**	**Total**
	A$M	*A$M*	*A$M*	*A$M*
Assets				
WIPS *(note 1)*	–	–	–	–
Royalty receivable	–	–	198	198
Total assets	–	–	198	198

The Company

31 December 2015	Level 1	Level 2	Level 3	Total
	A$M	*A$M*	*A$M*	*A$M*
Liabilities				
Forward foreign exchange contracts *(note 1)*	–	1	–	1
Total liabilities	–	1	–	1

Note 1:

Fair value is determined using the discounted future cash flows that are dependent on the following unobservable inputs: forecast sales volumes and fluctuations in foreign exchange rates.

During the years ended 31 December 2015, 2016 and 2017 and 30 June 2018, there are no change in categories between level 1 and level 2 and no movement from or into level 3. For more information about royalty receivable, please refer to note 17.

The fair value of the royalty receivable is determined using the discounted future cash flows that are dependent on the following unobservable inputs: forecast sales volumes, coal prices and fluctuations in foreign exchange rates. The forecast sales volumes are based on the internally maintained budgets, five year business plan and life of mine models. The forecast coal prices and long term exchange rates are based on external data consistent with the data used for impairment assessments. The risk-adjusted post-tax discount rate used to determine the future cash flows is 10.5%. The estimated fair value would increase if the sales volumes and coal prices were higher and if the Australian dollar weakens against the US dollar. The estimated fair value would also increase if the risk adjusted discount rate was lower.

Sensitivity analysis

The following tables summarise the sensitivity analysis of royalty receivable. This analysis assumes that all other variables remain constant.

Coal price	**Fair value increase (decrease)**			
	Year ended 31 December			**Six months ended 30 June**
	2015	**2016**	**2017**	**2018**
	A$M	*A$M*	*A$M*	*A$M*
+10%	18	17	18	18
-10%	(18)	(17)	(18)	(18)

Exchange rates	**Fair value increase (decrease)**			
	Year ended 31 December			**Six months ended 30 June**
	2015	**2016**	**2017**	**2018**
	A$M	*A$M*	*A$M*	*A$M*
+10%	(16)	(16)	(17)	(16)
-10%	20	19	19	20

Discount rates	Fair value increase (decrease)			
	Year ended 31 December			Six months ended 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
+10%	(6)	(5)	(5)	(4)
-10%	6	5	5	4

35. BUSINESS COMBINATION AND CHANGES INTERESTS IN JOINT OPERATIONS

(i) Moolarben Coal Joint Venture 1% acquisition

On 30 March 2015, Moolarben Coal Mine Pty Ltd, a 100% owned subsidiary of the Company acquired an additional 1% interest in the Moolarben Coal Joint Venture ("Moolarben JV") owned by Hanwha Resources (Australia) Pty Ltd ("Hanwha"). The Moolarben JV is accounted for as a joint operation. With the 1% acquisition the Group now holds an 81% interest in the Moolarben JV. The cash consideration paid was A$20 million.

The accounting for the acquisition of the additional 1% interest in Moolarben JV has been determined on a final basis at 31 December 2015.

Details of the purchase consideration, the net assets and liabilities acquired and gain on the additional interest in the Moolarben JV are as follows:

	A$M
Total consideration	20
Gain on acquisition of additional interest in joint operation	7
Fair value of net identifiable assets acquired	27

As the fair value of the assets acquired was greater than the consideration a gain of A$7 million was recognised in the profit and loss.

The assets and liabilities recognised as a result of the acquisition are as follows:

	Fair value
	A$M
Trade receivables	1
Plant and equipment	7
Mining tenements	25
Exploration and evaluation assets	3
Prepayments (non-current)	(5)
Deferred tax liabilities	(4)
Fair value of net identifiable assets acquired	27

The acquired 1% contributed revenue of A$4 million and a net profit of A$1 million to the Group for the period from 1 April 2015 to 31 December 2015. If the acquisition had occurred on 1 January 2015, the contributed revenue and net profit for the year ended 31 December 2015 would have been A$5 million and A$1 million respectively. These amounts have been calculated using the Group's accounting policies.

(ii) Acquisition of Coal & Allied

As announced on 24 January 2017 and as subsequently amended on 26 June 2017, the Company entered into a binding agreement to acquire 100% of the shares in Coal & Allied from wholly owned subsidiaries of Rio Tinto for US$2.69 billion plus an adjustment for net debt and working capital. US$2.45 billion was paid on completion, plus US$240 million in non-contingent royalty payments over five years from completion. The Acquisition completed on 1 September 2017 resulting in the Company acquiring (through its ownership of the shares in Coal & Allied) Rio Tinto's interest in the HVO and MTW mines (an integrated operation of two open-cut mines located adjacent to each other in the Hunter Valley, NSW), a 36.5%interest in PWCS (the owner of a coal export terminal located at the Port of Newcastle), as well as other coal exploration projects and landholdings.

In 24 May 2017, the Company transferred its right to acquire Mitsubishi's 32.4% interest in the HVO JV (the "Tag-along Offer") to Glencore. For details, please refer to note 23(a).

Mitsubishi has also agreed to grant the Company a call option amounted US$10 million to purchase its 28.9% interest in the Warkworth operation for the price of US$230 million.

The Tag-along Offer fulfills the Company's obligation to make a tag-along offer to Mitsubishi under the sale and purchase agreement for the Company's acquisition of 100% of the shares in Coal & Allied from wholly owned subsidiaries of Rio Tinto ("CNA Transaction") and the corresponding requirements of the Hunter Valley Operations Joint Venture Agreement.

Transaction funding and capital structure simplification

On 31 August 2017, funding for the acquisition of Coal & Allied was achieved by the Company successfully completing the issue of new fully paid ordinary shares under the pro-rata renounceable entitlement offer and institutional placement announced to Australian Securities Exchange on 1 August 2017. New shares under the entitlement offer and placement were issued at the offer price of US$0.10. The Company issued:

1. 23,464,929,520 new shares under the entitlement offer, raising gross proceeds of US$2,346,492,952; and

2. 1,500,000,000 new shares under the placement, raising gross proceeds of US$150,000,000.

Details of the purchase consideration, the net assets and liabilities acquired and gain on acquisition of subsidiaries are as follows:

	A$M
Purchase consideration	
Acquisition price	3,102
Non-contingent royalty*	283
Net debt and working capital adjustment*	162
Total consideration	3,547
Gain on acquisition of subsidiaries	177
Fair value of net identifiable assets acquired	3,724

* These amounts are all cash payments either up front or over time which will be paid for the acquisition.

	Fair value
	A$M
Cash	152
Trade receivables	135
Inventories	79
Assets classified as held for sale	82
Other assets	60
Investments in associates	197
Plant and equipment	1,326
Mining tenements	2,456
Exploration and evaluation assets	108
Intangible assets	35
Deferred tax asset	105
Trade and other payables	(303)
Other liabilities	(2)
Provisions	(436)
Deferred tax liabilities	(270)
Fair value of net identifiable assets acquired	3,724

Assets and liabilities acquired

The accounting for the acquisition on a provisional basis at 30 June 2018.

The preliminary assessment of the contingent royalty included in the entitlement offer booklet was that it formed part of the purchase consideration. Having performed a more detailed assessment it has been determined the contingent royalty obligation represents a liability of the acquired group as it is payable by subsidiaries of Coal & Allied and is included in provisions above.

The fair value of net identifiable assets acquired includes A$3 million of non-controlling interests measured at fair value over certain subsidiaries controlled by Coal & Allied.

Acquisition-related costs amounting to approximately A$16 million have been excluded from the consideration transferred and have been recognised as an expense during the year ended 31 December 2017, within other operation expenses in the consolidated statements of profit or loss and other comprehensive income

The Group recognised a gain on a bargain purchase of approximately A$177 million in the consolidated statement of profit or loss and other comprehensive income for the year ended 31 December 2017. In the opinion of the directors of the Company, the bargain purchase is mainly attributable to the improved valuation assumptions on completion date compared to the date the acquisition price was struck.

The fair value and the gross amount of trade receivables, prepayments and other receivables at the date of acquisition amounted to approximately A$195 million. No estimated uncollectible contractual cash flows were expected at the acquisition date.

	A$M
Net cash outflow arising on acquisition	
Cash paid on acquisition	3,264
Non-contingent royalty paid	142
Less: Bank balances and cash acquired	(152)
	3,254

During the period from the acquisition date to 31 December 2017, Coal & Allied has contributed a total revenue of A$749 million and net profit of A$138 million.

If the acquisition had occurred on 1 January 2017, the consolidated revenue and net profit of the Group for the year ended 31 December 2017 would have been A$2,173 million and A$818 million respectively.

The proforma financial information is for illustrative purpose only and does not necessarily reflect the Group's revenue and operating results if the acquisition has been completed on 1 January 2017 and could not serve as a basis for the forecast of future operation result.

(iii) Disposal of interest in HVO to Glencore

On 4 May 2018 the Company announced that it had completed the establishment of a 51%:49% unincorporated joint operation with Glencore in relation to HVO JV as was previously announced on 27 July 2017 and held a 51%:49% shareholding in HV Operations Pty Ltd and HVO Coal Sales Pty Ltd (together the "HVO entities").

Glencore paid cash consideration of US$1,139 million for 49% of HVO JV and the HVO entities, of which US$710 million was paid to Mitsubishi for its 32.4% interest and US$429 million was paid to a wholly owned subsidiary of the Company, Coal & Allied Operations Pty Ltd, for its 16.6% interest, adjusted for a net debt and working capital adjustment and an adjustment for the net cash inflows of HVO since 1 September 2017.

The Company will also receive from Glencore a 27.9% share of the US$240 million non-contingent royalties payable by the Company to Rio Tinto resulting from the acquisition of Coal & Allied, which occurred on 1 September 2017. The US$429 million includes US$20 million associated with the transfer of shares in Newcastle Coal Shippers held by Coal & Allied and Warkworth Coal Sales Limited to a Glencore subsidiary.

From 4 May 2018, the Company continues to consolidates its 51% interest in the HVO JV and has deconsolidated the HVO entities and continues to account for these entities as joint ventures.

Details of the sale proceeds, the net identifiable assets disposed of and the gain on disposal of the interest in joint venture and subsidiaries are as follows:

	A$M
Sale proceeds	
Disposal price	569
Non-contingent royalties	87
Working capital and share of net cash outflows adjustment	(36)
Total disposal consideration	620
Gain on disposal of interest in joint venture and subsidiaries	(78)
Fair value of net identifiable assets and liabilities disposed of (refer to (i) below)	542

(i) Assets and liabilities acquired

The assets and liabilities recognised as a result of the acquisition are as follows:

	Fair value
	A$M
Cash	13
Trade receivables	175
Inventories	12
Assets classified as held for sale	26
Other assets	1
Plant and equipment	186
Mining tenements	335
Exploration and evaluation assets	18
Intangible assets	4
Trade and other payables	(172)
Provisions	(56)
Net identifiable assets disposed	542

As noted in note 35(iii) the acquisition accounting relating to Coal & Allied is on a provisional basis at 30 June 2018. Any further adjustments to the provisional values of Coal & Allied as a result of completing work on the fair values of assets and liabilities acquired may have an effect on the recognition of disposed assets and liabilities above.

(iv) Acquisition of additional interest in Warkworth Joint Venture

As announced on 7 March 2018 and effective from 1 March 2018 CNA Warkworth Australasia Pty Ltd, a subsidiary of the Company, acquired a 28.898% interest in the Warkworth Joint Venture from Mitsubishi for US$230 million, plus a net debt and working capital adjustment. This transaction was executed pursuant to a call option that the group held in connection with the Acquisition of Coal & Allied. The acquisition also included acquiring additional Mitsubishi's shareholding in the following companies, Warkworth Coal Sales Pty Ltd, Warkworth Mining Ltd, Warkworth Pastoral Co Pty Ltd and Warkworth Tailings Treatment Pty Ltd.

	A$M
Purchase consideration	
Acquisition price	295
Net debt and working capital adjustment	58
Total consideration	353
Gain on acquisition of additional interest in joint operation	–
Fair value of net identifiable assets acquired (refer to (i) below)	353

(i) Assets and liabilities acquired

	Fair value
	A$M
Cash	6
Trade receivables	72
Inventories	13
Plant and equipment	178
Mining tenements	127
Exploration and evaluation assets	12
Intangible assets	2
Other assets	1
Trade and other payables	(44)
Provisions	(16)
Deferred tax assets	1
Non controlling interest	1
Net identifiable assets acquired	353

The accounting for the acquisition has been determined on a provisional basis at 30 June 2018. Any adjustments to the provisional values as a result of completing work on the fair values of assets and liabilities acquired will be recognised within 12 months of the acquisition date and will be recognised as if they had occurred as at the date of acquisition.

Revenue and profit contribution

The acquired additional interest contributed revenue of A$103 million and net profit of A$47 million to the Group for the period from 1 March 2018 to 30 June 2018. If the acquisition had occurred on 1 January 2018, consolidated revenue and net profit for the period ended 30 June 2018 would have been A$151 million and A$70 million respectively. These amounts have been calculated using the Group's accounting policies.

36. NON-CONTROLLING INTERESTS

The non-controlling interest relates to the Group's investments in Mount Thorley Coal Ltd, HVO Coal Sales Pty Ltd, Miller Pohang Coal Company Pty Ltd, Warkworth Mining Ltd, Warkworth Pastoral Company Pty Ltd and Warkworth Tailings Treatment Pty Ltd which were acquired as part of the Coal & Allied acquisition.

	31 December 2017
	A$M
Opening non-controlling interests	–
Acquisition of Coal & Allied	3
Profit/loss of non-controlling interest	–
Closing non-controlling interest	3

The movement of non-controlling interest relates to the group's acquisition of additional investments in Warkworth joint operation, details refer to note 35.

The non-controlling interest relates to the Group's investments in Warkworth Joint Venture, Warkworth Coal Sales Pty Ltd, Warkworth Mining Ltd, Warkworth Pastoral Co Pty Ltd and Warkworth Tailings Treatment Pty Ltd.

	30 June 2018
	A$M
Opening non-controlling interests	3
Acquisition of additional interest	(1)
Profit/loss of non-controlling interest	–
Closing non-controlling interest	2

37. RELATED PARTY BALANCES AND TRANSACTIONS

Transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation and are not disclosed. Saved as disclosed in elsewhere of the Historical Financial Information, the Group had the following related party balances and transactions.

Outstanding balances arising from transactions with related parties

	31 December			30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Current assets				
Trade and other receivables				
Receivable from Yancoal International Group entities in relation to cost reimbursement *(note i)*	24	5	11	6
Receivable from Watagan Group entities in relation to cost reimbursement *(note ii)*	–	1	–	12
Trade receivable from Noble Group Limited in relation to sales of coal	14	41	42	–
Promissory Notes receivable from Yancoal International (Holding) Co., Ltd *(note i)*	21	21	–	–
Royalty receivable from Middlemount JV *(note iii)*	51	74	11	8
Other receivables from Yancoal International Group entities *(note i)*	–	35	–	4
Promissory Notes receivable from Oz Star Ningbo Trading Co Ltd *(note i)*	–	–	36	38
Interest income receivable from Watagan *(note ii)*	–	–	16	16
	110	177	116	84
Non-current assets				
Advances to joint venture				
Other receivable from Middlemount JV being an unsecured, non interest bearing advance *(note iii)*	331	347	332	274
Other receivable from Watagan being an unsecured, interest bearing loan *(note ii)*	–	775	712	730
	331	1,122	1,044	1,004

	31 December			30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Current liabilities				
Trade and other payables				
Other payables to the Parent Company	35	77	81	157
Other payables to Yancoal International Resources Development Co., Ltd *(note i)*	1	1	1	1
Other payables to Yancoal International Trading Co., Ltd HK *(note i)*	8	8	8	8
Other payables to Yancoal International (Holding) Co., Ltd *(note i)*	2	4	4	4
Trade payables to Yancoal International Group entities *(note i)*	3	–	–	–
Trade payables to Noble Group Limited	1	–	–	–
Trade payables to NCIG Holdings Pty Limited *(note ii)*	1	–	–	–
Other payable under tax sharing and funding with Watagan Group *(note ii)*	–	–	43	69
Trade payable to Watagan Group Entities *(note ii)*	–	–	32	–
	51	90	169	239
Non-current liabilities				
Other payables				
Other payable to Yancoal International Resources Development Co., Ltd being an unsecured, interest-bearing loan *(note i)*	159	160	322	340
Other payable to Yancoal International (Holding) Co., Ltd being an unsecured, interest-bearing loan *(note i)*	137	138	128	135
Other payable to Yancoal International Trading Co., Ltd being an unsecured, interest-bearing loan *(note i)*	284	276	276	291
Other payable to the Parent Company being an unsecured, interest-bearing loan	363	715	801	845
	943	1,289	1,527	1,611

Balances outstanding at the reporting date to /from related parties are unsecured, non-interest bearing (except for loans receivable and loans payable) and are repayable on demand.

Transactions with related parties

	31 December			30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (unaudited)	*A$M*
Sales of goods and services					
Sales of coal to Noble Group Limited	247	162	195	92	–
Sales of coal to Watagan *(note ii)*	–	61	76	48	16
Sales of coal to Yancoal International (Holding) Co., Ltd *(note i)*	16	41	–	–	–
Provision of marketing and administrative services to other related parties – Watagan Group *(note ii)*	–	7	6	3	3
Provision of marketing and administrative services to other related parties – Yancoal International Group *(note i)*	11	10	8	4	4
	274	281	285	147	23
Purchases of goods and services					
Purchase of coal from Watagan Group *(note ii)*	–	(48)	(161)	(56)	(34)
Purchases of coal from Noble Group Limited	(2)	–	–	–	–
Purchase of coal from Syntech Resources Pty Ltd *(note i)*	(7)	(31)	(39)	(22)	(27)
	(9)	(79)	(200)	(78)	(61)
Advances/loans to and repayment of advances					
Loan to Watagan *(note ii)*	–	(1,363)	–	–	–
Net repayment (advances) of loan to (from) Watagan *(note ii)*	–	588	63	15	(18)
Repayment from a related party – Premier Coal Holdings Pty Ltd *(note i)*	3	–	–	5	–
Repayment from a related party – Yancoal Technology Development Pty Ltd *(note i)*	16	–	–	–	–
Advances to a related party – Yancoal Technology Development Pty Ltd *(note i)*	(16)	–	–	–	–
Repayment/(advances) to a related party – Premier Coal Holdings Pty Ltd *(note i)*	(3)	(35)	35	–	(4)
Repayment of loan – Middlemount JV	–	–	–	–	69
Loans from Parent Company	–	–	–	71	–
	–	(810)	98	91	47

	31 December			30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (unaudited)	*A$M*
Equity subscription, debt repayment and debt provision					
Loans from the Parent Company	351	352	330	–	–
Loan from Yancoal International (Holding) Co., Limited *(note i)*	140	–	–	–	–
Loan from Yancoal International Trading Co., Ltd *(note i)*	10	–	–	–	–
	501	352	330	–	–
Finance costs					
Interest paid on loans from Yancoal International Resources Development Co., Ltd *(note i)*	(9)	(8)	(8)	(5)	(4)
Interest accrued on loans from Yancoal International Resources Development Co., Ltd *(note i)*	(1)	(1)	(1)	–	(11)
Interest paid on loans from the Parent Company	(2)	(18)	(22)	–	(9)
Interest accrued on loans from the Parent Company	(11)	(25)	(34)	(24)	(18)
Interest paid on loans from Yancoal International (Holding) Co., Ltd *(note i)*	–	(5)	(5)	(4)	(4)
Interest accrued on loans from Yancoal International (Holding) Co., Ltd *(note i)*	(2)	(4)	(4)	–	–
Interest accrued on loans from Yancoal International Trading Co., Ltd HK *(note i)*	(11)	(7)	(9)	1	(1)
Interest paid on loans from Yancoal International Trading Co., Ltd HK *(note i)*	(8)	(8)	(8)	(8)	–
	(44)	(76)	(91)	(40)	(47)
Other costs					
Corporate guarantee fee paid to the Parent Company (extended portion)	(75)	(49)	(118)	–	–
Corporate guarantee fee accrued to the Parent Company (extended portion)	(24)	(52)	24	(43)	(47)
Port charges paid to NCIG Holdings Pty Limited *(note ii)*	(64)	(68)	(102)	(44)	(68)
Port charges accrued to NCIG Holdings Pty Limited *(note ii)*	(1)	(2)	(14)	(1)	3
Port charges paid to Noble Group Limited	(2)	–	–	(1)	–
Demurrage paid to Noble Group Limited	(1)	–	–	–	–
Demurrage paid to NCIG Holdings Pty Limited *(note ii)*	(1)	–	–	–	–

	31 December			30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (unaudited)	*A$M*
Arrangement fee paid on loans from Yancoal International Resources Development Co., Ltd *(note i)*	(2)	(2)	(2)	(1)	(1)
Arrangement fee accrued on loans from Yancoal International Resources Development Co., Ltd *(note i)*	(1)	–	–	–	–
	(171)	(173)	(212)	(90)	(113)
Finance income					
Interest income received from Premier Coal Holdings Pty Ltd *(note i)*	–	1	2	–	–
Interest income capitalised into loan receivable from Middlemount JV *(note iii)*	19	19	27	9	11
Interest income received on loan to Watagan *(note ii)*	–	74	50	34	32
Interest income receivable from Watagan *(note ii)*	–	–	16	–	–
Interest income accrued on loan to Watagan *(note ii)*	–	–	–	1	–
	19	94	95	44	43
Other income					
Mining services fees charged to Watagan *(note ii)*	–	38	52	29	26
Royalty income from Middlemount JV *(note iii)*	18	20	28	13	15
Bank guarantee fee charged to Premier Coal Holdings Pty Ltd *(note i)*	–	1	–	–	–
Bank guarantee fee charged to Syntech Resources Pty Ltd *(note i)*	2	1	–	1	1
Longwall hire fee charged to Austar Coal Mine Pty Ltd *(note i)*	–	3	3	2	2
	20	63	83	45	44

Note:

(i) The entities are fellow subsidiaries to the Company.

(ii) The entities are associates to the Company.

(iii) The entities are joint venture to the Company.

Terms and conditions

Transactions between related parties are usually on normal commercial terms and conditions no more favourable than those available to other parties unless otherwise stated.

1. Syndicated facility and bi-lateral facility (converted to a bank guarantee facility in 2016) – a fixed rate of 2.5% is charged on the outstanding loan principal and outstanding bank guarantee facility limit as at 31 December 2015, 2016 and 2017 and 30 June 2018 provided by the Parent Company. Refer below for further analysis on the Parent Company corporate guarantee and the market reset effective from 1 April 2018.

2. ICBC bank guarantee facility – a fixed rate of 2.0% is charged on the facility limit of A$100 million as at 31 December 2015 and 2016. This corporate guarantee was cancelled on 30 September 2017.

3. Working capital facility – a fixed rate of 2.5% is charged on the facility limit of A$50 million as at 31 December 2015.

The Parent Company provided corporate guarantees as security for the following facilities:

1. The Company is charged a guarantee fee by the Parent Company for the provision of a corporate guarantee over the Company's syndicated facility and bilateral bank guarantee facility. During the Track Record Period, up to 1 April 2018, the fee was fixed at 2.5% of the outstanding loan principal and bank guarantee facility balance. It was agreed by both parties that effective from 1 April 2018 there would be a market reset of the guarantee fee. The market reset work was completed on 3 October 2018 resulting in the guarantee fee being reduced to 1.5% for the period from 1 April 2018. If this lower rate had been accrued for the period 1 April 2018 to 30 June 2018 the guarantee fee would have been reduced by A$8 million.

The Directors of the Parent Company have provided a letter of support whereby unless revoked by giving not less than 24 months notice, for so long as the Parent Company owns at least 51% of the shares of the Company, the Parent Company will ensure that the Group continues to operate so that it remains solvent.

Compensation of key management personnel

The remuneration of directors and other members of key management were as follows:

	Year ended 31 December			Six months ended 30 June	
	2015	**2016**	**2017**	**2017**	**2018**
	A$M	*A$M*	*A$M*	*A$M* **(unaudited)**	*A$M*
Short-term employee benefits	5	5	9	1	1
Other long-term benefits	2	2	2	–	–
	7	7	11	1	1

The remuneration of directors and key executives is determined by the remuneration committee having regard to the performance of individuals and market trends.

38. COMMITMENTS

Save as disclosed elsewhere is the consolidated financial statements the Group had the following capital commitments.

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Capital expenditure contracted for but not provided in the consolidated financial statements				
Acquisition of property, plant and equipment				
– share of joint operations	6	138	33	32
– others	9	1	–	4
	15	139	33	36

39. RETIREMENT BENEFITS

The Company and Company's subsidiaries are participants in a state-managed retirement scheme pursuant to which the subsidiaries pay a minimum 9.5% superannuation of its qualifying staff's wages as a contribution to the scheme. The subsidiaries' financial obligations under this scheme are limited to the payment by the employer. During the year, contributions paid and payable by the subsidiaries pursuant to this arrangement were insignificant to the Group.

40. OPERATING LEASE COMMITMENTS

Operating lease as lessee:

The Group

	At 31 December			At 30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
Within one year	5	25	38	26
More than one year, but not more than five years	1	67	149	151
	6	92	187	177

The Group leases mining equipment, office space and small items of office equipment under operating leases. The leases typically run for 1 month to 5 years with an option to renew at the expiry of the lease period. None of the leases include contingent rentals.

41. CONTINGENT LIABILITIES

	31 December			30 June
	2015	2016	2017	2018
	A$M	*A$M*	*A$M*	*A$M*
The Group and the Company				
Guarantees secured over deposits	24	–	–	–
Performance guarantees provided to external parties	162	88	352	203
Guarantees provided in respect of the cost of restoration of certain mining leases given to government departments as required by statute	101	77	80	108
	287	165	432	311
Joint ventures				
Guarantees provided in respect of land acquisition	50	20	–	–
Performance guarantees provided to external parties	–	65	195	150
Guarantees provided in respect of the cost of restoration of certain mining leases	–	27	248	266
	50	112	443	416
Guarantees to related parties				
Guarantees secured over deposits	1	–	–	–
Performance guarantees provided to external parties	102	112	109	112
Guarantees provided in respect of the cost of restoration of certain mining leases given to government departments as required by statute	18	52	57	55
	121	164	166	167
	458	441	1,041	894

(i) The Company has issued a letter of support dated 4 March 2015 to Middlemount JV, confirming:

– It will not demand the repayment of any loan due from Middlemount JV, except to the extent that Middlemount JV agrees otherwise or as otherwise provided in the loan agreement; and

– It will provide financial support to Middlemount JV to enable it to meet its debts as and when they become due and payable, by way of new shareholder loans in proportion to its share of the net assets of Middlemount JV.

– This letter of support will remain in force whilst the group is a shareholder of Middlemount JV or until notice of not less than 12 months is provided or such shorter period as agreed by Middlemount JV.

(ii) The Company is charged a guarantee fee by the Parent Company for the provision of a corporate guarantee over the Company's syndicated facility and bilateral bank guarantee facility. During the Track Record Period, up to 1 April 2018, the fee was fixed at 2.5% of the outstanding loan principal and bank guarantee facility balance. It was agreed by both parties that effective from 1 April 2018 there would be a market reset of the guarantee fee. The market reset work was completed on 3 October 2018 resulting in the guarantee fee being reduced to 1.5% for the period from 1 April 2018. If this lower rate had been accrued for the period 1 April 2018 to 30 June 2018 the guarantee fee would have been reduced by A$8 million.

(iii) A number of claims have been made against the Group, including in respect of personal injuries, and in relation to contracts which Group members are party to as part of the Group's day to day operations. The personal injury claims which have been made against the Group have largely been assumed by the insurers of the Group under the Group's insurance policies. The Directors do not believe that the outcome of these claims will have a material impact on the Group's financial position.

42. DEED OF CROSS GUARANTEE

The Company and certain subsidiaries are parties to a deed of cross guarantee under which each company guarantees the debts of the others. By entering into the deed, the wholly-owned entities have been relieved from the requirement to prepare a financial report and Directors' Report under Legislative Instrument 2016/785 issued by the Australian Securities and Investments Commission.

43. SHARE-BASED PAYMENT TRANSACTIONS

On 28 February 2018, the establishment of an employee incentive share scheme was approved by the Company's Board of Directors. Pursuant to the scheme, the Group has set up a trust for the purpose of administering the incentive share scheme and holding the shares before they vest. The Company shall pay the trustee monies and give directions to the trustee to apply such monies and/or such other net amount of cash derived from shares held as part of the fund of the trusts to acquire shares from the market, and/or to allot and issue shares to the trustee, to satisfy any award made to selected participants. The Company shall select eligible persons from time to time and determine the number of shares to be awarded to such eligible persons. As of 30 June 2018, 42,574,974 shares of the Company (before share consolidation) were held by the Trust for the share award scheme.

During the six months ended 30 June 2018, a total of 41,482,104 shares of the Company based on A$0.141 per share, 1,185,203 shares after the share consolidation on 28 September 2018, have been awarded to certain employees of the Group respectively at no consideration which will be vested on 1 September 2018. With respect to this award of shares to eligible employees, there are no service or performance vesting conditions.

44. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The table below details changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the consolidated statements of cash flows as cash flows from financing activities.

For the year ended 31 December 2015

	At 1 January 2015	Debt drawdown	Debt repayment	Lease repayment	New Leases	Foreign exchange movements	At 31 December 2015
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Secured bank loan	3,354	–	(5)	–	–	409	3,758
Loan from related parties	385	502	–	–	–	56	943
Finance leases	41	–	–	(11)	22	–	52
Total interest-bearing liabilities	3,780	502	(5)	(11)	22	465	4,753

For the year ended 31 December 2016

	At 1 January 2016	Debt drawdown	Debt repayment	Lease repayment	New Leases	Foreign exchange movements	At 31 December 2016
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Secured bank loan	3,758	–	(198)	–	–	33	3,593
Loan from related parties	943	350	–	–	–	(3)	1,290
Finance leases	52	–	–	(16)	32	–	68
Total interest-bearing liabilities	4,753	350	(198)	(16)	32	30	4,951

For the year ended 31 December 2017

	At 1 January 2017	Debt drawdown	Debt repayment	Lease repayment	New Leases	Foreign exchange movements	At 31 December 2017
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Secured bank loan	3,593	–	(196)	–	–	(280)	3,117
Loan from related parties	1,290	326	–	–	–	(89)	1,527
Finance leases	68	–	–	(26)	13	–	55
Total interest-bearing liabilities	4,951	326	(196)	(26)	13	(369)	4,699

For the six months ended 30 June 2017 (unaudited)

	At 1 January 2017	Debt drawdown	Debt repayment	Lease repayment	New Leases	Foreign exchange movements	At 30 June 2017
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Secured bank loan	3,593	–	–	–	–	(213)	3,380
Loan from related parties	1,290	71	–	–	–	(78)	1,283
Finance leases	68	–	–	(14)	10	–	64
Total interest-bearing liabilities	4,951	71	–	(14)	10	(291)	4,727

For the six months ended 30 June 2018

	At 1 January 2018	Debt drawdown	Debt repayment	Lease repayment	New Leases	Foreign exchange movements	At 30 June 2018
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Secured bank loan	3,117	–	(664)	–	–	169	2,622
Loan from related parties	1,527	–	–	–	–	84	1,611
Finance leases	55	–	–	(10)	6	–	51
Total interest-bearing liabilities	4,699	–	(664)	(10)	6	253	4,284

45. FINANCIAL INFORMATION FOR PROPOSED ACQUISITION OF MOOLARBEN

Subject to certain approvals, the Company will acquire a 4% interest in Moolarben from Korea Resources Corporation for total consideration of A$84 million, which will be paid in four installments through to 31 December 2019, and adjusted for the economic benefit of the 4% interest from 15 April 2018, that will flow to the Company. The Moolarben Acquisition will raise the interest in the unincorporated Moolarben JV to 85%. The following financial information represents 100% of Moolarben's profit or loss and its financial position.

Statement of profit or loss

	Year ended 31 December			Six months ended 30 June	
	2015	2016	2017	2017	2018
	A$M	*A$M*	*A$M*	*A$M* (Unaudited)	*A$M*
Revenue	521	683	1,254	532	924
Other income	–	–	2	1	–
Changes in inventories of finished goods and work in progress	(3)	10	(2)	15	23
Raw materials and consumables used	(63)	(104)	(144)	(79)	(88)
Employee benefits	(37)	(45)	(69)	(33)	(51)
Depreciation and amortisation	(28)	(30)	(52)	(21)	(63)
Transportation	(134)	(149)	(165)	(81)	(118)
Contractual services and plant hire	(44)	(70)	(111)	(54)	(68)
Government royalties	(33)	(49)	(88)	(39)	(67)
Coal purchases	(81)	(41)	(66)	(11)	(52)
Other operating expenses	(17)	(17)	(26)	(9)	(16)
Finance costs	–	(1)	(1)	–	–
Profit before income tax	81	187	532	221	424
Income tax expense	(24)	(56)	(160)	(66)	(127)
Profit for the year	57	131	372	155	297

Asset and liabilities

	At 30 June
	2018
	A$M
Current assets	
Cash and cash equivalents	44
Trade and other receivables	198
Inventories	56
Other current assets	3
	301
Non-current assets	
Mining tenements	28
Exploration and evaluation assets	8
Intangible assets	1
Property, plant and equipment	1,311
Other non-current assets	2
	1,350
Total assets	1,651
Current liability	
Trade and other payables	295
Non-current liability	
Provision	43
Total liabilities	338
Net assets	1,313

B. SUBSEQUENT EVENTS

No matter or circumstances have occurred subsequent to the end of the financial year which has significantly affected, or may significantly affect, the operations of the Group, the result of those operations or the state of affairs of the Group in subsequent financial periods except for the following matters:

(1) Share consolidation

In preparation for the Listing, the shareholders approved the share consolidation by ordinary resolution at the general meeting of the Company held on 26 September 2018 pursuant to section 254H of the Australia Corporations Act. The share consolidation took effect on 28 September 2018 which resulted in the issued capital of the Company being consolidated on the basis of one Share for every 35 Shares on issue on 1 October 2018, and fractional entitlements as a result of holdings not being evenly divisible by 35 were rounded up to the nearest whole number. The issued share capital of the Company immediately following the share consolidation was 1,256,071,756 shares.

(2) Dividend

On 15 August 2018 the Directors announced an unfranked dividend of A$130 million, with a record date of 7 September 2018 and payment date of 21 September 2018, which represents 36% of profit after tax consistent with the 25%-40% range detailed in the Company's Constitution.

(3) Debt pre-payments

On 17 September 2018, the Company pre-paid US$150 million in loans to reduce its existing debt liabilities. US$75 million was pre-paid in loans from the Bank of China and China Construction Bank under the Company's Syndicated Facility Agreement, and US$75 million pre-paid to unsecured related-party loans.

On 17 October 2018, the Company pre-paid US$100 million in loans to reduce its existing debt liabilities. US$50 million was pre-paid in loans from the Bank of China and China Construction Bank under the Company's Syndicated Facility Agreement, and US$50 million pre-paid to unsecured related-party loans.

The following is the text of a report set out on pages IB-1 to IB-71, received from the Company's reporting accountants, ShineWing Australia, for the purpose of incorporation in this prospectus. It is prepared and addressed to the Directors of the Company and to the Joint Sponsors pursuant to the requirements of HKSIR 200 Accountants' Report on Historical Financial Information in Investment Circulars issued by the Hong Kong Institute of Certified Public Accountants.

ShineWing Australia
Accountants and Advisors
Level 8, 167 Macquarie Street
Sydney NSW 2000

ACCOUNTANTS' REPORT ON HISTORICAL FINANCIAL INFORMATION TO THE DIRECTORS OF COAL & ALLIED INDUSTRIES LIMITED, CMB INTERNATIONAL CAPITAL LIMITED, MORGAN STANLEY ASIA LIMITED AND BOCI ASIA LIMITED

Introduction

We report on the historical financial information of Coal & Allied Industries Limited (the "C&A") and its subsidiaries (hereinafter collectively referred to as the "C&A Group") set out on pages IB-3 to IB-71, which comprises the consolidated statements of financial position as at 31 December 2015, 2016 and 2017 and the consolidated statements of profit or loss and other comprehensive income, the consolidated statements of changes in equity and the consolidated statements of cash flows for each of the three financial years ended 31 December 2015, 2016 and 2017 (the "Track Record Period") and a summary of significant accounting policies and other explanatory information (together, the "Historical Financial Information"). The Historical Financial Information set out on pages IB-3 to IB-71 forms an integral part of this report, which has been prepared for inclusion in the prospectus of Yancoal Australia Ltd (the "Company") dated 26 November 2018 (the "Prospectus") in connection with the listing of the shares of the Company on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange").

Directors' Responsibility for the Historical Financial Information

The directors of C&A are responsible for the preparation of the Historical Financial Information that gives a true and fair view in accordance with the basis of preparation and presentation set out in note 1 to the Historical Financial Information, and for such internal control as the directors of C&A determine is necessary to enable the preparation of the Historical Financial Information that is free from material misstatement, whether due to fraud or error.

Reporting Accountants' Responsibility

Our responsibility is to express an opinion on the Historical Financial Information and to report our opinion to you. We conducted our work in accordance with Hong Kong Standard on Investment Circular Reporting Engagements 200 "Accountants' Reports on Historical Financial Information in Investment Circulars" issued by the Hong Kong Institute of Certified Public Accountants (the "HKICPA"). This standard requires that we comply with ethical standards and plan and perform our work to obtain reasonable assurance about whether the Historical Financial Information is free from material misstatement.

Our work involved performing procedures to obtain evidence about the amounts and disclosures in the Historical Financial Information. The procedures selected depend on the reporting accountants' judgement, including the assessment of risks of material misstatement of the Historical Financial Information, whether due to fraud or error. In making those risk assessments, the reporting accountants consider internal control relevant to the entity's preparation of the Historical Financial Information that give a true and fair view in accordance with the basis of preparation and presentation set out in note 1 to the Historical Financial Information in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Our work also included evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors of the C&A, as well as evaluating the overall presentation of the Historical Financial Information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the Historical Financial Information gives, for the purpose of the accountants' report, a true and fair view of the consolidated financial position of the C&A Group as at 31 December 2015, 2016 and 2017 and of the Group's financial performance and cash flows for the Track Record Period in accordance with the basis of preparation and presentation set out in note 1 to the Historical Financial Information.

REPORT ON MATTERS UNDER THE RULES GOVERNING THE LISTING OF SECURITIES ON THE STOCK EXCHANGE OF HONG KONG LIMITED AND THE COMPANIES (WINGING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE

Adjustments

In preparing the Historical Financial Information, no adjustments to the Underlying Financial Statements as defined on page IB-3 have been made.

Dividends

We refer to Note 27 to the Historical Financial Information which states that no dividends have been paid by C&A to target groups during the relevant Track Record Period.

ShineWing Australia
Chartered Accountants
Rami Eltchelebi
Sydney
26 November 2018

A. FINANCIAL INFORMATION OF THE GROUP

HISTORICAL FINANCIAL INFORMATION OF THE C&A GROUP

Preparation of financial information of C&A Group

Set out below is the Historical Financial Information which forms an integral part of this accountants' report.

The consolidated financial statements of C&A Group for the Track Record Period ("Underlying Financial Statements") prepared in accordance with accounting policies which conform with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board ("IASB"), on which the Historical Financial Information is based, were audited by ShineWing Australia in accordance with Australia Auditing Standards issued by the Auditing and Assurance Standards Board in Australia.

The Historical Financial Information is presented in Australian Dollars ("A$") and all values are rounded to the nearest million (A$M) except when otherwise indicated.

CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

		Predecessor			Successor
		31 December	31 December	1 January to 31 August	1 September to 31 December
	Notes	2015	2016	2017	2017
		A$M	*A$M*	*A$M*	*A$M*
Revenue	*7*	2,131	1,664	1,424	732
Other income	*8*	24	1,902	26	(5)
Changes in inventories of finished goods and work in progress		(22)	(6)	(11)	26
Raw materials and consumables used		(524)	(357)	(274)	(141)
Employee benefits	*9*	(333)	(253)	(140)	(77)
External services		(256)	(192)	(169)	(80)
Selling and distribution		(437)	(322)	(221)	(98)
Debt forgiveness	*9*	–	(1,475)	–	–
Other operating expenses		(108)	(90)	(25)	(35)
Net gain/(loss) on disposal of property, plant and equipment		(2)	10	–	–
Depreciation and amortisation		(184)	(125)	(78)	(39)
Exploration and evaluation		(8)	–	–	–
Sea freight and purchase coal		(40)	(26)	–	(34)
Net foreign exchange (losses)/gains		10	(2)	(1)	4
Finance costs	*9*	(16)	(7)	(3)	(1)
Share of (loss)/profit of equity-accounted investees, net of tax		7	2	(16)	(6)
Profit before income tax		242	723	512	246
Income tax benefit/(expense)	*10*	42	(326)	169	(79)
Profit for the year		284	397	681	167
Profit for the year attributable to:					
Equity holders of C&A		283	396	681	166
Non-controlling interests		1	1	–	1
		284	397	681	167
Profit for the year		284	397	681	167
Other comprehensive income for the year (after income tax)		–	–	–	–
Total comprehensive income for the year		284	397	681	167
Total comprehensive income for the year attributable to:					
Equity holders of C&A		283	396	681	166
Non-controlling interests		1	1	–	1
		284	397	681	167

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

	Notes	Predecessor 31 December 2015	Predecessor 31 December 2016	Successor 31 December 2017
		A$M	A$M	A$M
ASSETS				
Current assets				
Cash and cash equivalents	11	213	312	33
Trade and other receivables	12	130	276	554
Inventories	13	87	61	71
		430	649	658
Assets classified as held for sale	14	320	–	132
		750	649	790
Non-current assets				
Trade and other receivables	12	–	–	53
Interests in associates	15	216	206	145
Land held for development or future sale		1	1	1
Property, plant and equipment	16	1,243	762	627
Deferred tax assets	17	81	155	454
Intangible assets	18	188	154	145
		1,729	1,278	1,425
Total assets		2,479	1,927	2,215
LIABILITIES				
Current liabilities				
Trade and other payables	19	251	346	384
Bank overdraft	20	1	–	–
Current tax payable		7	4	–
Provisions	22	76	118	15
		335	468	399
Liabilities directly associated with assets classified as held for sale	23	44	–	53
		379	468	452
Non-current liabilities				
Deferred income		3	3	2
Deferred tax liabilities	24	72	11	6
Provisions	25	158	133	176
		233	147	184
Total liabilities		612	615	636
Net assets		1,867	1,312	1,579
EQUITY				
Contributed equity	26	441	60	60
Reserves	28(a)	11	10	1
Retained earnings	28(b)	1,413	1,240	1,515
Equity attributable to equity holders of the C&A		1,865	1,310	1,576
Non-controlling interests	29	2	2	3
Total equity		1,867	1,312	1,579

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

	Notes	Attributable to equity holders of the C&A				Non-controlling interests	Total
		Share capital	Other reserves	Retained earnings	Total		
		A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Predecessor							
At 1 January 2015		441	7	1,230	1,678	2	1,680
Profit for the year		–	–	283	283	1	284
Other comprehensive income		–	–	–	–	–	–
Total comprehensive income for the year		–	–	283	283	1	284
Transactions with owners:							
– Dividends paid	*27*	–	–	(100)	(100)	(1)	(101)
– Employee share schemes	*28*	–	4	–	4	–	4
At 31 December 2015		441	11	1,413	1,865	2	1,867
At 1 January 2016		441	11	1,413	1,865	2	1,867
Profit for the year		–	–	396	396	1	397
Other comprehensive income		–	–	–	–	–	–
Total comprehensive income for the year		–	–	396	396	1	397
Transactions with owners:							
– Return of capital		(381)	–	–	(381)	–	(381)
– Dividends paid	*27*	–	–	(569)	(569)	(1)	(570)
– Employee share schemes	*28*	–	(1)	–	(1)	–	(1)
		(381)	(1)	(569)	(951)	(1)	(952)
At 31 December 2016		60	10	1,240	1,310	2	1,312

	Notes	Attributable to equity holders of the C&A				Non-controlling interests	Total
		Share capital	Other reserves	Retained earnings	Total		
		A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
At 1 January 2017		60	10	1,240	1,310	2	1,312
Profit for the period		–	–	681	681	–	681
Other comprehensive income		–	–	–	–	–	–
Total comprehensive income for the period		–	–	681	681	–	681
Transactions with owners:							
– Return of capital		–	–	–	–	–	–
– Dividends paid	*27*	–	–	(581)	(581)	(1)	(582)
– Employee share schemes	*28*	–	(9)	9	–	–	–
		–	(9)	(572)	(581)	(1)	(582)
At 31 August 2017		60	1	1,349	1,410	2	1,412
Successor							
At 1 September 2017		60	1	1,349	1,410	2	1,412
Profit for the period		–	–	166	166	1	167
Other comprehensive income		–	–	–	–	–	–
Total comprehensive income for the period		–	–	166	166	1	167
At 31 December 2017		60	1	1,515	1,576	3	1,579

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Predecessor			Successor
	31 December 2015	31 December 2016	1 January to 31 August 2017	1 September to 31 December 2017
	A$M	*A$M*	*A$M*	*A$M*
Operating activities				
Profit before income tax	242	723	512	246
Adjustments for:				
Interest income	(6)	(18)	(6)	(1)
Dividend income from associates	(12)	(13)	(1)	–
Net unrealised foreign exchange loss/(gain)	(1)	5	1	(4)
Depreciation of property, plant and equipment and amortization	184	125	78	39
Exploration and evaluation	8	–	–	–
Gain on sale of investments	–	(1,860)	–	–
Net loss on debt forgiveness	–	1,475	–	–
Share of loss or profit of associates	5	10	10	6
(Loss)/gain on disposal of property, plant and equipment	2	(10)	(20)	–
Other	13	9	(6)	(11)
Operating cash flows before movements in working capital	435	446	568	275
Decrease/(increase) in bills and accounts receivable	39	(138)	141	(123)
Decrease in inventories	49	9	(13)	(9)
Decrease in assets held for sale	11	–	–	–
Movement in provision for land subsidence, restoration, rehabilitation and environmental cost	6	(4)	–	–
Deferred tax liability	–	–	(312)	4
(Increase)/decrease in long term receivables	(1)	1	–	–
(Increase)/decrease in bills and accounts payable	(5)	111	(163)	106
Increase/(decrease) in other payables and accrued expenses	2	–	(3)	–
(Increase)/decrease in long-term payable and provision	(12)	8	34	(4)
Cash generated from operations	524	433	252	249
Income taxes paid	(110)	(451)	169	(79)
Interest received	6	18	5	1
Dividend received	12	13	1	–
Net cash inflow from operating activities	432	13	427	171

	Notes	Predecessor			Successor
		31 December 2015	31 December 2016	1 January to 31 August 2017	1 September to 31 December 2017
		A$M	A$M	A$M	A$M
Cash flows from investing activities					
Purchase of property, plant and equipment		(64)	(40)	(33)	(26)
Exploration and evaluation		(8)	–	–	–
Advances to related parties		–	–	–	(272)
Dividends received		–	–	7	6
Proceeds on disposal of property, plant and equipment		4	9	20	3
Proceeds from sale of an investment in an associate	*8*	–	1,069	–	–
Net cash (outflow)inflow from investing activities		(68)	1,038	(6)	(289)
Cash flows from financing activities					
Dividends paid	*27*	(100)	(569)	(581)	–
Dividends paid to non-controlling interest		(1)	(1)	(1)	
Capital return		–	(381)	–	–
Repayment of bank borrowings		(293)	–	–	–
Net cash outflow from financing activities		(394)	(951)	(582)	–
Net (decrease) increase in cash and cash equivalents		(30)	100	(161)	(118)
Cash and cash equivalents at the beginning of the year/period		242	212	312	151
Cash and cash equivalents at end of year/period	*11*	212	312	151	33
Breakdown of cash and cash equivalents at end of year/period:					
Bank balances and cash held		213	312	151	33
Bank overdraft	*20*	(1)	–	–	–
Cash and cash equivalents at end of year/period		212	312	151	33

1. GENERAL INFORMATION

Description of business

Coal & Allied Industries Limited (the "C&A") is a leading Australian producer of high quality thermal coal, indirectly owning majority joint venture interests in three coal mine operations, namely Hunter Valley Operations ("HVO"), Mount Thorley and Warkworth (together, "MTW") and associated assets.

During the Track Record Period the effective ownership interest in HVO and MTW was 100% and 64.1% respectively at 31 December 2015, 67.6% and 64.1% respectively at 31 December 2016 and 67.6% and 64.1% respectively at 31 December 2017.

The C&A Group's parent entity during the years ended 31 December 2015 and 31 December 2016 was Rio Tinto Limited, owned 80% and 100% respective at the end of each of the financial years. On 1 September 2017 the C&A Group's parent entity changed from Rio Tinto Limited to Yancoal Australia Ltd. As a result, the ultimate parent entity and ultimate controlling party became Yankuang Group Corporation Limited (incorporated in the People's Republic of China).

The principal activities of the Group and its subsidiaries (the "Group") during the three years ended 31 December 2017 (the "Track Record Period") were coal mining and related coal preparation and marketing.

The consolidated financial information are presented in Australian dollars, which is C&A's functional and presentation currency.

Basis of preparation

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRSs").

These consolidated financial statements include applicable disclosures required by the Hong Kong Companies Ordinance and the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules").

The consolidated financial statements have been prepared on a going concern basis.

Historical cost convention

The consolidated financial information have been prepared on a historical cost basis, except for the following:

- assets held for sale – measured at the lower of cost or fair value less costs of disposal.

The accounting policies adopted in the preparation of the Financial Information are presented in Note 3 – Significant Accounting Policies. These policies have been consistently applied to all of the Track Record Period.

2. APPLICATION OF NEW AND REVISED INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs")

For the purpose of preparing and presenting the Historical Financial Information for the Track Record Period, the Group has consistently adopted all of the new and revised IFRS, International Accounting Standards ("IASs"), IFRSs amendments and the related interpretations ("IFRICs") issued by the International Accounting Standards Board (the "IASB") which are effective for the Group's financial year beginning on 1 January 2017 and has early adopted the new and revised IFRSs which are in issue but not yet effective until the Group's financial year beginning on 1 January 2018 throughout the Track Record Period.

New and revised IFRSs issued but not yet effective

At the date of authorisation of these consolidated financial statements, certain new and amended IFRSs have been published but are not yet effective, and have not been adopted early by the Group.

IFRS 16	Leases[1]
IFRS 17	Insurance Contracts[2]
Amendments to IFRSs	Annual improvements to IFRS Standards 2015-2017 Cycle[1]
Amendments to IFRS 9	Prepayment Features with Negative Compensation[1]
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture[3]
Amendments to IAS 19	Plan Amendment, Curtailment or Settlement[1]
Amendments to IAS 28	Long-term Interests in Associates and Joint Ventures[1]
IFRIC 23	Uncertainty over Income Tax Treatments[1]

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1 Effective for annual periods beginning on or after 1 January 2019.

2 Effective for annual periods beginning on or after 1 January 2021.

3 Effective date not yet been determined.

The directors of C&A anticipate that, except as described below, the application of the new and revised IFRSs will have no material impact on the results and the financial position of the Group.

The Group's assessment of the impact of these new standards and interpretations is set out below.

The directors of C&A anticipate that all the pronouncements will be adopted in the C&A Group's accounting policy for the first period beginning after the effective date of the pronouncement. Information on new and amended IFRSs that are expected to have impact on the Group's accounting policies is provided below. Other new and amended IFRSs are not expected to have a material impact on the C&A Group's financial statements.

IFRS 16 Leases

IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessors and lessees.

In respect of the lessee accounting, the standard introduces a single lessee accounting model, requiring lessees to recognise assets and liabilities for all leases with the lease term of more than 12 months, unless the underlying asset has a low value.

At the commencement date of the lease, the lessee is required to recognise a right-of-use asset at cost, which consists of the amount of the initial measurement of the lease liability, plus any lease payments made to the lessor at or before the commencement date less any lease incentives received, the initial estimate of restoration costs and any initial direct costs incurred by the lessee. A lease liability is initially recognised at the present value of the lease payments that are not paid at that date.

Subsequently, the right-of-use asset is measured at cost less any accumulated depreciation and any accumulated impairment losses, and adjusted for any remeasurement of the lease liability. Lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability, reducing the carrying amount to reflect the lease payment made, and remeasuring the carrying amount to reflect any reassessment or lease modifications or to reflect revised in-substance fixed lease payments. Depreciation and impairment expenses, if any, on the right-of-use asset will be charged to profit or loss following the requirements of IAS 16 Property, Plant and Equipment, while interest accrual on lease liability will be charged to profit or loss.

In respect of the lessor accounting, IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17. Accordingly, a lessor continues to classify its leases as operating leases or finance leases, and to account for those two types of leases differently.

IFRS 16 will supersede the current lease standards including IAS 17 Leases and the related interpretations when it becomes effective.

IFRS 16 will become effective for annual periods beginning on or after 1 January 2019 with early application permitted provided that the entity has applied IFRS 15 Revenue from Contracts with Customers at or before the date of initial application of IFRS 16.

The directors of C&A are in the process of assessing the impacts on the consolidated financial statements. However, it is not practicable to provide a reasonable estimate of the effect of until the Group performs a detailed review.

As at 31 December 2017, C&A Group has non-cancellable operating lease commitments of A$21M as disclosed in note 32. A preliminary assessment indicates that these arrangements will meet the definition of a lease under IFRS 16, and hence the C&A Group will recognise a right-of-use asset and a corresponding liability in respect of all these leases unless they qualify for low value or short-term leases upon the application of IFRS 16. In addition, the application of new requirements may result changes in the measurement, presentation and disclosure as indicated above. The directors of C&A are in the process to determine the amounts of right-of-use assets and lease liabilities to be recognised in the consolidated statement of financial position, after taking into account all practical expedients and recognition exemption under IFRS 16. The directors of C&A expect that the adoption of IFRS 16 will not have material impact on the Group's results but certain portion of these lease commitments will be required to be recognised in the consolidated statement of financial position as right-of-use assets and lease liabilities.

Amendments to IFRS 10 and IAS 28 Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The amendments provide guidance on addressing the acknowledged inconsistency between the requirements in IFRS 10 and those in IAS 28, in dealing with the sale or contribution of assets between an investor and its joint venture and associate. An investing entity is required to recognise the gain or loss arising from selling or contributing assets that constitutes or contains a business to a joint venture or associate in full. An investing entity is required to recognise the gain or loss arising from selling or contributing assets that does not constitute or contain a business to a joint venture or associate only to the extent of the unrelated investors' interests in that joint venture or associate.

The effective date of amendments to IFRS 10 and IAS 28 has not yet been determined. However, earlier application is permitted. The amendments should be applied prospectively.

The directors of the C&A are in the process of assessing their impact on the consolidated financial statements of these requirements.

There are no other standards that are not yet effective and that would be expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

3. SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments, which are stated at fair value. The principal accounting policies are set out below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal (or most advantageous) market at the measurement date under current market conditions (i.e. an exit price) regardless of whether that price is directly observable or estimated using another valuation technique. Details of fair value measurement are explained in the accounting policies set out below.

The principal accounting policies are set out below.

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the C&A and its subsidiaries for the Track Record Period.

Subsidiaries are entities controlled by the Group. The C&A Group controls an entity when the C&A Group is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. When assessing whether the C&A Group has power over the entity, only substantive rights relating to the entity (held by the C&A Group and others) are considered.

The C&A Group includes the income and expenses of a subsidiary in the consolidated financial statements from the date it gains control until the date when the C&A Group ceases to control the subsidiary.

Intra-group transactions, balances and unrealised gains and losses on transactions between group companies are eliminated in preparing the consolidated financial statements. Where unrealised losses on intra-group asset sales are reversed on consolidation, the underlying asset is also tested for impairment from the C&A Group's perspective. Amounts reported in the financial statements of subsidiaries have been adjusted where necessary to ensure consistency with the accounting policies adopted by the C&A Group.

Non-controlling interests represent the equity on a subsidiary not attributable directly or indirectly to the C&A, and in respect of which the C&A Group has not agreed any additional terms with the holders of those interests which would result in the C&A Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability. For each business combination, the C&A Group can elect to measure any non-controlling interests either at fair value or at their proportionate share of the subsidiary's net identifiable assets.

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from the equity attributable to the owners of the C&A. Non-controlling interests in the results of the Group are presented on the face of the consolidated statement of profit or loss and other comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the owners of the C&A.

Changes in the C&A Group's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognised.

When the C&A Group loses control of a subsidiary, the profit or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and any non-controlling interests. The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition for subsequent accounting under IAS 39 "Financial Instruments: Recognition and Measurement" or, when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

In the C&A's statement of financial position, subsidiaries are carried at cost less any impairment loss unless the subsidiary is held for sale or included in a disposal group. Cost is adjusted to reflect changes in consideration arising from contingent consideration amendments. Cost also includes direct attributable costs of investment.

The results of subsidiaries are accounted for by the C&A on the basis of dividends received and receivable at the reporting date. All dividends whether received out of the investee's pre or post-acquisition profits are recognised in the C&A's profit or loss.

Business combination

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the C&A Group, liabilities incurred by the C&A Group to former owners of the acquiree and the equity interests issued by the C&A Group in exchange for control of the acquiree. Acquisition-related costs incurred to effect a business combination are recognised in profit or loss as incurred.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date, except that:

– deferred tax assets or liabilities arising from the assets acquired and liabilities assumed in the business combination are recognised and measured in accordance with IAS 12 *Income Taxes*;

– assets or liabilities related to the acquiree's employee benefit arrangements are recognised and measured in accordance with IAS 19 *Employee Benefits*;

– liabilities or equity instruments related to share-based payment transactions of the acquiree or the replacement of the acquiree's share-based payment transactions with the share-based payment transactions of the Group are measured in accordance with IFRS 2 *Share-based Payment* at the acquisition date (see the accounting policy below); and

– assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* are measured in accordance with that standard.

Goodwill is measured as the excess of the aggregate of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the C&A Group's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after re-assessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the aggregate of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognised immediately in profit or loss as a gain on bargain purchase.

Non-controlling interests, unless as required by another standards, are measured at acquisition-date fair value except for non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation are measured either at fair value or at the present ownership instruments' proportionate share in the recognised amounts of the acquiree's identifiable net assets on a transaction-by-transaction basis.

Where the consideration transferred by the C&A Group in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with the corresponding adjustments being made against goodwill or gain on bargain purchase. Measurement period adjustments are adjustments that arise from additional information obtained during the measurement period about facts and circumstances that existed as of the acquisition date. Measurement period does not exceed one year from the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounting for within equity. Contingent consideration that is classified as an asset or a liability is remeasured at subsequent reporting dates at fair value with corresponding gain or loss being recognised in profit or loss.

When a business combination is achieved in stages, the C&A Group's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date (i.e. the date when the C&A Group obtains control), and the resulting gain or loss, if any, is recognised in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in other comprehensive income are reclassified to profit or loss where such treatment would be appropriate if that interest were disposed of.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the C&A Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (see above), or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognised as of that date.

Interests in other entities

(i) Associates

Associates are all entities over which the C&A Group has significant influence but not control or joint control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting, after initially being recognised at cost. The C&A Group's investments in associates include goodwill identified on acquisition.

The C&A Group's share of its associates' post-acquisition profits or losses is recognised in profit or loss, and its share of post-acquisition other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. Dividends receivable from associates are recognised as a reduction in the carrying amount of the investment.

When the C&A Group's share of losses in an associate equals or exceeds its interest in the associate (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate), the C&A Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate.

(ii) Joint arrangements

A joint arrangement is a contractual arrangement whereby two or more parties undertake economic activities under joint control. Joint control exists only when the strategic, financial and operational policy decisions relating to the activities of the joint arrangement require the unanimous consent of the parties sharing control.

A joint arrangement is either a joint operation or a joint venture. The structure of each joint arrangement is analysed to determine whether the joint arrangement is a joint operation or a joint venture. The classification of a joint arrangement is dependent on the rights and obligations of the parties to the arrangement.

Joint operations

The C&A Group recognises its proportional right to the assets, liabilities, revenues and expenses of joint operations and its share of any jointly held or incurred assets, liabilities, revenues and expenses. These have been incorporated in the financial statements under the appropriate headings.

Joint ventures

A joint venture is structured through a separate vehicle and the parties have rights to the net assets of the arrangement. Joint ventures are accounted for using the equity method where the assets and liabilities will be aggregated into one line item on the face of the consolidated statements of financial position, after adjusting for the share of profit or loss after tax, which is shown as a separate line item on the face of the consolidated statements of profit or loss and other comprehensive income, after adjusting for amounts recognised directly in equity.

When the C&A Group's share of losses in a joint venture equals or exceeds its interest in the joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the joint venture), the C&A Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the joint venture.

Unrealised gains on transactions between the C&A Group and its joint ventures are eliminated to the extent of the C&A Group's interest in the joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary, to ensure consistency with the policies adopted by the C&A Group.

Parent entity financial information

(a) Investments in subsidiaries, associates and joint arrangements

Investments in subsidiaries, associates and joint arrangements are accounted for at cost less any impairment in the financial statements of the C&A. Dividends received from associates are recognised in the parent entity's profit or loss, rather than being deducted from the carrying amount of these investments.

(b) Tax consolidation legislation

At 31 December 2015, the C&A was the head entity of a tax consolidated group, which included its wholly owned Australian entities.

At 31 December 2016, C&A and its wholly owned Australian entities were part of the Rio Tinto Limited tax consolidated Group.

On 1 September 2017, C&A and its wholly owned Australian entities became a member of the Yancoal Australia Limited tax consolidated group, of which Yancoal Australia Limited is the head entity.

The head entity, Yancoal Australia Limited, and the controlled entities in the tax consolidated group account for their own current and deferred tax amounts. These tax amounts are measured as if each entity in the tax consolidated group continues to be a stand alone taxpayer in its own right.

The C&A has entered into a tax sharing and funding agreement with the head entity of the tax consolidated group, Yancoal Australia Limited, in relation to their participation in the tax consolidation regime. Under the terms of this agreement, the subsidiary entities in the tax consolidated group have agreed to pay a tax equivalent payment to or from the head entity, based on the current tax liability or current tax asset of the entity. The reimbursements are payable at the same time as the associated income tax liability falls due and have therefore been recognised as a "current intercompany payable/receivable in respect of tax" by C&A.

Segment information

Management has determined the operating segments based on the strategic direction and organisational structure of the C&A Group together with reports reviewed by the Chief Operating Decision Makers ("CODM"), defined as the Executive Committee, that are used to make strategic decisions including resource allocation and assessment of segment performance.

Non-operating items of the C&A Group are presented under the segment "Corporate" which includes administrative expenses, foreign exchange gains and losses on interest-bearing liabilities, and the elimination of intersegment transactions and other consolidation adjustments.

Revenue

Revenue is measured at the fair value of the consideration received or receivable. for the sales of coal and services in the ordinary course of the C&A Group's activities, stated net of discounts, returns and value added taxes. The C&A Group recognises revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the C&A Group and specific criteria have been met for each of the Group's activities as described below. The C&A Group bases its estimates of return on historical results, taking into consideration the type of customers, the type of transactions and the specifics of each arrangement.

Revenue is recognised in the profit or loss as follows:

(i) Sale of coal

Revenue from the sale of coal is recognised when the significant risks and rewards of ownership of the goods have passed to the buyer and can be measured reliably. Risks and rewards are considered passed to the buyer at a point in time which is the time of delivery, usually on a Free On Board ("FOB") basis. On occasion the sale of coal is recognised as the ship pulls into harbour on a Free Alongside Ship ("FAS") basis or from the stockpile on an ex-works basis.

In Track Record Period, the C&A Group recognises the revenue from sales of coal when the risks and rewards of coal are transferred to the purchasers, which is when the production of coal has been completed and the coal has been delivered to the purchasers and recoverability of related receivables is reasonably assured.

In adopting IFRS 15, revenues are recognised when or as the control of the coal is transferred to the customer. Depending on the terms of the contract and the laws that apply to the contract, control of the asset may be transferred over time or at a point in time. Control of the asset is transferred over time if the C&A Group's performance does not create an asset with an alternative use to the C&A Group and the C&A Group has an enforceable right to payment for performance completed to date.

If control of the asset transfers over time, revenue is recognised over the period of the contract by reference to the progress towards complete satisfaction of that performance obligation. Otherwise, revenue is recognised at a point in time when the customer obtains control of the asset.

The progress towards complete satisfaction of the performance obligation is measured based on the C&A Group's efforts or inputs to the satisfaction of the performance obligation, by reference to the contract costs incurred up to the end of reporting period as a percentage of total estimated costs for each contract.

For coal production and sales contracts for which the control of the coal is transferred at a point in time, revenue is recognised when the customer obtains the coal and the C&A Group has present right to payment and the collection of the consideration is probable.

The revenue is measured at the transaction price received or receivable under the contract.

For contract where the period between the payment by the customer and the transfer of the promised coal exceeds one year, the promised amount of consideration is adjusted for the effects of a significant financing component.

(ii) Services

Revenue from the rendering of a service is recognised upon the delivery of the service to the customer.

(iii) Other

Other primarily consists of dividends, rents, sub-lease rental and management fees. Dividends are recognised as revenue when the right to receive payment is established. Rental income arising on land surrounding a mine site is accounted for on a straight-line basis over the lease term. Contingent rental income is recognised as income in the periods in which it is earned.

Other income

Gain on acquisition is recognised in line with the accounting for business combinations.

Taxation

The income tax expense or benefit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate enacted or substantially enacted at the end of the reporting period for each jurisdiction, adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses. The carrying value of the deferred tax asset is reviewed at each reporting period and reduced to the extent that it is no longer probable that future taxable profit will be available to allow all or part of the asset to be recovered.

Deferred tax liabilities and assets are recognised for taxable temporary differences between the carrying amount and tax bases of investments in controlled entities, except where the parent entity is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the C&A Group has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Current and deferred tax is recognised in the profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

Property, plant and equipment

Items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses. The cost includes expenditure directly attributable to the acquisition of the items and the estimated restoration costs associated with the asset.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the C&A Group and the cost of the item can be measured reliably. The carrying amount of any component accounted for as a separate asset is derecognised when replaced. All other repairs and maintenance are charged to profit or loss during the reporting period in which they are incurred.

Mine development assets include all mining related development expenditure that is not included under land, buildings and plant and equipment.

The open pit operations capitalise mine development costs including both direct and indirect costs incurred to remove overburden and other waste materials to enable access to the coal seams during the development of a mine before commercial production commences, and during future development of new open pit mining areas. Amortisation of those capitalised costs over the life of the operation commences at the time that commercial production begins for the mine for the new open pit mining area.

Underground mine development costs include both direct and indirect mining costs relating to underground longwall panel development and mains development (primary access/egress roads for the mine).

Mains development costs are capitalised net of the coal sales revenue earned from coal extracted as part of the mains development process. These capitalised costs are amortised over the life of the mine if the roads service the entire mine or over the life of the panels accessible from those mains if shorter than the mine life.

A regular review is undertaken of each area of interest to determine the appropriateness of continuing to carry forward mine development costs in relation to that area of interest. Accumulated costs in relation to an abandoned area are written off in full in the period in which the decision to abandon the area is made.

Open cut

During the commercial production stage of open pit operations, production stripping costs comprises the accumulation of expenses incurred to enable access to the coal seam, and includes direct removal costs (inclusive of an allocation of overhead expenditure) and machinery and plant running costs.

Production stripping costs are capitalised as part of an asset, if it can be demonstrated that it is probable that future economic benefits will be realised, the costs can be reliably measured and the entity can identify the component of the ore body for which access has been improved. The asset is called "stripping activity asset" included in mine development.

The stripping activity asset is amortised on a systematic basis, over the expected useful life of the identified component of the ore body that becomes more accessible as a result of the stripping activity. The units of production method shall be applied.

Production stripping costs that do not satisfy the asset recognition criteria are expensed.

Depreciation and amortisation

The depreciable amount of all fixed assets, excluding freehold land, is depreciated on a straight-line or units of production basis over the asset's useful life to the Group based on life of mine plans and Joint Ore Reserves Committee ("JORC") estimated reserves, commencing from the time the asset is held ready for use. Leased assets are depreciated over the asset's useful life or over the shorter of the asset's useful life and the lease term if there is no reasonable certainty that the Group will obtain ownership at the end of the lease term. Leasehold improvements are depreciated over the period of the lease or estimated useful life, whichever is the shorter, using the straight-line method.

For some assets, the useful life of the asset is linked to the level of production. In such cases, depreciation is charged on a units of production basis based on the recoverable reserves or the remaining useful hours. Alternatively, the straight-line method may be used where this provides a suitable alternative because production is not expected to fluctuate significantly from one year to another.

The estimated useful lives, residual values and depreciation method are reviewed at the end of each annual reporting period and any change in estimate is taken into account in the determination of remaining depreciation charges.

The estimated useful lives are as follows:

– Buildings 10 – 25 years

– Mine development 10 – 45 years

– Plant and equipment 2.5 – 40 years

– Leased plant and equipment 2 – 20 years

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Any gain or loss arising on the disposal of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

Mining tenements

Mining tenements have a finite useful life and are carried at cost less any accumulated amortisation and impairment losses. Mining tenements are amortised from the date when commercial production commences, or the date of acquisition. Amortisation is calculated over the life of the mine on a 'units of production' method based on the JORC estimated reserves.

Changes in the annual amortisation rate resulting from changes in the remaining estimated reserves, are applied on a prospective basis from the commencement of the next financial year. Every year the mining tenement's carrying amount is compared to its recoverable amount and assessed for impairment, or for possible reversals of prior year impairment (see the accounting policy in respect of impairment losses on tangible and intangible assets below).

Exploration and evaluation assets

Exploration and evaluation expenditure incurred is accumulated in respect of each separately identifiable area of interest which is at the individual exploration permit or license level. These costs are only carried forward where the right of tenure for the area of interest is current and to the extent that they are expected to be recouped through successful development and commercial exploitation, or alternatively, sale of the area, or where activities in the area have not yet reached a stage which permits reasonable assessment of the existence of economically recoverable reserves and active and significant operations in, or in relation to, the area of interest are continuing.

Exploration and evaluation assets acquired in a business combination are recognised at their fair value at the acquisition date. The carrying amount of exploration and evaluation assets are assessed for impairment when facts or circumstances suggest the carrying amount of the assets may exceed their recoverable amount. A regular review is undertaken for each area of interest to determine the appropriateness of continuing to carry forward costs in relation to each area of interest. Accumulated costs in relation to an abandoned area are written off in full in the period in which the decision to abandon the area is made.

Once the technical feasibility and commercial viability of the extraction of mineral resources in an area of interest are demonstrable, the exploration and evaluation assets attributable to that area of interest are first tested for impairment and then reclassified to mining tenements.

Impairment of assets

(i) Long term assets

Mining tenements are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired.

An impairment loss is recognised immediately in profit or loss for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. Mining tenements and other non-financial assets that have previously suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

For the purposes of assessing impairment, assets are grouped into Cash-Generating Units ("CGU"), being the lowest levels for which there are separately identifiable cash inflows which are largely independent of the cash inflows from other assets or groups of assets. For the purposes of goodwill impairment testing, CGUs to which goodwill has been allocated are aggregated so that the level at which impairment is tested reflects the lowest level at which goodwill is monitored for internal reporting purposes. The goodwill acquired in a business combination, for the purpose of impairment testing, is allocated to CGUs that are expected to benefit from the synergies of the combination.

The C&A Group assesses impairment by evaluation of conditions and events specific to the C&A that may be indicative of impairment triggers.

(ii) Other financial assets

The C&A Group recognises a loss allowance for expected credit loss ("ECL") on investments in debt instruments that are measured at amortised cost. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The C&A Group recognises lifetime ECL when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECL ("12m ECL"). The assessment of whether lifetime ECL should be recognised is based on significant increases in the likelihood or risk of a default occurring since initial recognition instead of on evidence of a financial asset being credit-impaired at the reporting date or an actual default occurring.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of a financial instrument. In contrast, 12m ECL represents the portion of lifetime ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

Intangibles

(i) Computer software

Computer software is carried at cost less accumulated amortisation and any accumulated impairment losses. Amortisation is calculated on a straight-line basis over the period of expected benefit, which ranges from 2.5 to 10 years.

(ii) Access, water rights and other mining licences

Access rights and other mining licences have a finite useful life and are carried at cost less any accumulated amortisation and accumulated impairment losses. Water rights have been recognised at cost and are assessed annually for impairment. The water rights have been determined to have an indefinite useful life. Amortisation of access rights and other mining licences is calculated as the shorter of the life of the mine or agreement using a units of production basis in tonnes, or on a straight-line basis. The estimated useful lives vary from 10 to 25 years.

(iii) Other

In acquiring Coal & Allied Industries Limited ("Coal & Allied") in 2017 under IFRS3 Business Combinations an asset was recognised for management fees charged to Port Waratah Coal Services Pty Ltd. The intangible asset will be released to the profit and loss on a straight line basis.

Construction in progress

Construction in progress represents production site development projects under construction for production or for its own use purposes. Construction in progress is carried at cost less any impairment loss. Costs included costs of constructing the production plant and acquisition of mining rights, mining permits and

licenses that form an integral part of the overall development projects. Construction in progress is classified to the appropriate category of property, plant and equipment or intangible assets when completed and ready for intended use. Depreciation or amortisation commences when the assets are ready for their intended use.

Cash and cash equivalents

For the purpose of the consolidated statement of cash flows, cash and cash equivalents includes:

(i) cash on hand and at call deposits with banks or financial institutions, net of bank overdrafts; and

(ii) other short term, highly liquid investments, that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Inventories

Coal stocks are stated at the lower of cost and net realisable value. Costs are assigned on a weighted average basis and include direct materials, direct labour and an appropriate proportion of variable and fixed overheads on the basis of normal mining capacity. Net realisable value is the estimated selling price in ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Inventories of auxiliary materials, spare parts, small tools, and fuel expected to be used in production are stated at weighted average cost after deducting rebated and discounts less allowance, if necessary, for obsolescence.

Assets classified as held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale or loss of control transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal group) is available for immediate sale or disposal in its present condition subject only to terms that are usual and customary for sales or disposals of such assets (or disposal group) and the transaction is highly probable. Management must be committed to the transaction, which should be expected to qualify for recognition as a completed transaction within one year from the date of classification.

When the C&A Group is committed to a sale plan or other transaction involving loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale when the criteria described above are met, regardless of whether the Group will retain a non-controlling interest in its former subsidiary after the sale.

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell.

Provisions

Provisions are:

– recognised when: the C&A Group has a legal or constructive obligation as a result of a past event; it is probable that cash will be required to settle the obligation; and the amount has been reliably estimated.

– measured at the present value of the management's best estimate at reporting date of the cash outflow required to settle the obligation.

Provisions are determined by discounting the expected future cash flows at a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the liability where the time value is material. Any increase in the provision due to the passage of the time is recognised as an interest expense.

Employee benefits

The provision for employee benefits represents long service leave and annual leave entitlements and other incentives accrued by employees.

Close down and restoration costs

Close down and restoration costs include the dismantling and demolition of infrastructure, the removal of residual materials and remediation of disturbed areas. Estimated close down and restoration costs are provided for in the accounting period when the obligation arising from the related disturbance occurs, whether this occurs during the site development or during the production phase, based on the net present value of estimated future costs.

Provisions for close down and restoration costs do not include any additional obligations which are expected to arise from future disturbance.

Close down and restoration costs are a normal consequence of operations and majority of close down and restoration expenditures are incurred at the end of the life of the operation. Although the ultimate cost to be incurred is uncertain, the Company estimates its costs based on specific legislative requirements.

The initial closure provision together with other movements in the provisions for close down and restoration costs, including those resulting from new disturbance, updated cost estimates, changes to the lives of operations and revisions to discount rates are capitalised within property, plant and equipment. These costs are then depreciated over the lives of the assets to which they relate.

Where rehabilitation is conducted systematically over the life of the operation, rather than at the time of closure, provision is made for the outstanding continuous rehabilitation work at each balance date and the cost is charged to the profit or loss.

As a result of the change in ownership of the Company on 1 September 2017 the Group changed its accounting policy application prospectively from recognising changes in rehabilitation estimates through the statement of profit and loss to recognising a capital asset which is then depreciated over the life of mine. This change in accounting policy is to more closely align the recognition of rehabilitation provisions with the accounting standard AASB 137 Provisions, Contingent Liabilities and Contingent Assets, and associated accounting standard interpretations.

Remediation procedures may commence soon after the time of the disturbance, remediation processes and estimated remediation costs become known, but may continue for a number of years depending on the nature of the disturbance and the remediation techniques used.

Environmental clean-up costs

Provision is made for the estimated present value of the costs of environmental clean-up obligations outstanding at the balance date. These costs are charged to the profit or loss. Movements in the environmental clean-up provisions are presented as an operating cost, except for the unwind of the discount which is shown as a financing cost.

Take or pay

In acquiring part of a business or operation, an assessment is made on the fair value of the assets and liabilities under IFRS 3 Business Combinations. Take or pay is the assessment of forecast excess capacity for port and rail contracts. A provision was recognised for the discounted estimated excess capacity. The provision has a finite life and will be released to profit or loss over the period in which excess capacity is realised.

Sales contract

In acquiring part of a business or operation, an assessment is made on the fair value of the assets and liabilities under IFRS 3 Business Combinations. The sales contract provision is the assessment of a coal supply and transportation agreement to supply coal to BLCP Power Limited in Thailand at below market prices. A provision was recognised for the discounted estimated variance between contract and market prices. The provision has a finite life and will be released to profit or loss over the contract term.

Other provisions

The provision includes marketing services fee payable to Noble Group Limited deemed above market norms, contingent royalties payable to Rio Tinto Plc assessed as part of the Coal & Allied acquisition in 2017 which will be amortised over the contract term, and make good provisions to cover the cost to 'make good' any hired equipment, in case any major overhaul costs are incurred at the end of the lease period.

Contributed equity

An equity instrument is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities. Costs directly attributable to the issue of new shares, options or other equity instrument are shown as a deduction from the equity proceeds, net of any income tax benefit. Costs directly attributable to the issue of new shares or options associated with the acquisition of a business are included as part of the purchase consideration.

Foreign currencies

In the individual financial statements of each individual group entity, transactions in currencies other than the functional currency of that entity (foreign currencies) are recorded in the respective functional currency (i.e., the currency of the primary environment in which the entity operates) at the rates of exchanges prevailing on the dates of the transactions. At the end of the reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing on the reporting date.

Non-monetary items carried at fair value that are denominated in foreign currencies are translated at the rates prevailing on the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences arising on the settlement of monetary items, and on the retranslation of monetary items, are recognised in profit or loss in the period in which they arise.

Exchange differences on monetary items receivable from or payable to foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognised initially in other comprehensive income and reclassified from equity to profit or loss on repayment of the monetary items.

In the consolidated financial statements, the assets and liabilities of the C&A Group's foreign operations are translated into the presentation currency of the C&A at the rate of exchange prevailing at the reporting date, and their income and expenses are translated at the average exchange rates for the year, unless exchange rates fluctuate significantly during the period, in which case, the exchange rates prevailing at the dates of transactions are used. Exchange differences arising, if any, are recognised in other comprehensive income and accumulated in equity (attributed to non-controlling interests as appropriate). Such exchange differences are recognised in profit or loss in the period in which the foreign operation is disposed of.

Employee benefits

(i) Employee benefits expenses

Employee benefits are expensed as the related service by the employee is provided and includes both equity and cash based payment transactions. Employee benefits recognised in the profit or loss are net of recoveries.

(ii) Superannuation

Contributions made by the C&A Group to defined contribution superannuation funds are recognised as an expense in the period in which they are incurred.

(iii) Wages and salaries, annual leave and sick leave

Liabilities for employee benefits for wages, salaries, annual leave and accumulating sick leave that are expected to be wholly settled within 12 months of the reporting date represent present obligations resulting from employees' services provided to the reporting date and are calculated at undiscounted amounts based on wage and salary rates that C&A Group expects to pay as at the reporting date including related on costs, such as superannuation, workers compensation, insurance and payroll tax and are included in trade and other payables. Non-accumulating, non-monetary benefits such as housing and cars are expensed by the C&A Group as the benefits are used by the employee.

Employee benefits payable later than 12 months have been measured at the present value of the estimated future cash outflows to be made for those benefits. In determining the liability, consideration is given to employee salary and wage increases and the probability that the employee may satisfy any vesting requirements. Those cash flows are discounted using corporate bonds with terms to maturity that match the expected timing of cash flows attributable to employee benefits.

Additional Long Service Leave payments are made monthly to the Coal Mining Industry (Long Service Leave Funding) Corporation based on the eligible monthly payroll of employees involved in the mining of black coal. Reimbursement is sought from the fund when long service leave is paid to employees involved in the mining of black coal. An asset for the amount recoverable from the Coal Mining Industry (Long Service Leave Funding) Corporation is recognised in trade and other receivables.

These employee benefits are presented as current provisions as the C&A Group has no unconditional right to deferred settlement for at least 12 months after the end of the reporting period.

Financial instruments

Financial assets and financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss ("FVTPL")) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributed to the acquirer of financial assets or financial liabilities at FVTPL are recognised immediately in profit or loss.

Financial assets

All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

All recognised financial assets are subsequently measured in their entirety at either amortised cost or fair value, depending on the classification of the financial assets.

Classification of financial assets

Debt instruments that meet the following conditions are subsequently measured at amortised cost:

– the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

– the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

By default, all other financial assets are subsequently measured at FVTPL.

Amortised cost and effective interest method

The effective interest method is a method of calculating the amortised cost of a debt instrument and of allocating interest income over the Track Record Period.

For financial instruments other than purchased or originated credit-impaired financial assets, the effective interest rate is the rate that exactly discounts estimated future cash receipts (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) excluding expected credit losses ("ECL"), through the expected life of the debt instrument, or, where appropriate, a shorter period, to the gross carrying amount of the debt instrument on initial recognition.

The amortised cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. On the other hand, the gross carrying amount of a financial asset is the amortised cost of a financial asset before adjusting for any loss allowance.

Interest income is recognised using the effective interest method for debt instruments measured subsequently at amortised cost. For financial instruments other than purchased or originated credit-impaired financial assets, interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired. For

financial assets that have subsequently become credit-impaired, interest income is recognised by applying the effective interest rate to the amortised cost of the financial asset. If, in subsequent reporting periods, the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest rate to the gross carrying amount of the financial asset.

Interest income is recognised in profit or loss and is included in the "other income" line item.

Financial assets at FVTPL

Financial assets that do not meet the criteria for being measured at amortised cost or fair value through other comprehensive income ("FVTOCI") are measured at FVTPL. Specifically:

– Investments in equity instruments are classified as at FVTPL, unless the Group designates an equity investment that is neither held for trading nor a contingent consideration arising from a business combination as at FVTOCI on initial recognition.

– Debt instruments that do not meet the amortised cost criteria or the FVTOCI criteria are classified as at FVTPL. In addition, debt instruments that meet either the amortised cost criteria or the FVTOCI criteria may be designated as at FVTPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency that would arise from measuring assets or liabilities or recognising the gains and losses on them on different bases. The C&A Group has not designated any debt instruments as at FVTPL.

Financial assets at FVTPL are measured at fair value, with changes in fair value arising from remeasurement recognised in profit or loss. The net gain or loss recognised in profit or loss excludes any dividend or interest earned on the financial assets and is included in the 'investment income' line item.

Foreign exchange gains and losses

The carrying amount of financial assets that are denominated in a foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period. For financial assets measured at amortised cost that are not part of a designated hedging relationship, exchange differences are recognised in profit or loss in the 'other gains and losses' line item.

Significant increase in credit risk

In assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, C&A Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, C&A Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort. Forward-looking information considered includes the future prospects of the industries in which C&A Group's debtors operate, obtained from economic expert reports, financial analysts, governmental bodies, relevant think-tanks and other similar organisations, as well as consideration of various external sources of actual and forecast economic information that relate to C&A Group's core operations.

In particular, the following information is taken into account when assessing whether credit risk has increased significantly since initial recognition:

– an actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;

– significant deterioration in external market indicators of credit risk for a particular financial instrument, e.g. a significant increase in the credit spread, the credit default swap prices for the debtor, or the length of time or the extent to which the fair value of a financial asset has been less than its amortised cost;

– existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;

– an actual or expected significant deterioration in the operating results of the debtor;

– significant increases in credit risk on other financial instruments of the same debtor; and

– an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

Irrespective of the outcome of the above assessment, the C&A Group presumes that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the C&A Group has reasonable and supportable information that demonstrates otherwise.

Despite the a foregoing, the C&A Group assumes that the credit risk on a financial instrument has not increased significantly since initial recognition if the financial instrument is determined to have low credit risk at the reporting date. A financial instrument is determined to have low credit risk if i) the financial instrument has a low risk of default, ii) the borrower has a strong capacity to meet its contractual cash flow obligations in the near term and iii) adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfill its contractual cash flow obligations. The C&A Group considers a financial asset to have low credit risk when it has an internal or external credit rating of 'investment grade' as per globally understood definition.

The C&A Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

Definition of default

The C&A Group considers the following as constituting an event of default for internal credit risk management purposes as historical experience indicates that receivables that meet either of the following criteria are generally not recoverable.

– when there is a breach of financial covenants by the counterparty; or

– information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the C&A Group, in full (without taking into account any collaterals held by the Group).

Irrespective of the above analysis, the C&A Group considers that default has occurred when a financial asset is more than 90 days past due unless the C&A Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

Credit-impaired financial assets

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

(a) significant financial difficulty of the issuer or the borrower;

(b) a breach of contract, such as a default or past due event;

(c) the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider; or

(d) it is becoming probable that the borrower will enter into bankruptcy or other financial reorganisation.

Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of probability of default and loss given default is based on historical data adjusted by forward-looking information as described above. As for the exposure at default, for financial assets, this is represented by the assets' gross carrying amount at the reporting date.

For financial assets, the ECL is estimated as the difference between all contractual cash flows that are due to the C&A Group in accordance with the contract and all the cash flows that the C&A Group expects to receive, discounted at the original effective interest rate.

Where lifetime ECL is measured on a collective basis to cater for cases where evidence of significant increases in credit risk at the individual instrument level may not yet be available, the financial instruments are grouped on the following basis:

– Nature of financial instruments;

– Past-due status;

– Nature, size and industry of debtors; and

– External credit ratings where available.

The grouping is regularly reviewed by management to ensure the constituents of each group continue to share similar credit risk characteristics.

If the C&A Group has measured the loss allowance for a financial instrument at an amount equal to lifetime ECL in the previous reporting period, but determines at the current reporting date that the conditions for lifetime ECL are no longer met, the C&A Group measures the loss allowance at an amount equal to 12m ECL at the current reporting date.

The C&A Group recognises an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

Derecognition of financial assets

The C&A Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party.

On derecognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss.

Financial liabilities and equity instruments

Debt and equity instruments issued by the C&A Group are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

An equity instrument is any contract that evidences a residual interest in the assets of the C&A Group after deducting all of its liabilities.

Financial liabilities

The C&A Group's financial liabilities including bills and accounts payables, other payables, amounts due to the parent entity and its subsidiary companies, long term payables and borrowings which are initially recognised at fair value and subsequently measured at amortised cost, using the effective interest method and financial liabilities at fair value through profit or loss.

Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liabilities are either held for trading or those designated as at FVTPL on initial recognition.

A financial liability is classified as held for trading if:

– it has been incurred principally for the purpose of repurchasing in the near term; or

– on initial recognition it is a part of a portfolio of identified financial instruments that the C&A Group manages together and has a recent actual pattern of short-term profit-taking; or

– it is a derivative that is not designated and effective as a hedging instrument.

Financial liabilities at FVTPL are measured at fair value, with any gains or losses arising on remeasurement recognised directly in profit or loss in the period in which they arise. The net gain or loss is recognised in profit or loss includes any interest paid on the financial liabilities. Fair value is determined in a manner described in note 34.

Effective interest method

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the Track Record Period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees paid or points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition. Interest expense is recognised on an effective interest basis.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the C&A are recognised at the proceeds received, net of direct issue costs.

Offsetting financial instruments

Financial assets and liabilities of the C&A Group are offset and the net amount presented in the consolidated statement of financial position when, and only when, there is a legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously.

Accounting for derivative financial instruments and hedging activities

Derivatives are initially recognised at fair value at the date when a derivative contract is entered into and are subsequently remeasured at their fair value at the end of the reporting period. The resulting gain or loss is recognised in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship. The C&A Group designates certain derivatives as either: (i) hedges of the fair value of recognised assets or liabilities (fair value hedge); and (ii) hedges of highly probable forecast transactions (cash flow hedge).

The fair values of various derivative instruments used for hedging purposes. The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedged item is more than 12 months and as a current asset or liability when the remaining maturity of the hedged item is less than 12 months.

At the inception of the hedging relationship the C&A Group documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the C&A Group documents whether the hedging instrument that is used in a hedging relationship is highly effective in offsetting changes in fair values or cash flows of the hedged item.

(i) Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges are recognised in other comprehensive income and accumulated in cash flow hedge reserve. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss.

Amounts previously recognised in other comprehensive income and accumulated in cash flow hedge reserve in equity are reclassified to profit or loss in the periods when the hedged item is recognised in profit or loss.

Hedge accounting is discontinued when the C&A Group revokes the hedging relationship, the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income and accumulated in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in profit or loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in profit or loss.

(ii) Derivatives that do not qualify for hedge accounting and those not designated as hedging instruments

Changes in the fair value of any derivative instruments that do not qualify for hedge accounting and those not designated as hedges are recognised immediately in the profit or loss.

Derecognition

A financial asset is derecognised only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in investment revaluation reserve is recognised in profit or loss.

A financial liability is derecognised when, and only when, the C&A Group's obligations are discharged, cancelled or expire. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

The preparation of financial information requires the use of accounting estimates which, by definition, will seldom equal the actual results. Management also needs to exercise judgement in applying the C&A Group's accounting policies.

This note provides an overview of the areas that involved a higher degree of judgement or complexity, and of items which are more likely to be materially adjusted due to estimates and assumptions turning out to be wrong. Detailed information about each of these estimates and judgements is outlined below.

Mine closure and rehabilitation provisions estimates

The calculation of rehabilitation and closure provisions (and corresponding capitalised closure cost assets where necessary) rely on estimates of costs required to rehabilitate and restore disturbed areas of land to their original condition. The costs are estimated on the basis of a closure plan. Significant judgement is required in determining the provision as there are many transactions and other factors that will affect the ultimate liability payable. Factors that will affect this liability include future disturbances caused by further development, changes in technology and restoration techniques, changes in the timing of rehabilitation expenditure due, for example, to changes in ore reserves or production rates, changes in regulations, price increases and changes in discount rates. These estimates are regularly reviewed and adjusted in order to ensure the most up to date data is used to calculate these balances. When these factors change in the future, such differences will impact the provision in the period in which they change or become known.

Determination of coal reserves and resources

The C&A Group estimates its coal reserves and coal resources based on information compiled by Competent Persons as defined in accordance with the Australasian Code for Reporting of Mineral Resources and Ore Reserves of December 2012 (the "JORC code"). Reserves determined in this way are used in the calculation of depreciation, amortisation and impairment charges, and the assessment of mine lives and for forecasting the timing of the payment of closure and rehabilitation costs.

Impairment

Assets are reviewed for impairment whenever events or changes in circumstances indicate that their carrying amount exceeds its recoverable amount. The assessment of the carrying amount often requires estimates of future cash flows and foreign exchange rates.

5. FINANCIAL RISK MANAGEMENT

The C&A Group carries out risk management under policies approved by the directors of C&A. The C&A Group provides principles for overall risk management, as well as written policies covering specific areas, such as mitigating interest rate and other risks, and the use of derivative and non-derivative financial instruments.

The C&A Group's business is coal mining and not trading. Accordingly, the C&A Group only contracts to sell coal that it plans to produce, however purchasing coal for resale may be required in circumstances where actual production falls short of contractual sales volumes. The C&A Group operates entirely in Australia and is exposed primarily to Australian dollar denominated costs. Sales are primarily denominated in US dollars. Cash deposits are denominated in both Australian and US dollars.

(a) Market risk

(i) Foreign exchange risk

The C&A Group markets its products internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to export coal sales being denominated in US dollars and recognised financial assets and liabilities that are denominated in a currency that is not the respective functional currency of entities within the C&A Group. The C&A Group has a number of US dollar denominated cash, trade receivables and payables balances. The exposures to foreign currency risk at the reporting dates were as follows:

Exposure

	Predecessor		Successor
	31 December	31 December	31 December
	2015	2016	2017
	US$M	*US$M*	*US$M*
Cash	6	5	15
Trade receivables	60	126	50
Trade payables	40	101	106

Sensitivity

The sensitivity of profit or loss to changes in exchange rates arises mainly from US dollar denominated financial instruments. Profit is more sensitive to movements in the Australian dollar/US dollar exchange rates in 2016 than 2015 because of the increased net amount of USD denominated trade receivables and trade payables.

The tables below summarise the impact on the C&A Group's post-tax profit of a 10% movement of the Australian dollar against the US dollar with all other variables held constant. Other components of equity would have been unaffected.

	Impact on post-tax profit Sensitivity 10% increase FX*		
	Predecessor		Successor
	31 December	31 December	31 December
Index	**2015**	**2016**	**2017**
	A$M	*A$M*	*A$M*
Cash	(1)	–	(2)
Trade receivables	(5)	(11)	(4)
Trade payables	4	8	9
Total	(2)	(3)	3

	Impact on post-tax profit Sensitivity 10% decrease in FX*		
	Predecessor		Successor
	31 December	31 December	31 December
	2015	**2016**	**2017**
	A$M	*A$M*	*A$M*
Cash	1	–	2
Trade receivables	6	14	5
Trade payables	(4)	(11)	(11)
Total	3	3	(4)

* All other variables held constant. Figures include trade receivables and trade payables classified as held for sale.

(ii) Interest rate risk

The C&A Group's interest rate management policy is generally to borrow and invest at floating interest rates. This approach is based on a historical correlation between interest rates and commodity price. Cash deposits and borrowings issued at variable rates expose the C&A Group to risk of changes in cash flows due to changes in interest rates.

During the year ended 31 December 2015, 2016 and 2017, deposits were held at variable rates and were held in both Australian dollars and US dollars.

Exposure

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Cash	213	312	33
Borrowings	–	–	–

Sensitivity

The table below summarises the impact on the C&A Group's post-tax profit of a 50 basis points (bps) increase in interest rates with all other variables held constant. A 50 bps decrease would have the same impact in the opposite direction. Other components of equity would have been unaffected.

	Impact on post-tax profit 50 bps increase in interest rates		
	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Cash	1	1	–
Borrowings	–	–	–

(iii) Price risk

The C&A Group's policy is to sell coal at prevailing market prices by creating a pricing portfolio of various pricing mechanisms available in the market. Typically for thermal coal this means three main pricing mechanisms-annual bi-lateral price negotiations with major customers for a 12 month fixed price, short term spot pricing and index linked pricing based on global COAL NEWC index which are settled monthly or quarterly depending on contract terms. Semi soft coking coal is priced on a quarterly basis, set through negotiations with major customers. A small proportion of semi soft sales are sold at spot price.

The marking to market of provisionally priced sales contracts is recorded as an adjustment to sales revenue.

Exposure

	Predecessor		Successor
	31 December	31 December	31 December
	2015	2016	2017
	A$M	*A$M*	*A$M*
Provisionally priced trade receivables	52	49	63

Sensitivity

The table below summarises the impact on the C&A Group's post-tax profit for a 10% increase in coal price because of provisionally priced trade receivables with all other variables held constant. A 10% decrease in coal price would have the same impact in the opposite direction. Other components of equity would have been unaffected.

	Impact on post-tax profit 10% increase in coal price		
	Predecessor		Successor
	31 December	31 December	31 December
Index	2015	2016	2017
	A$M	*A$M*	*A$M*
Impact to sales revenue	4	3	4

(b) Credit risk

(i) Risk management

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The C&A Group is exposed to credit risk from its operating activities, including bank deposits, foreign exchange transactions and trade receivables.

Japan represents the highest percentage of the C&A Group's sales and accordingly Japanese customers represent the highest concentration of credit risk (refer to segment information in Note 6 for further details on sales by country of destination). However, management believes the C&A Group has minimal exposure to credit risk related to trade receivables or by virtue of the possible non-performance of the counterparties to the C&A Group's other financial instruments. There is a limited number of counterparties who purchase coal from the C&A Group, all of which are well known, reputable counterparties with sound financial positions. In the unlikely event of a default of counterparty, the C&A Group is likely to be able to sell its coal to another counterparty at short notice, reducing the scope for potential loss.

As at 31 December 2015, 2016 and 2017, the C&A Group has concentration of credit risk as 11.7%, 21.1% and 12.9% of the C&A Group's receivables were due from the C&A Group's largest customer respectively while 49.6%, 51.3% and 45.2% of the C&A Group's receivables were due from the C&A Group's five largest customers respectively.

The C&A Group has a single external customer which represents more than ten per cent of its total revenue. Refer to note 6(c).

Cash transactions are limited to high credit quality financial institutions. The C&A Group has policies that limit the amount of credit exposure to any one financial institution.

The maximum credit risk exposure to the C&A Group's financial assets at each reporting date is as follows:

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Cash and cash equivalents			
Counterparties with external credit rating			
Deposits with Rio Tinto Finance (Baa1 credit rating – Moody's)	159	232	–
Deposits with banking institutions with a minimum Baa1 credit rating – Moody's	54	80	33
Total cash and cash equivalents *(Note 11)*	213	312	33
Trade and other receivables *(Note 12)*			
Trade and other receivables	130	276	554

Impaired trade receivables

Individual receivables which are known to be uncollectable are written off by reducing the carrying amount directly. The other receivables are assessed collectively to determine whether there is objective evidence that an impairment has been incurred but not yet identified. For these receivables the estimated impairment losses are recognised in a separate provision for impairment.

The C&A Group considers that there is evidence of impairment if any of the following indicators are present.

- significant financial difficulties of the debtor
- probability that the debtor will enter into bankruptcy

At 31 December 2015, 2016 and 2017 there were no impaired trade receivables.

Past due but not impaired

At 31 December 2015, 2016 and 2017 there were no trade receivables that were past due.

The other classes within trade and other receivables do not contain impaired assets and are not past due.

Credit risk in relation to financial guarantees

The C&A Group only issues financial guarantees in exceptional circumstances or where required in order to secure access to mining leases. Guarantees are usually required by government bodies in order to guarantee the restoration of disturbed sites under mining leases granted to the C&A Group. Refer to note 31 on contingent liabilities for further disclosure of the amount under risk and the counterparty involved.

(c) Liquidity risk

The C&A Group's liquidity and risk management strategies are principally driven by Yancoal. Liquidity needs and surpluses of the C&A Group are primarily managed through equity funding from and loans to Yancoal. Credit facilities have also previously been used to ensure sufficient funds are available to meet contractual obligations arising in the ordinary course of business.

(i) Maturities of financial liabilities

The amounts disclosed in the table below analyse the C&A Group's financial liabilities into relevant maturity groupings based on their contractual maturities. The amounts disclosed are the contractual undiscounted cash flows.

Contractual maturities of financial liabilities	Less than 6 months	6-12 months	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Total contractual cash flows	Carrying amount liabilities
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Predecessor							
31 December 2015							
Non-derivatives							
Trade and other payables	251	–	–	–	–	251	251
31 December 2016							
Non-derivatives							
Trade and other payables	346	–	–	–	–	346	346
Successor							
31 December 2017							
Non-derivatives							
Trade and other payables	384	–	–	–	–	384	384

(d) Capital risk management

The C&A Group's overriding objectives when managing capital include safeguarding the business as a going concern; maximising returns for Yancoal; and maintaining an optimal capital and tax structure in order to provide a high degree of financial flexibility at the lowest cost of capital. The capital structure of the C&A Group is regularly reviewed taking into account strategic priorities and the economic conditions within which the C&A Group operates.

The capital structure of the C&A Group consists of borrowings, cash and cash equivalents and equity attributable to equity holders of the parent, including issued capital, reserves and retained earnings.

The C&A Group is part of a larger organisational structure and as such the ultimate parent controls the C&A Group's capital management policy. The ultimate parent controls financing decisions, however, cash levels are managed within the C&A Group. The C&A Group does not have a target debt to equity ratio, but considers various financial metrics including liquidity levels, total capital, cash flow and EBITDA to ensure a strong balance sheet is maintained.

The C&A Group's gearing ratios at Track Record Period were as follows:

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Total borrowings	1	–	–
Less: Cash and cash equivalents	(213)	(312)	(33)
Net (cash)/debt	(212)	(312)	(33)
Total equity	1,867	1,312	1,579
Total capital	1,654	1,000	1,546
Gearing ratio (%)	–	–	–

6. SEGMENT INFORMATION

(a) Description of segments and principal activities

Operating segments are reported in a manner consistent with the internal reporting provided to the senior management team (being the chief operating decision maker), comprising the Managing Director of Coal and the Coal Executive Committee in assessing performance and determining strategy.

The C&A Group derives its revenue from coal mining and as such, performance is assessed for each of the operating coal mines individually. The following operating segments have been identified:

- Hunter Valley Operations
- Mount Thorley Warkworth
- Bengalla Mining
- Other

'Other' refers to corporate activities (including revenue from purchased coal), Mount Pleasant and any other items that are not appropriate to allocate to an individual operating segment.

Performance of the segments is assessed on a stand-alone, pre-tax basis as per below.

The senior management team do not regularly review assets and liabilities on a segment basis, rather at the consolidated level and therefore assets and liabilities by segment have not been disclosed.

(b) Segment results

	Hunter Valley Operations	Mount Thorley Warkworth	Bengalla Mining	Other	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
Predecessor					
Year ended 31 December 2015					
Segment revenue[1]	1,160	692	257	22	2,131
EBITDA[2]	242	164	84	(54)	436
Reconciliation of EBITDA to profit after tax					
Depreciation and amortisation expense					(184)
Net finance expense					(10)
Income tax benefit					42
Profit for the year					284

	Hunter Valley Operations	Mount Thorley Warkworth	Bengalla Mining	Other	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
Year ended 31 December 2016					
Segment revenue[1]	878	728	35	23	1,664
EBITDA[2]	71	215	570	(19)	837
Other material items included in EBITDA					
Debt forgiveness	(1,475)	–	–	–	(1,475)
Gain on sale of operations	1,567	–	261	32	1,860
Reconciliation of EBITDA to profit after tax					
Depreciation and amortisation expense					(125)
Net finance income					11
Income tax expense					(326)
Profit for the year					397

	Hunter Valley Operations	Mount Thorley Warkworth	Bengalla Mining	Other	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
1 January to 31 August 2017					
Segment revenue[1]	792	623	–	8	1,424
EBITDA[2]	326	270	–	(3)	593
Other material items included in EBITDA					
Debt forgiveness	–	–	–	–	–
Gain on sale of operations	–	–	–	–	–
Reconciliation of EBITDA to profit after tax					
Depreciation and amortisation expense					(78)
Net finance expense					(3)
Income tax benefit					169
Profit for the period					681

	Hunter Valley Operations	Mount Thorley Warkworth	Bengalla Mining	Other	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
Successor					
1 September to 31 December 2017					
Segment revenue[1]	383	321	–	28	732
EBITDA[2]	151	137	–	(2)	286
Other material items included in EBITDA					
Debt forgiveness	–	–	–	–	–
Gain on sale of operations	–	–	–	–	–
Reconciliation of EBITDA to profit after tax					
Depreciation and amortisation expense					(39)
Net finance expense					(1)
Income tax expense					(79)
Profit for the period					167

(1) Segment revenue refers to total sales revenue as per note 7 and are from external customers.

(2) EBITDA is earnings before net finance costs, depreciation, amortisation and income tax expense.

EBITDA is the key measure that management uses to assess performance of individual segments and make decisions on the allocation of resources.

EBITDA includes the C&A Group's share of profit (loss) from investments accounted for using the equity method, included within 'Other' and debt forgiven as part of the deed of forgiveness entered into by the C&A Group, Hunter Valley Resources Pty Ltd and Rio Tinto NSW Holdings Ltd.

(c) Other segment revenue disclosures

Segment revenue reconciles to total sales revenue from continuing operations as disclosed in Note 7.

The C&A Group is domiciled in Australia. Sales revenue by country of destination and product are outlined below:

	Predecessor			Successor
	31 December	31 December	1 January to 31 August	1 September to 31 December
	2015	2016	2017	2017
	A$M	*A$M*	*A$M*	*A$M*
Segment revenue				
Japan	937	544	554	282
Korea	214	216	212	66
Taiwan	214	233	130	70
Singapore	262	227	121	55
Thailand	224	163	130	85
Malaysia	36	53	–	–
China	37	28	18	72
Switzerland	76	38	–	–
Turkey	23	1	–	–
Other foreign countries	36	102	118	36
Australia	72	59	128	58
Total sales revenue *(note 7)*	2,131	1,664	1,411	724
Interest revenue	6	17	5	1
Other revenue	18	25	8	7
Total revenue	2,155	1,706	1,424	732
Total sales revenue by product				
Thermal	1,671	1,190	1,053	560
Semi-soft	460	474	358	164
	2,131	1,664	1,411	724

(d) Segment assets and liabilities

The senior management team do not regularly review assets on a segment basis and therefore assets and liabilities by segment are not disclosed here. All non-current assets are located in Australia.

7. REVENUE

	Predecessor			Successor
	31 December 2015	31 December 2016	1 January to 31 August 2017	1 September to 31 December 2017
	A$M	*A$M*	*A$M*	*A$M*
From continuing operations				
Sales revenue				
Sale of coal – produced	2,091	1,638	1,411	698
Sale of coal – purchased	23	23	–	26
Sea freight	17	3	–	–
Interest income	–	–	5	1
Management fee income-related parties	–	–	1	6
Coal handling services	–	–	–	–
Dividend income	–	–	1	–
Rental and sub-lease rental income	–	–	1	1
Other income	–	–	5	–
	2,131	1,664	1,424	732

8. OTHER INCOME

	Predecessor			Successor
	31 December 2015	31 December 2016	1 January to 31 August 2017	1 September to 31 December 2017
	A$M	*A$M*	*A$M*	*A$M*
Interest income	6	17	–	–
Management fee income-related parties	7	8	–	–
Coal handling services	5	5	–	–
Dividend income	–	1	–	–
Rental and sub-lease rental income	2	3	–	–
Other income	4	8	–	–
Net gain/(loss) on sale of PPE	–	1,860	26	(5)
	24	1,902	26	(5)

The net gain on sale of operations is a combination of the three sale events below:

On 3 February 2016, the C&A completed the sale of 32.4 per cent of the assets and liabilities associated with its Hunter Valley Operations to Mitsubishi Development Pty Ltd ("MDP"). The sale was in exchange for acquiring MDP's interest in the Coal & Allied Group (the "C&A Group"). A component of the non-cash consideration was intercompany receivables from Hunter Valley Resources Pty Ltd and Rio Tinto Coal NSW Holdings Ltd (parent of Hunter Valley Resources Pty Ltd). This intercompany receivable was later forgiven (refer Note 9(i)).

On 1 March 2016, the C&A completed the sale of the 40 per cent interest in Bengalla Joint Venture (Bengalla) to New Hope Corporation Limited.

On 4 August 2016, the C&A completed the sale of the Mount Pleasant thermal coal development project to MACH Energy Australia Pty Limited.

The table below is a reconciliation of the components of the net gain on sale of operations.

	Predecessor			Successor
	31 December	31 December	1 January to 31 August	1 September to 31 December
	2015	2016	2017	2017
	A$M	*A$M*	*A$M*	*A$M*
Cash consideration received	–	1,110	–	–
Less: Cash divested	–	(5)	–	–
Less: Transaction costs	–	(36)	–	–
Net cash consideration	–	1,069	–	–
Non-cash consideration				
Intercompany receivable	–	1,474	–	–
Contingent consideration	–	21	–	–
Total disposal consideration	–	2,564	–	–
Less: Carrying amount of net assets disposed				
Assets classified as held for sale	–	322	–	–
Other current assets	–	21	–	–
Property, plant and equipment and intangible assets	–	423	–	–
Deferred tax assets	–	1	–	–
Trade and other payables	–	(35)	–	–
Provisions	–	(42)	–	–
Liabilities classified as held for sale	–	(46)	–	–
Other	–	(1)	–	–
	–	643	–	–
Onerous contracts provision recognised on disposal	–	(61)	–	–
	–	1,860	–	–

9. EXPENSES

	Predecessor			Successor
	31 December 2015	31 December 2016	1 January to 31 August 2017	1 September to 31 December 2017
	A$M	A$M	A$M	A$M
Employee benefits expense				
Salaries and other benefits	333	253	140	77
Transportation				
Rail Freight	139	101	61	13
Port charges	112	76	41	22
Net demurrage	24	15	8	7
	275	192	110	42
Debt forgiveness (i)	–	1,475	–	–
Finance costs				
Interest expenses	8	1	–	–
Unwinding of discount on provisions	8	6	3	1
	16	7	3	1

Depreciation is disclosed with Note 16 by class. No impairment has been recorded.

(i) Debt forgiveness

During 2016, the C&A and its wholly owned subsidiaries entered into a deed of forgiveness with Hunter Valley Resources Pty Ltd and Rio Tinto Coal NSW Holdings Ltd (parent of Hunter Valley Resources Pty Ltd), whereby each party agreed to settle all intercompany balances in existence at 31 August 2016. A second tranche was forgiven for any new intercompany balances arising from 31 August 2016 to 30 November 2016.

10. INCOME TAX (BENEFITS)/EXPENSES

	Predecessor			Successor
	31 December 2015	31 December 2016	1 January to 31 August 2017	1 September to 31 December 2017
	A$M	A$M	A$M	A$M
Current tax expense on profits for the year	80	462	139	–
Adjustments to current tax for prior periods	(4)	–	1	–
	76	462	140	–
Deferred income tax expense/(benefit) included in income tax expense comprises:				
Deferred tax in relation to current year	(123)	(136)	(316)	79
Deferred tax in relation to prior year	5	–	7	–
	(118)	(136)	(309)	79
	(42)	326	(169)	79

The C&A and its subsidiaries in the C&A Group are subject to the standard income tax rate of 30% on its taxable income.

The total tax benefit/(expense) for the years can be reconciled to the profit per the consolidated statement of profit or loss and other comprehensive income as follows:

	Predecessor			Successor
	31 December	31 December	1 January to 31 August	1 September to 31 December
	2015	2016	2017	2017
	A$M	*A$M*	*A$M*	*A$M*
Profit from continuing operations before income tax expense	242	723	512	246
Tax at applicable income tax rate of 30.0%	72	217	153	73
Tax effect of amounts which are not taxable/deductible in calculating taxable income:				
Change in tax base due to sale	(110)	(337)	(331)	–
Debt forgiveness	–	442	–	–
Other	(4)	4	9	6
Income tax (benefits)/expenses	(42)	326	(169)	79

(a) Amounts recognised directly in equity

	Predecessor			Successor
	31 December	31 December	1 January to 31 August	1 September to 31 December
	2015	2016	2017	2017
	A$M	*A$M*	*A$M*	*A$M*
Aggregate current and deferred tax arising in the reporting period and not recognised in net profit or loss or other comprehensive income but directly debited or credited to equity:				
Deferred tax: Share based payments	(2)	1	–	–

(b) Unrecognised temporary differences

	Predecessor			Successor
	31 December 2015	31 December 2016	1 January to 31 August 2017	1 September to 31 December 2017
	A$M	*A$M*	*A$M*	*A$M*
Tax losses	1	–	–	–
Unrecoverable deductions	–	–	–	–
	1	–	–	–

11. CURRENT ASSETS – CASH AND CASH EQUIVALENTS

	Notes	Predecessor		Successor
		31 December 2015	31 December 2016	31 December 2017
		A$M	*A$M*	*A$M*
Coal & Allied cash held		180	264	30
Coal & Allied's share of cash held in Joint Operations		33	48	3
Cash and cash equivalents per consolidated statements of financial position		213	312	33
Bank overdraft	*20*	(1)	–	–
Cash and cash equivalents per consolidated statements of cash flows		212	312	33

12. TRADE AND OTHER RECEIVABLES

	Notes	Predecessor		Successor
		31 December 2015	31 December 2016	31 December 2017
		A$M	*A$M*	*A$M*
Trade receivables		73	177	112
Amounts due from related parties	*33(e)*	21	54	328
Other receivables		33	43	111
Long service leave receivable		–	–	53
Prepayments		3	2	3
		130	276	607
Presented as:				
Current Portion		130	276	554
Non-current portion		–	–	53

The following is an aged analysis of trade receivables, net of provision for impairment, based on the invoice dates at the reporting dates:

	Predecessor		Successor
	31 December	31 December	31 December
	2015	2016	2017
	A$M	*A$M*	*A$M*
0 to 60 days	73	177	109
61 to 90 days	–	–	–
Over 90 days	–	–	3
	73	177	112

Before accepting any new customer, the C&A Group assesses the potential customer's credit quality and defines credit limits by customer. Limits attributed to customers are reviewed once a year.

The ageing analysis of the C&A Group's bills and accounts receivables, that were past due but not yet impaired as at 31 December 2015, 2016 and 2017, based on due date is as follows:

The C&A Group

	At 31 December		
	2015	2016	2017
	A$'M	*A$'M*	*A$'M*
1-90 days	31	45	23
91-180 days	9	19	4
181-365 days	9	13	1
Over 1 year	23	48	4
	72	125	32

The C&A Group does not hold any collateral over these balances. The management closely monitors the credit quality of accounts receivable and consider the balance that are neither past due nor impaired are of good credit quality.

13. CURRENT ASSETS – INVENTORIES

	Predecessor		Successor
	31 December	31 December	31 December
	2015	2016	2017
	A$M	*A$M*	*A$M*
Coal stocks – at cost			
Finished goods	16	7	18
Work in progress	13	16	18
	29	23	36
Stores			
Stores	60	38	35
Provision for obsolescence	(2)	–	–
	58	38	35
	87	61	71

	Predecessor		Successor
	31 December	31 December	31 December
	2015	2016	2017
	A$M	*A$M*	*A$M*
Balance as at 1 January	–	2	–
Impairment loss recognized during the year	1	–	–
Reversal of impairment loss recognized during the year	–	(2)	–
	1	–	–

14. CURRENT ASSETS – ASSET CLASSIFIED AS HELD FOR SALE

		Predecessor		Successor
		31 December	31 December	31 December
	Notes	2015	2016	2017
		A$M	*A$M*	*A$M*
Property, plant and equipment	*(i)*	288	–	–
Receivables	*(i)*	27	–	–
Inventories	*(i)*	5	–	–
Interest in joint venture	*(ii)*	–	–	106
Investment in associate	*(iii)*	–	–	26
		320	–	132

(i) The 31 December 2015 balance relates to the sale of the C&A Group's 40 per cent interest in the Bengalla Joint Venture. The sale was completed in 2016, refer to Note 6.

The 31 December 2017 balance relates to the following:

(ii) On 27 July 2017 YAL announced that it has entered into a binding agreement to establish a 51:49 unincorporated joint venture with Glencore in relation to HVO, following completion of Yancoal Australia Ltd acquisition of Coal & Allied from Rio Tinto. Glencore will pay cash consideration of US$429 million to the Group for a 16.6% interest in HVO, and this amount is reduced by the net cash flows generated by the 16.6% HVO interest from 1 September 2017 to the date of completion. The consideration will also include a 27.9% share of US$240 million of non-contingent royalties and 49% of HVO contingent royalties payable by Yancoal Australia Ltd and a net debt and working capital adjustment in respect of the Coal & Allied acquisition. The US$429 million includes US$20 million associated with the sale of shares in Newcastle Coal Shippers Pty Ltd held by Coal & Allied to Glencore noted above.

The land held for sale refers to parcels of non-mining land located in the Lower Hunter Valley that is held for development or future sale.

(iii) An indirect interest in Port Waratah Coal Services Pty Ltd of 6.5%, held via shares in Newcastle Coal Shippers Pty Ltd, will be sold for US$20m and is expected to complete in 2018.

15. NON-CURRENT ASSETS – INVESTMENTS IN ASSOCIATES

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Shares in associates	216	206	145
Interest in joint venture partnership	–	–	–
	216	206	145

16. NON-CURRENT ASSETS-PROPERTY, PLANT AND EQUIPMENT

	Freehold land and buildings	Operational mining properties	Plant and equipment	Construction in progress	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
Predecessor					
At 1 January 2015					
Cost	150	1,034	2,526	23	3,733
Accumulated depreciation	(2)	(536)	(1,541)	–	(2,079)
Net book amount	148	498	985	23	1,654
Year ended 31 December 2015					
Opening net book amount	148	498	985	23	1,654
Additions	–	–	–	64	64
Depreciation charge	–	(26)	(149)	–	(175)
Net disposals	–	(1)	(5)	–	(6)
Assets classified as held for sale	–	(160)	(123)	(5)	(288)
Transfers to/(from) construction in progress	2	7	48	(57)	–
Adjustment to rehabilitation and closure provisions	–	(6)	–	–	(6)
Closing net book amount	150	312	756	25	1,243

	Freehold land and buildings	Operational mining properties	Plant and equipment	Construction in progress	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
Predecessor					
At 1 January 2016					
Cost	152	713	2,267	25	3,157
Accumulated depreciation	(2)	(401)	(1,511)	–	(1,914)
Net book amount	150	312	756	25	1,243
Year ended 31 December 2016					
Opening net book amount	150	312	756	25	1,243
Additions	–	–	–	41	41
Depreciation charge	(1)	(9)	(106)	–	(116)
Net disposals	(1)	2	–	–	1
Net assets included in divested operations	(210)	(39)	(145)	(5)	(399)
Reclassifications	166	(166)	–	–	–
Transfers to/(from) construction in progress	16	7	18	(41)	–
Adjustment to rehabilitation and closure provisions	–	(8)	–	–	(8)
	120	99	523	20	762
At 31 December 2016					
Cost	166	330	1,697	20	2,213
Accumulated depreciation	(46)	(231)	(1,174)	–	(1,451)
Net book amount	120	99	523	20	762

	Freehold land and buildings	Operational mining properties	Plant and equipment	Construction in progress	Total
	A$M	*A$M*	*A$M*	*A$M*	*A$M*
At 1 January 2017					
Cost	166	330	1,697	20	2,213
Accumulated depreciation	(46)	(231)	(1,174)	–	(1,451)
Net book amount	120	99	523	20	762
Year ended 31 December 2017					
Opening net book amount	120	99	523	20	762
Additions	–	3	–	43	46
Depreciation charge	(1)	(7)	(100)	–	(108)
Net disposals	–	(1)	(2)	–	(3)
Reclassifications	(51)	51	–	–	–
Transfers to/(from) construction in progress	10	1	33	(44)	–
Adjustment to rehabilitation and closure provisions	–	6	11	–	17
Transfer to assets classified as held for sale	(16)	(15)	(56)	–	(87)
	62	137	409	19	627
Successor At 31 December 2017					
Cost	102	388	1,520	19	2,029
Accumulated depreciation	(40)	(251)	(1,111)	–	(1,402)
Net book amount	62	137	409	19	627

The following estimated useful lives are used for the depreciation of property, plant and equipment, other than freehold land:

– Buildings 10 – 25 years

– Operational mining properties 10 – 45 years

– Plant and equipment 2.5 – 25 years

– Leased plant and equipment 2 – 20 years

17. NON-CURRENT ASSETS – DEFERRED TAX ASSETS

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
The balance comprises temporary differences attributable to:			
Rehabilitation and closure provision	51	38	40
Employee benefits	28	28	11
Other provision	–	16	23
Tax losses	2	2	2
Property, plant and equipment and Intangible assets	–	69	375
Other receivables	–	1	3
Unrealised foreign exchange gains/losses	–	1	–
	81	155	454

18. NON-CURRENT ASSETS – INTANGIBLE ASSETS

	Mining reserves	Others	Total
	A$M	*A$M*	*A$M*
COST			
At 1 January 2015	306	37	343
Reclassification	–	–	–
At 31 December 2015 and 1 January 2016	306	37	343
Disposal for the year	–	(26)	(26)
At 31 December 2016 and 1 January 2017	306	11	317
At 31 December 2017	306	11	317

	Mining reserves	Others	Total
	A$M	*A$M*	*A$M*
AMORTIZATION AND IMPAIRMENT			
At 1 January 2015	137	9	146
Provided for the year	8	1	9
At 31 December 2015 and 1 January 2016	145	10	155
Provided for the year	9	1	10
Disposal for the year	–	(2)	(2)
At 31 December 2016 and 1 January 2017	154	9	163
Provided for the year	8	1	9
Disposal for the year	–	–	–
At 31 December 2017	162	10	172
CARRYING VALUES			
At 31 December 2015	161	27	188
At 31 December 2016	152	2	154
At 31 December 2017	144	1	145

19. CURRENT LIABILITIES – TRADE AND OTHER PAYABLES

		Predecessor		Successor
		31 December	31 December	31 December
	Notes	2015	2016	2017
		A$M	*A$M*	*A$M*
Trade payables		222	290	257
Amounts due to related parties	*33(e)*	15	17	6
Intercompany payable in respect of income tax		–	13	75
Other payables		14	26	46
		251	346	384
The following is an aged analysis of trade payables:				
0 to 60 days		222	270	254
61 to 90 days		–	1	3
Over 90 days		–	19	–
		222	290	257

20. CURRENT LIABILITIES – BANK OVERDRAFT

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Bank overdraft	1	–	–

21. CURRENT LIABILITIES – BORROWINGS

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Shareholder loan – unsecured	–	–	–

The shareholder loan was advanced from its shareholders Australian Coal Holdings Pty Limited, Hunter Valley Resources Pty Ltd and Mitsubishi Development Pty Ltd and was unsecured and interest bearing at the London interbank offered rate for three month dollar deposits plus 5% and is repayable equally to all shareholders every three months.

Financing facilities

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Shareholder loan			
Total shareholder loan facility	–	–	–
Used at balance date	–	–	–
	–	–	–

The shareholder loan was repaid in full during 2015.

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Credit standby arrangements			
Total overdrafts	75	75	–
Unused at balance date	74	75	–
Loan facilities			
Total revolving loan facility	400	400	–
Unused at balance date	400	400	–

The bank overdraft facility was undrawn as at 31 December 2015, 2016 and 2017 (see Note 20 – Bank Overdraft).

An unsecured revolving loan facility of A$400.0 million was available at 31 December 2016 of which A$320.0 million (80 per cent) was with Rio Tinto Finance Limited and A$80.0 million (20 per cent) was with MDP. This facility lapsed on 9 February 2017.

22. CURRENT LIABILITIES – PROVISIONS

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Employee benefits	68	70	5
Rehabilitation	8	7	–
Other provisions*	–	41	10
	76	118	15

Refer to Note 25 for the movements in each class of provision other than employee benefits.

* Other provisions in 2016 and 2017 principally relates to onerous contracts.

23. CURRENT LIABILITIES – LIABILITIES CLASSIFIED AS HELD FOR SALE

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Provisions	25	–	43
Trade payables	19	–	10
Borrowing	–	–	–
	44	–	53

The 31 December 2015 balance above represent the liabilities of the Group's 40 per cent interest in Bengalla Joint Venture. Refer to Note 14 for further information and assets classified as held for sale.

24. NON-CURRENT LIABILITIES – DEFERRED TAX LIABILITIES

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
The balance comprises temporary differences attributable to:			
Property, plant and equipment and Intangible assets	54	–	–
Inventories	18	11	6
	72	11	6

25. NON-CURRENT LIABILITIES – PROVISIONS

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Employee benefits	4	4	60
Rehabilitation	74	63	116
Closure	80	53	–
Other provisions*	–	13	–
	158	133	176

* Other provisions in 2016 principally relates to onerous contracts.

Movements in provisions

Movements in each class of provision during the financial year, other than employee benefits, are set out below:

At 31 December 2015

	Rehabilitation	Closure	Other	Total
	A$M	*A$M*	*A$M*	*A$M*
Current & Non-current				
Carrying amount at start of year	67	93	5	165
Additional provisions recognised	15	–	–	15
Adjustment to operation mining properties	–	(6)	–	(6)
Unwinding of discount	3	4	–	7
Assets classified as held for sale	(3)	(11)	–	(14)
Unused amounts reversed	–	–	–	–
Amounts used during the year	–	–	(5)	(5)
Carrying amount at end of year	82	80	–	162

At 31 December 2016

Current & Non-current				
Carrying amount at start of year	82	80	–	162
Additional provisions recognised	6	1	61	68
Adjustment to operation mining properties	(1)	(8)	–	(9)
Unwinding of discount	4	2	–	6
Unused amounts reversed	(2)	–	–	(2)
Amounts used during the year	–	–	(9)	(9)
Foreign exchange	–	–	2	2
Net amounts divested	(19)	(22)	–	(41)
Carrying amount at end of year	70	53	54	177

At 31 December 2017

	Rehabilitation	Closure	Other	Total
	A$M	*A$M*	*A$M*	*A$M*
Current & Non-current				
Carrying amount at start of period	70	53	53	176
Additional provisions recognised	7	–	–	7
Adjustment to operation mining properties	–	–	–	–
Unwinding of discount	(3)	–	–	(3)
Unused amounts reversed	–	–	–	–
Amounts used during the year	(11)	–	(43)	(54)
Assets held for sale	–	–	–	–
Reclassifications	53	(53)	–	–
Carrying amount at end of year	116	–	10	126

26. SHARE CAPITAL

(a) Share capital

	Predecessor		Successor	Predecessor		Successor
	31 December		31 December	31 December		31 December
	2015	2016	2017	2015	2016	2017
	Shares	*Shares*	*Shares*	*A$M*	*A$M*	*A$M*
Ordinary shares – fully paid	86,584,735	86,584,735	86,584,735	441	60	60

During the year-ended 31 December 2016 there was a capital return of A$381 million to shareholders.

(b) Ordinary shares

Ordinary shares entitle the holder to participate in dividends and the proceeds on winding up of the C&A Group in proportion to the number of and amounts paid on the shares held.

On a show of hands every holder of ordinary shares present at a meeting in person or by proxy, is entitled to one vote, and upon a poll each share is entitled to one vote.

Holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at shareholders meetings. In the event of winding up the Group ordinary shareholders rank after all other shareholders and creditors and are fully entitled to any proceeds of liquidation.

Ordinary shares have no par value and the C&A Group does not have a limited amount of authorised capital.

(c) Earnings per share

The C&A Group is not required to calculate earnings per share as it is not a listed entity.

27. DIVIDENDS

Ordinary shares

	Predecessor			Successor
	31 December 2015	31 December 2016	1 January to 31 August 2017	1 September to 31 December 2017
	A$M	*A$M*	*A$M*	*A$M*
Final dividend for the year ended 31 December 2015, 2016 and 2017 was paid of A$1.15, A$6.57 and A$6.72 per fully paid share respectively	100	569	581	–

No dividends have been paid or declared since year ended 31 December 2017.

28. OTHER RESERVES AND RETAINED EARNINGS

(a) Other reserves

(i) Share-based payments

The C&A Group participates in a number of share-based payment plans available to executives and employees of the C&A Group administered by Rio Tinto Limited. The share-based payments reflected in this reserve relate to various equity-settled Rio Tinto share option plans. The share-based payments reserve is used to recognise the fair value of options issued but not exercised. On 1 September 2017, due to a change of ownership of Yancoal Australia Limited, the share based payment scheme was settled and reserve recycled through retained earnings.

(ii) Foreign currency translation

Exchange differences arising on translation of foreign controlled entities are recognised in other comprehensive income as described in note 3(b) and accumulated in a separate reserve within equity. The cumulative amount is reclassified to profit or loss when the net investment is disposed of.

(iii) Other reserves

Other reserves relates to the equity instruments reserve of Port Waratah Coal Services Ltd, an equity accounted associate of Coal & Allied Industries Limited.

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Share-based payments	11	9	–
Equity accounted units' equity instrument reserve	–	1	1
	11	10	1

(b) Retained earnings

Movements in retained earnings were as follows:

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Balance 1 January	1,230	1,413	1,240
Net profit for the year	283	396	857
Dividends paid	(100)	(569)	(582)
Balance 31 December	1,413	1,240	1,515

29. NON-CONTROLLING INTERESTS

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Interest in:			
Retained earnings	2	2	3

30. JOINT ARRANGEMENTS

Joint operations

At the end of the year the Group held the following interests in joint operations, the principal activity of which is coal mining and exploration:

	Principal place of business	31 December 2015	31 December 2016	31 December 2017
		%	%	%
Hunter Valley Operations	Australia	100	67.6	67.6
Bengalla Joint Venture	Australia	40	–	–
Mount Thorley Co-venture*	Australia	80	80	80
Warkworth Associates*	Australia	55.6	55.6	55.6

* Coal & Allied Industries Limited holds an 80 per cent interest in the Mount Thorley Co-Venture and a 55.574 per cent interest in Warkworth Associates. In 2004 these two joint ventures entered into an Operational Integration Agreement (OIA) that allows the two joint ventures to be managed as a single operation. Under the terms of the OIA production can be sourced from either mining lease and is allocated between the two joint ventures based on a tonnage ratio that is contractually agreed between the two joint ventures. The tonnage ratio is agreed at the beginning of each year. Since entering into the OIA the tonnage commitment ratio has been Warkworth Associates 65 per cent and Mount Thorley Co-Venture 35 per cent. In effect, Warkworth Associates receives 65 per cent and the Mount Thorley Co-Venture receives 35 per cent of the output from the combined mining leases with each joint venture then being responsible for the marketing and sale of its respective tonnage received. Production costs are shared on the same basis as the tonnage ratio. The OIA provides for compensation to be made for the use of each joint venture's assets and resource depletion.

Refer to Note 6 for further information.

31. CONTINGENCIES

(a) Contingent liabilities

The Group had contingent liabilities at 31 December 2015, 2016 and 2017 in respect of:

Guarantees

For information about guarantees given by entities within the Group and under the deed of cross guarantee, including the parent entity.

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Bank guarantees for restoration obligations The consolidated entity has a programme of on-going restoration as part of its mining operations. Guarantees have been provided to the NSW government in respect of the cost of restoration of certain leasehold properties, representing guarantees required by statute.	228	175	152
Bank guarantee for port allocation The consolidated entity has entered into various agreements with Port Waratah Coal Services Limited to secure port allocation arrangements and coal handling services. The consolidated entity has entered into various agreements with Newcastle Coal Infrastructure Group Pty Ltd as a condition of participating in the port nomination process.	98	91	100
Bank guarantees for rail network access The consolidated entity has entered into an access holder agreement with Australian Rail Track Corporation Limited relating to rail access to the Hunter Valley Network.	14	23	23
Bank guarantees for land conservation and environmental land offsets The consolidated entity has entered into various agreements with the Commonwealth Office of the Environment and Heritage, trading as National Parks and Wildlife with respect to land development in the Lower Hunter region.	19	19	54
Bank guarantees for infrastructure and emergency services			

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
The consolidated entity has entered into agreements with the NSW Department of Planning And Infrastructure for infrastructure and emergency services relating to land development applications in the Lower Hunter Valley.	5	5	2
Bank guarantee for other miscellaneous obligations			
The consolidated entity has entered into various agreements with State and local government authorities and other entities.	1	6	1

As at 31 December 2017, the Coal & Allied Industries Ltd and Yancoal Resources Ltd had contingent liabilities in the form of bank guarantees amounting to A$331.9 million (2016: A$319.5 million) associated with subsidiaries of Coal & Allied Industries Ltd, A$374.4 million (2016: A$91.8 million) associated with subsidiaries of Yancoal Resources Ltd and A$256.4 million (2016: A$nil) associated with Yancoal Australia Ltd. Total combined bank guarantees for 2017 are A$960.7 million (2016: A$411.3 million).

The Group has no other contingent liabilities or assets other than the ones mentioned in these financial statements.

32. COMMITMENTS

(a) Non-cancellable operating leases

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Commitments for minimum lease payments in relation of non-cancellable operating leases are payable as follows:			
Within one year	5	5	9
Later than one year but not later five years	11	8	12
Later than five years	–	–	–
	16	13	21
Average remaining lease terms	2 years	2 years	2 years

Items that are subject to operating leases include mining equipment, office space and small items of office equipment.

(b) Capital commitments

Significant capital expenditure contracted for at the end of the reporting period but not recognised as liabilities is as follows:

	Predecessor		Successor
	31 December	31 December	31 December
	2015	2016	2017
	A$M	*A$M*	*A$M*
Within one year	12	16	17
Later than one year but not later five years	–	–	–
	12	16	17

(c) Lease commitments: Group as lessee

Non-cancellable mining leases

	Predecessor		Successor
	31 December	31 December	31 December
	2015	2016	2017
	A$M	*A$M*	*A$M*
Commitments required to satisfy expenditure requirements on mining and exploration lease:			
Within one year	16	12	9
Later than one year but not later five years	60	47	35
Greater than five years	109	66	5
	185	125	49

33. RELATED PARTY TRANSACTIONS

The consolidated entity operated through a Management Services Agreement with Rio Tinto Coal Australia Pty Limited (RTCA), an integrated approach to managing and organising its operating companies. Directly attributable costs are charged to Coal & Allied and costs that are incurred by RTCA on behalf of Coal & Allied are charged based on an estimate of time spent providing the service.

(a) Parent entities

The immediate parent entities are Australian Coal Holdings Pty Ltd and Hunter Valley Resources Pty Ltd which at 31 December 2016 owned 75.71% and 24.29% respectively (2015: 75.71%, 14.09%) of the issued ordinary shares of Coal & Allied. The ultimate parent entity at 31 December 2016 is Rio Tinto Limited.

The parent entity within the Group is Coal & Allied Industries Ltd. On 1 September 2017 the Group's parent entity changed from Rio Tinto Limited to Yancoal Australia Ltd. The ultimate parent entity and ultimate controlling party is Yankuang Group Corporation Limited (incorporated in the People's Republic of China).

(b) Subsidiaries

Interests in subsidiaries are set out in note 34.

(c) Terms and conditions

Amounts due to and from related parties are unsecured and non-interest bearing. There are no formal agreements for these amounts, therefore they are classified as current.

Transactions with other related parties were made on normal commercial terms and conditions.

(d) Ownership interests in related parties

Interests held in the following classes of related parties are set out in the following notes: Joint operations – note 30

Associates and Joint Ventures – note 34(a)

(e) Amounts due to and from related parties as at Track Record Period

	Predecessor		Successor
	31 December	31 December	31 December
	2015	2016	2017
	A$M	*A$M*	*A$M*
Cash deposited with Rio Tinto Finance Limited	160	231	–
Amounts owing by related parties *(note 12)*	21	54	328
Amounts owing to related parties *(note 19)*	(15)	(17)	(6)

The Cash deposited with Rio Tinto Finance Limited is interest bearing at the unofficial unsecured overnight mid-rate quoted on the Reuters Screen 'AUCASH=' at 11:00am on the applicable date on which interest is to be calculated. This is settled with 1 business days notice.

The amounts owing by and to related parties are non-interest bearing and are settled on thirty day terms.

(f) Transactions with other related parties

The following transactions occurred with other related parties:

	Predecessor			Successor
	31 December 2015	31 December 2016	1 January to 31 August 2017	1 September to 31 December 2017
	A$M	*A$M*	*A$M*	*A$M*
Rio Tinto Group companies				
Expenditure				
Insurance services	(4)	(4)	(4)	–
Management services	(62)	(53)	(37)	–
Interest paid	(6)	–	–	–
Shipping services	(18)	(3)	–	–
Consulting services	(2)	–	–	–
Debt forgiveness	–	(1,475)	–	–
Share based payment expenses	6	2	–	–
Revenue				
Interest received	5	16	4	–
Coal sales	247	206	190	–
Yancoal Group companies				
Expenditure				
Insurance services	–	–	–	(4)
Management services	–	–	–	(7)
Revenue				
Coal Sales	–	–	–	132
Other related companies				
Port Waratah Coal Services Limited				
Coal handling charges	(65)	(36)	(17)	–
Management fee	1	2	1	–
Employee related recharges	–	1	1	–
Dividend revenue – associates	12	13	6	6
Mitsubishi Development Pty Limited				
Commissions paid	(1)	(1)	(1)	–
Interest paid	(2)	–	–	–

Coal Handling charges are calculated based a throughput rate agreed by the PWCS management. Management fee is generated for providing management services to PWCS.

Employee related charges are reimbursement for provided employee services to PWCS. Dividend revenue are dividends received from PWCS.

Commissions paid are for 1% of the average quarterly price on Japanese sales from Hunter Valley Operations.

Interest paid on shareholder loan at London interbank offered rate for three month dollar deposits plus 5%.

34. SUBSIDIARIES, ASSOCIATES AND JOINT VENTURES

(a) Interests in associates and joint ventures

Set out below are the associates and joint ventures of the C&A Group as at 31 December 2015, 2016 and 2017. The entities listed below have share capital consisting solely of ordinary shares, which are held directly by the Group. The country of incorporation or registration is also their principal place of business, and the proportion of ownership interest is the same as the proportion of voting rights held.

Name of entity	Place of business/ country of incorporation	Class of shares held	Principal activities	% of ownership interest			Nature of relationship	Measurement method	Carrying amount		
				31 December					31 December		
				2015	2016	2017			2015	2016	2017
Port Waratah Coal Services Limited (1)	Australia	Ordinary	The provision of coal receivable, blending, Stockpiling and ship loading service	36.5	36.5	36.5	Associate	Equity method	215	205	145
UBE C&A Co Ltd	Japan	Ordinary	The provision of procurement, coal handling and storage facilities, charter of oceangoing vessels and barging of coal service	24.5	24.5	–	Associate	Equity method	1	1	–
Bengalla Agricultural Company Pty Limited	Australia	Ordinary	Non-trading entity	–	–	–	Joint venture	Equity method	–	–	–
									216	206	145

All of the above associates have been accounted for using equity method in the consolidated financial statements.

The financial information and carrying amount, in aggregate, of the Group's interests in associates that are accounted for using the equity method are set out below:

	Predecessor			Successor
	31 December 2015	31 December 2016	1 January to 31 August 2017	1 September to 31 December 2017
	A$M	*A$M*	*A$M*	*A$M*
The Group's share of (loss)/profit and total comprehensive income	7	2	(16)	(6)
Aggregate carrying amount of the Group's interests in these associates	216	206	170	145

The principal activities of Port Waratah Coal Services Limited were the provision of coal receivable, blending, stockpiling and ship loading services in the Port of Newcastle. The investment is strategic as the Group utilises port services provided by the associate.

(i) Summarised financial information for associates and joint ventures

The tables below provide summarised financial information for those associates that are material to the C&A Group. The information disclosed reflects amounts presented in the financial statements of the relevant associates. They have been amended to reflect adjustments made by the entity when using the equity method, including fair value adjustments and modifications for differences in accounting policy.

Summarised balance sheet	Port Waratah Coal Services Limited		
	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Total current assets	88	76	79
Non-current assets	1,685	1,620	1,433
Total current liabilities	(438)	(312)	(351)
Total non-current liabilities	(743)	(822)	(665)
Net assets	592	562	496
Ownership share (%)	37	37	37
Carrying amount of investment	216	205	145

Summarised balance sheet	Port Waratah Coal Services Limited		
	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Reconciliation to carrying amounts of investment:			
Carrying amount at 1 January	221	216	205
Share of (loss)/profit after income tax	7	2	(22)
Amount reclassified as asset held for sale	–	–	(25)
Dividends received/receivable	(12)	(13)	(13)
Carrying amount at 31 December	216	205	145
Summarised statement of comprehensive (expense)/income			
Revenue	320	301	329
(Loss)/profit before income tax	26	10	(73)
Income tax benefit/(expense)	(8)	(3)	22
(Loss)/profit from continuing operations	18	7	(51)
(Loss)/profit for the period	18	7	(51)
Other comprehensive income	–	–	–
Total comprehensive (expense)/income	18	7	(51)

(ii) Share of associates' expenditure commitment

	Predecessor		Successor
	31 December 2015	31 December 2016	31 December 2017
	A$M	*A$M*	*A$M*
Capital commitments	24	15	1
Lease commitments	47	43	41
Other commitments	19	14	50
	90	72	92

(b) Significant investments in subsidiaries

The consolidated financial information incorporate the assets, liabilities and results of the following principal subsidiaries in accordance with the accounting policy described in note 3(a). The proportion of ownership interest is the same proportion of voting rights held.

		Predecessor		Successor
	Notes	**31 December 2015**	**31 December 2016**	**31 December 2017**
		%	*%*	*%*
Australian Coal Resources Limited	*A*	100	100	100
Black Hill Land Pty Ltd		100	100	100
Catherine Hill Bay Land Pty Ltd		100	100	100
CNA Bengalla Pty Limited	*D*	100	–	–
CNA Bengalla Investments Pty Limited	*A*	100	100	100
CNA Investments (UK) Pty Limited	*D*	100	100	–
CNA Resources Holdings Pty Limited	*D*	100	100	–
CNA Resources Limited	*A, D*	100	100	–
CNA Sub Holdings Pty Limited		100	100	–
CNA Warkworth Australasia Pty Limited	*A*	100	100	100
CNA UK Limited	*D*	100	–	–
Coal & Allied Mining Services Pty Limited	*A*	100	100	100
Coal & Allied Operations Pty Limited	*A*	100	100	100
Darex Capital Inc (UK)	*D*	100	–	–
Dolphin Properties Pty Limited	*C, D*	100	100	–
Gwandalan Land Pty Ltd		100	100	100
HV Operations Pty Ltd	*A*	100	100	100
HVO Coal Sales Pty Ltd	*B*	67	67	67
Kalamah Pty Ltd	*A*	100	100	100
Lower Hunter Land Holdings Pty Ltd		100	100	100
Miller Pohang Coal Company Pty limited	*B*	80	80	80
Minmi Land Pty Ltd		100	100	100
Mount Thorley Coal Loading Pty Limited	*B*	66	66	66
Mount Thorley Operations Pty Limited	*A*	100	100	100
Namoi Valley Coal Pty Limited	*A*	100	100	100
Nords Wharf Land Pty Ltd		100	100	100
Northern (Rhondda) Collieries Pty Limited	*A*	100	100	100
Novacoal Australia Pty Limited	*A*	100	100	100
Oaklands Coal Pty limited		100	100	100
Coal & Allied (NSW) Pty Limited	*A*	100	100	100
R W Miller (Holdings) Limited	*A*	100	100	100
Warkworth Coal Sales Pty Ltd		56	56	56
Warkworth Pastoral Company Pty Ltd		56	56	56
Warkworth Tailings Treatment Pty Ltd		56	56	56
Warkworth Mining Limited		56	56	56

All entities are incorporated in Australia except the following:

Entity	**Place of incorporation**
Darex Capital Inc (UK)	United Kingdom
CNA UK Limited	United Kingdom

Notes:

A These wholly-owned companies and the parent entity have entered into a deed of cross guarantee under which each Group guarantees the debts of the others. By entering into the deed, the wholly-owned entities are relieved from the requirement to prepare a Financial Report and directors' report under Australian Securities and Investment Commission Class Order 98/1418. These companies represent a "Closed Group" for the purposes of the Class Order, and as there are no other parties to the deed of cross guarantee that are controlled by the parent entity, they also represent the "Extended Closed Group".

On 19 December 2016 the following entities were added to the deed of cross guarantee:

CNA Warkworth Australiasia Pty Ltd
CNA Resources Limited
CNA Bengalla Investments Pty Ltd
Kalamah Pty Limited
Coal & Allied Mining Services Pty Ltd
HV Operations Pty Ltd

The proportion of ownership interest is equal to the proportion of voting power held.

B Non-controlling interest in controlled entities refer to Note 29.

C Non-beneficially controlled.

D These entities were deregistered during 2017.

35. EVENTS OCCURRING AFTER THE REPORTING PERIOD

No matter or circumstance has occurred subsequent to year end that has significantly affected, or may significantly affect, the operations of the Group, the results of those operations or the state of affairs of the C&A Group or economic entity in subsequent financial years except for the following:

Effective 1 March 2018 CNA Warkworth Australasia Pty Ltd, a subsidiary of C&A, completed its purchase of Mitsubishi Development Pty Ltd's 28.898% interest in the Warkworth joint venture for US$230 million plus an adjustment for working capital. The C&A Group now owns 84.472% of the Warkworth joint venture, which will increase the C&A Group's share of coal production from the integrated Mount Thorley Warkworth ("MTW") operations from 64.1% to 82.9%.

36. CARVE OUT ACCOUNTING

The consolidated financial information presented in this Accountants' Report above represents the audited financial information of the Group for the financial years ended 31 December 2015, 2016 and 2017.

As further stated in note 8, the C&A Group had disposed of certain material operations during the year ended 31 December 2016. The information set forth below provides carve-out adjustments to those financial information to reflect the consolidated financial information of the Group as if those disposals were completed on 1 January 2015.

The carve-out adjustments made comprise:

Bengalla

In March 2016 Coal & Allied's interest in Bengalla was sold to New Hope. The carve out adjustments remove the one-off gain on sale of Bengalla as well as all Bengalla assets and associated P&L and cash flow for the three year financial period.

Mount Pleasant

In August 2016 the Mount Pleasant thermal coal development project was sold to MACH Energy Australia Pty Ltd. The carve out adjustments remove the one-off gain on sale of Mount Pleasant as well as all Mount Pleasant assets and associated P&L and cash flow for the three year financial period.

HVO 32.4%

In February 2016 Coal & Allied sold 32.4% of its interest in the Hunter Valley Operations to Mitsubishi Development. The carve out adjustments remove the one-off gain on sale of HVO beneficial interest as well as the 32.4% of HVO's assets and associated P&L and cash flow for the three year financial period.

Included below is the consolidated income statement and consolidated statement of cash flows of the Group for the financial years ended 31 December 2015, 2016 and 2017 after making the carve-out adjustments.

Included below is the consolidated balance sheet of the Group as at 31 December 2015, 2016 and 2017 after making the carve-out adjustments.

PROFORMA CONSOLIDATED STATEMENTS OF PROFIT OR LOSS FOR THE YEARS ENDED 31 DECEMBER 2015, 2016 AND 2017

	31 December 2015			31 December 2016			31 December 2017		
	As Reported	Carve Outs	Adjusted	As Reported	Carve Outs	Adjusted	As Reported	Carve Outs	Adjusted
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Revenue	2,131	634	1,497	1,664	65	1,599	2,156	–	2,156
Other income	24	–	24	1,902	1,860	42	21	–	21
Changes in inventories of finished goods and WIP	(22)	(4)	(18)	(6)	5	(11)	15	–	15
Raw material and consumables used	(524)	(145)	(379)	(357)	(16)	(341)	(415)	–	(415)
Employee benefits expense	(333)	(80)	(253)	(253)	(8)	(245)	(217)	–	(217)
External services	(256)	(70)	(186)	(192)	(11)	(181)	(249)	–	(249)
Selling and distribution	(437)	(132)	(305)	(322)	(33)	(289)	(319)	–	(319)
Debt forgiveness	–	–	–	(1,475)	(1,475)	–	–	–	–
Other operating expenses	(108)	(26)	(82)	(90)	(6)	(84)	(60)	–	(60)
Net (loss)/gain on disposal of property, plant and equipment	(2)	–	(2)	10	–	10	–	–	–
Depreciation and amortisation expense	(184)	(53)	(131)	(125)	(3)	(122)	(117)	–	(117)
Exploration and evaluation	(8)	(8)	–	–	–	–	–	–	–
Freight and purchased coal	(40)	(11)	(29)	(26)	–	(26)	(34)	–	(34)
Net foreign exchange gains	10	2	8	(2)	–	(2)	3	–	3
Finance costs	(16)	(2)	(14)	(7)	(1)	(6)	(4)	–	(4)
Share of profits after tax of equity accounted units	7	–	7	2	–	2	(22)	–	(22)
Profit before income tax	242	105	137	723	377	346	758	–	758
Income tax benefit/(expense)	42	87	(45)	(326)	(226)	(100)	90	–	90
Profit for the year	284	192	92	397	151	246	848	–	848
Profit for the year is attributable to:									
Owners of Coal & Allied Industries Limited	283	192	91	396	151	245	847	–	847
Non-controlling interests	1	–	1	1	–	1	1	–	1
	284	192	92	397	151	246	848	–	848
Other comprehensive income									
Items that may be reclassified to profit or loss									
Share of other comprehensive income of equity accounted unites	–	–	–	–	–	–	–	–	–
Foreign differences on translation	–	–	–	–	–	–	–	–	–
Other comprehensive income for the year, net of tax	–	–	–	–	–	–	–	–	–
Total comprehensive income for the year	284	192	92	397	151	246	848	–	848
Total comprehensive income for the year is attributable to:									
Owners of Coal & Allied Industries Limited	283	192	91	396	151	245	847	–	847
Non-controlling interests	1	–	1	1	–	1	1	–	1
	284	192	92	397	151	246	848	–	848

PROFORMA CONSOLIDATED STATEMENTS OF FINANCIAL POSITION AS AT 31 DECEMBER 2015, 2016 AND 2017

	31 December 2015			31 December 2016			31 December 2017		
	As Reported	Carve Outs	Adjusted	As Reported	Carve Outs	Adjusted	As Reported	Carve Outs	Adjusted
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
ASSETS									
Current assets									
Cash and cash equivalents	213	4	209	312	–	312	33	–	33
Trade and other receivables	130	25	105	276	–	276	554	–	554
Inventories	87	18	69	61	–	61	71	–	71
Assets classified as held for sale	320	320	–	–	–	–	132	–	132
Total Current assets	750	367	383	649	–	649	790	–	790
Non-Current assets									
Receivables	–	–	–	–	–	–	53	–	53
Investment accounted for using the equity method	216	–	216	206	–	206	145	–	145
Land held for development or future sale	1	–	1	1	–	1	1	–	1
Property, plant and equipment	1,243	394	849	762	–	762	627	–	627
Deferred tax assets	81	(51)	132	155	–	155	454	–	454
Intangible assets	188	25	163	154	–	154	145	–	145
Total non-current assets	1,729	368	1,361	1,278	–	1,278	1,425	–	1,425
Total assets	2,479	735	1,744	1,927	–	1,927	2,215	–	2,215
LIABILITIES									
Current liabilities									
Trade and other payables	251	41	210	346	–	346	384	–	384
Bank overdraft	1	–	1	–	–	–	–	–	–
Provisions	76	31	45	118	–	118	15	–	15
Current tax liabilities	7	7	–	4	–	4	–	–	–
Liabilities classified as held for sale	44	44	–	–	–	–	53	–	53
Total Current liabilities	379	123	256	468	–	468	452	–	452
Non-Current liabilities									
Deferred income	3	–	3	3	–	3	2	–	2
Deferred tax liabilities	72	58	14	11	–	11	6	–	6
Provisions	158	22	136	133	–	133	176	–	176
Total non-liabilities	233	80	153	147	–	147	184	–	184
Total liabilities	612	203	409	615	–	615	636	–	636
Net assets	1,867	532	1,335	1,312	–	1,312	1,578	–	1,579
EQUITY									
Contributed equity	441	–	441	60	–	60	60	–	60
Other reserves	11	1	10	10	–	10	1	–	1
Retained earnings	1,413	531	882	1,240	–	1,240	1,515	–	1,515
Non-controlling interests	2	–	2	2	–	2	3	–	3
Total equity	1,867	532	1,335	1,312	–	1,312	1,579	–	1,579

PROFORMA CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED 31 DECEMBER 2015, 2016 AND 2017

	31 December 2015			31 December 2016			31 December 2017		
	As Reported	Carve Outs	Adjusted	As Reported	Carve Outs	Adjusted	As Reported	Carve Outs	Adjusted
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Cash flows from operating activities									
Receipts from customers	2,175	635	1,540	1,555	96	1,459	1,989	–	1,989
Payments to suppliers and employees	(1,642)	(566)	(1,076)	(1,121)	(231)	(890)	(1,166)	–	(1,166)
	533	69	464	434	(135)	569	823	–	823
Interest paid	(9)	–	(9)	–	–	–	–	–	–
Income taxes paid	(110)	(49)	(61)	(12)	71	(83)	(232)	–	(232)
Tax paid to tax consolidation group head entity	–	–	–	(440)	(440)	–	–	–	–
Dividends received	12	–	12	13	–	13	–	–	–
Interest received	6	–	6	18	–	18	7	–	7
Net cash inflow from operating activities	432	20	412	13	(504)	517	598	–	598
Cash flows from investing activities									
Payment for property, plant and equipment	(64)	(21)	(43)	(40)	–	(40)	(59)	–	(59)
Drawdown from related parties	–	–	–	–	–	–	(272)	–	(272)
Dividends received	–	–	–	–	–	–	13	–	13
Payments for exploration	(8)	(8)	–	–	–	–	–	–	–
Proceeds from sale of property, plant and equipment	4	2	2	9	–	9	23	–	23
Proceeds from divestment	–	–	–	1,069	1,069	–	–	–	–
Net cash outflow from investing activities	(68)	(27)	(41)	1,038	1,069	(31)	(295)	–	(295)

PROFORMA CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED 31 DECEMBER 2015, 2016 AND 2017

	31 December 2015			31 December 2016			31 August 2017		
	As Reported	Carve Outs	Adjusted	As Reported	Carve Outs	Adjusted	As Reported	Carve Outs	Adjusted
	A$M	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*	*A$M*
Cash flows from financing activities									
Dividends paid to non-controlling interest	(1)	–	(1)	(1)	–	(1)	(1)	–	(1)
Dividends paid	(100)	–	(100)	(569)	(569)	–	–	–	–
Return of capital	–	–	–	(380)	–	(380)	(581)	–	(581)
Repayment of loan facilities	(293)	–	(293)	–	–	–	–	–	–
Repayment of advances from related entities	–	–	–	–	–	–	–	–	–
Net cash outflow from financing activities	(394)	–	(394)	(950)	(569)	(381)	(582)	–	(582)
Net decrease in cash and cash equivalents	(30)	(7)	(23)	100	(4)	104	(279)	–	(279)
Cash and cash equivalents at the beginning of the year	242	11	231	212	4	208	312	–	312
Cash and cash equivalents at end of year	212	4	208	312	–	312	33	–	33

This information set out in this Appendix does not form part of the Accountants' Report from the joint reporting accountants, SHINEWING (HK) CPA Limited, Certified Public Accountants, Hong Kong and ShineWing Australia, Chartered Accountants, Australia, independent members of ShineWing International Limited, as set out in Appendix IA, and is included herein for illustrative purposes only.

The unaudited pro forma financial information should be read in conjunction with the section heading "Financial Information of the Group" in this prospectus and the Accountants' Report of the Group set out in Appendix IA to this prospectus.

UNAUDITED PRO FORMA ADJUSTED CONSOLIDATED NET TANGIBLE ASSETS OF THE GROUP

The following is the unaudited pro forma statement of adjusted consolidated net tangible assets of the Group, prepared in accordance with Rule 4.29 of the Listing Rules and is for illustrative purpose only, and is set out below to illustrate the effect of the Proposed Listing on the consolidated net tangible assets of the Group attributable to the owners of the Company as at 30 June 2018 as if the Proposed Listing had taken place on 30 June 2018.

The unaudited pro forma statement of adjusted consolidated net tangible assets of the Group was prepared for illustrative purpose only and, because of its hypothetical nature, it may not give a true picture of the consolidated net tangible assets of the Group as at 30 June 2018, or at any future date following the Proposed Listing.

The unaudited pro forma statement of adjusted consolidated net tangible assets of the Group is prepared based on the consolidated net tangible assets of the Group attributable to the owners of the Company as at 30 June 2018 as set out in the Accountants' Report of Yancoal Australia Ltd, the text of which is set out in Appendix IA to this prospectus, and adjusted as follows.

	Audited consolidated net tangible assets of the Group attributable to owners of the Company as at 30 June 2018	**Estimated net proceeds from the Proposed Listing**	**Unaudited pro forma adjusted consolidated net tangible assets of the Group attributable to the owners of the Company**	**Unaudited pro forma adjusted net tangible assets of the Group attributable to the owners of the Company per share**	**Unaudited pro forma adjusted net tangible assets of the Group attributable to the owners of the Company per share**
	A$'M (Note 1)	*A$'M (Note 2)*	*A$'M*	*A$ (Note 3)*	*HK$ (Note 5)*
Based on an Offer Price of HK$23.48 per Share	5,165	224	5,389	4.10	23.54
Based on an Offer Price of HK$25.84 per Share	5,165	249	5,414	4.12	23.65

(1) The consolidated net tangible assets attributable to owners of the Company as at 30 June 2018 was determined as follows:

	A$'M
Audited consolidated net assets of the Group set out in Appendix IA to this prospectus	5,265
Less: Non-Controlling interests	(2)
Less: Intangible assets attribute to owners of the Company	(98)
Audited consolidated net tangible assets attributable to owners of the Company	5,165

(2) The estimated net proceeds from the Share Offer are based on the issue of 59,441,900 new shares at the Offer Price of HK$23.48 and HK$25.84 per Share, respectively, after deduction of the underwriting fees and other related expenses payable by the Company and take no account of any Shares which may be issued upon the completion of the Australian Entitlement Offer on Australian Securities Exchange ("ASX") and exercise of the over-allotment option.

(3) The unaudited pro forma net tangible assets of the Group attributable to owners of the Company per Share is arrived at after the adjustments referred to in Notes 1 and 2 above and on the basis that 1,315,513,656 Shares were in issue assuming that the Share Offer and share consolidation (one share for every 35 shares) has been completed on 30 June 2018 but takes no account of any Shares which may be issued upon the completion of the Australian Entitlement Offer on ASX and exercise of the over-allotment option.

(4) No adjustment has been made to reflect any trading result or other transactions of the Group entered into subsequent to 30 June 2018, including but not limited to the effect of the interim dividend of A$130,000,000 declared and payable by the Company for the period ended 30 June 2018 on 15 August 2018 (the "Transaction"). The dividend was paid on 21 September 2018. Had the Transaction been completed on 30 June 2018, the unaudited pro forma adjusted consolidated net tangible assets of the Group attributable to owners of the Company per share would be A$4.00 or HK$22.96 (assuming an Offer Price of HK$23.48 per share) and A$4.02 or HK$23.08 (assuming an Offer Price of HK$25.84 per share).

(5) For the purpose of presentation of the unaudited pro forma financial information, the exchange rate adopted is A$1 = HK$5.7405, which is based on a rate of A$1 = US$0.7332 and US$1 = HK$7.8295.

No representation is made that the amounts in Australian dollars ("A$") or US dollars ("US$") were or could have been or could be converted into Hong Kong dollars ("HK$") and/or that amounts in Hong Kong Dollars were or could have been or could be converted into Australian dollars or US dollars at such rate or any other exchange rates.

INDEPENDENT REPORTING ACCOUNTANTS' ASSURANCE REPORT ON THE COMPILATION OF UNAUDITED PRO FORMA FINANCIAL INFORMATION IN ACCORDANCE WITH RULES 4.29 OF THE LISTING RULES ON THE STOCK EXCHANGE OF HONG KONG

SHINEWING (HK) CPA Limited
43/F., Lee Garden One,
33 Hysan Avenue,
Causeway Bay, Hong Kong

ShineWing Australia
Level 8,
167 Macquarie Street
Sydney NSW 2000

26 November 2018

The Directors
Yancoal Australia Ltd
Level 18, Darling Park Tower 2
201 Sussex Street,
Sydney NSW 2000
Australia

We have completed our assurance engagement to report on the compilation of unaudited pro forma financial information of Yancoal Australia Ltd (the "Company") and its subsidiaries (collectively referred to as the "Group") by the directors of the Company for illustrative purposes only. The unaudited pro forma financial information consists of the unaudited pro forma statement of adjusted consolidated net tangible assets of the Group as at 30 June 2018 and related notes as set out on pages IIA-1 to IIA-2 of Appendix IIA to the prospectus (the "Prospectus") dated 26 November 2018 in connection with the proposed listing (the "Proposed Listing") of shares of the Company on The Stock Exchange of Hong Kong Limited. The applicable criteria on the basis of which the directors of the Company have compiled the unaudited pro forma financial information are described on pages in Appendix IIA to the Prospectus.

The unaudited pro forma financial information has been compiled by the directors of the Company to illustrate the impact of the Proposed Listing on the Group's net tangible assets as of 30 June 2018 as if the Proposed Listing had been taken place at 30 June 2018. As part of this process, information about the Group's financial position has been extracted by the directors of the Company from the Group's financial information for the six months ended 30 June 2018, on which accountants' reports of the Company has been included in the Appendix IA to the Prospectus.

Directors' Responsibility for the Unaudited Pro Forma Financial Information

The directors of the Company are responsible for compiling the unaudited pro forma financial information in accordance with paragraph 29 of Chapter 4 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") and with reference to Accounting Guideline 7 "Preparation of Pro Forma Financial Information for Inclusion in Investment Circulars" ("AG7") issued by the Hong Kong Institute of Certified Public Accountants (the "HKICPA").

Our Independence and Quality Control

We have complied with the independence and other ethical requirement of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants ("IESBA"), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

The firms apply International Standard on Quality Control 1 "Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements" and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Reporting Accountants' Responsibilities

Our responsibility is to express an opinion, as required by paragraph 29(7) of Chapter 4 of the Listing Rules, on the unaudited pro forma financial information and to report our opinion to you. We do not accept any responsibility for any reports previously given by us on any financial information used in the compilation of the unaudited pro forma financial information beyond that owed to those to whom those reports were addressed by us at the dates of their issue.

We conducted our engagement in accordance with International Standard on Assurance Engagements 3420 "Assurance Engagements to Report on the Compilation of Pro Forma Financial Information Included in a Prospectus" issued by the International Auditing and Assurance Standards Board. This standard requires that the reporting accountants plan and perform procedures to obtain reasonable assurance about whether the directors of the Company have compiled the unaudited pro forma financial information in accordance with paragraph 29 of Chapter 4 of the Listing Rules and with reference to AG7 issued by the HKICPA.

For purposes of this engagement, we are not responsible for updating or reissuing any reports or opinions on any historical financial information used in compiling the unaudited pro forma financial information, nor have we, in the course of this engagement, performed an audit or review of the financial information used in compiling the unaudited pro forma financial information.

The purpose of unaudited pro forma financial information included in prospectus is solely to illustrate the impact of the Proposed Listing on unadjusted financial information of the Group as if the Proposed Listing had been undertaken at an earlier date selected for purposes of the illustration. Accordingly, we do not provide any assurance that the actual outcome of the Proposed Listing at 30 June 2018 would have been as presented.

A reasonable assurance engagement to report on whether the unaudited pro forma financial information has been properly compiled on the basis of the applicable criteria involves performing procedures to assess whether the applicable criteria used by the directors in the compilation of the unaudited pro forma financial information provide a reasonable basis for presenting the significant effects directly attributable to the event or transaction, and to obtain sufficient appropriate evidence about whether:

- the related unaudited pro forma adjustments give appropriate effect to those criteria; and

- the unaudited pro forma financial information reflects the proper application of those adjustments to the unadjusted financial information.

The procedures selected depend on the reporting accountants' judgment, having regard to the reporting accountants' understanding of the nature of the Group, the event or transaction in respect of which the unaudited pro forma financial information has been compiled, and other relevant engagement circumstances.

The engagement also involves evaluating the overall presentation of the unaudited pro forma financial information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion:

(a) the unaudited pro forma financial information has been properly compiled on the basis stated;

(b) such basis is consistent with the accounting policies of the Group; and

(c) the adjustments are appropriate for the purposes of the unaudited pro forma financial information as disclosed pursuant to paragraph 29(1) of Chapter 4 of the Listing Rules.

SHINEWING (HK) CPA Limited
Certified Public Accountants
Chan Wing Kit
Practising Certificate Number: P03224
Hong Kong

ShineWing Australia
Chartered Accountants
Rami Eltchelebi
Sydney

UNAUDITED PRO FORMA CONSOLIDATED STATEMENT OF PROFIT OR LOSS OF THE GROUP

The following is the unaudited pro forma consolidated statement of profit or loss of the Group for the purpose of providing additional information to potential investors. The unaudited pro forma consolidated statement of profit or loss for the Group is for illustrative purpose only and set out below to illustrate the effect of the acquisition of Coal & Allied Industries Ltd ("C&A"), the acquisition of a further 28.9% interest in the Warkworth joint venture ("Warkworth") and the disposal of a 16.6% interest in the Hunter Valley Operations joint venture ("HVO") (collectively referred to as the "Acquisitions and Disposal") on the consolidated statements of profit or loss of the Group attributable to the owners of the Company for the year ended 31 December 2017 and for the six months ended 30 June 2018 as if the Acquisitions and Disposal had taken place on 1 January 2017.

Details of the Acquisitions and Disposal are set out as "Financial information – Acquisitions, Disposals and deconsolidation" section of this prospectus.

The unaudited pro forma consolidated statement of profit or loss of the Group was prepared for illustrative purpose only and, because of its hypothetical nature, it may not give a true picture of the consolidated statements of profit or loss of the Group for the year ended 31 December 2017 and for the six months ended 30 June 2018, or at any future date following the Acquisitions and Disposal.

The unaudited pro forma consolidated statement of profit or loss of the Group is prepared based on the consolidated statements of profit or loss of the Group attributable to the owners of the Company for the year ended 31 December 2017 and for six months ended 30 June 2018 as set out in the Accountants' Report of the Company, the text of which is set out in Appendix IA to this prospectus, and adjusted as follows.

(i) unaudited pro forma consolidated statements of profit or loss of the Group attributable to the owners of the Company for the year ended 31 December 2017

			Pro forma adjustments for			
	The Group as original for the year ended 31 December 2017	**C&A for the eight months ended 31 August 2017**	**Adjustments arising from acquisition accounting for acquisition of C&A, (including 55.6% interest in Warkworth & 67.6% interest in HVO)**	**Acquisition of additional 28.9% interest in Warkworth**	**Disposal of 16.6% interest in HVO**	**Unaudited pro forma consolidated statement of profit or loss of the Group for the year ended 31 December 2017**
	A$'M (Note 1)	*A$'M (Note 2)*	*A$'M (Note 3)*	*A$'M (Note 4)*	*A$'M (Note 5)*	*A$'M*
Revenue	2,601	1,424	46	261	(288)	4,044
Other income	325	26	–	–	78	429
Changes in inventories of finished goods and work in progress	7	(11)	–	3	(2)	(3)
Raw materials and consumables used	(349)	(274)	–	(50)	56	(617)
Employee benefits	(302)	(140)	–	(33)	27	(448)
Depreciation and amortisation	(256)	(78)	(97)	(27)	–	(458)
Transportation	(312)	(110)	26	(19)	20	(395)
Contractual services and plant hire	(274)	(169)	–	(26)	39	(430)
Government royalties	(173)	(111)	–	(21)	23	(282)
Coal purchases	(340)	–	–	–	–	(340)
Other operating expenses	(330)	(26)	–	(19)	7	(368)
Finance costs	(294)	(3)	(10)	–	1	(306)
Share of profit of equity-accounted investees, net of tax	32	(16)	–	–	–	16
Profit (loss) before income tax	**335**	**512**	**(35)**	**69**	**(39)**	**842**
Income tax expenses	(89)	169	(320)	(20)	12	(248)
Profit (loss) for the year	**246**	**681**	**(355)**	**49**	**(27)**	**594**

Notes:

(1) The audited consolidated statement of profit or loss of the Group for the year ended 31 December 2017 is extracted from the Accountants' Report of the Group as set out in Appendix IA to this Prospectus.

(2) The audited consolidated statement of profit or loss of C&A for the eight months ended 31 August 2017 is extracted from the Accountants' Report of C&A as set out in Appendix IB to this Prospectus. To conform with the presentation of the audited consolidated statement of profit or loss of the Group (i) distribution expenses of A$110 million have been reclassified as transportation expense (ii) distribution expenses of A$111 million have been reclassified as government royalties, and (iii) net foreign exchange differences of A$1 million have been aggregated into other operating expense. The tax benefit of A$169 million includes an adjustment to the deferred tax bases of assets of A$331 million which is eliminated in the consolidated financial statements of the Group for the year ended 31 December 2017.

(3) The adjustments arising from acquisition accounting for the acquisition of C&A including:

a. An increase in revenue of A$46 million to reflect the partial release of the BLCP sales contract provision recognised as if the acquisition had occurred on 1 January 2017. The BLCP Agreement is a long-term sales offtake contract as detailed in Note 28(ii) to the Accountants' Report of the Group. Based on management's provisional long-term coal price forecast the contract is "below market" and as such a provision has been recognised representing the discounted, after tax, "below market" value of the contract.

b. An increase in amortisation of A$55 million to reflect the amortisation of additional mining tenements and intangibles recognised on acquisition.

c. An increase in depreciation of A$42 million to reflect the depreciation of the uplift in value of property, plant and equipment as if the acquisition had occurred on 1 January 2017.

d. A decrease in transportation expenses of A$26 million to reflect the partial release of the excess take-or-pay ("ToP") provision calculated as if the acquisition had occurred on 1 January 2017.

e. An increase in finance costs of A$10 million to reflect the unwind of the discount on the non-contingent royalty payable, contingent royalty payable and BLCP and ToP provisions.

f. An increase in tax expense of A$320 million, of which A$331 million (which is included in the consolidated financial statements of C&A for the eight months ended 31 August 2017) reflects the reversal of deferred tax effect on tax base pushed down to C&A legal entities as part of the Group's acquisition tax allocation at the consolidation level of the Group (as stated in note 2 above).

(4) The adjustment to the statement of profit or loss on the acquisition of an additional 28.9% interest in Warkworth, (representing an 18.8% economic interest in the Mount Thorley Warkworth mine complex) for the year ended 31 December 2017 including:

a. 18.8% of profit and loss of Mount Thorley Warkworth for the year ended 31 December 2017, including the pro rata proportion of the acquisition accounting applied to the 64.1% interest in Mount Thorley Warkworth recognised as part of the C&A Acquisition, attributable to the Group as if the acquisition completed on 1 January 2017.

b. An increase in transaction costs of A$16 million to reflect the stamp duty not already included in "other operating expense" of the statement of profit and loss for the year ended 31 December 2017.

c. There is no gain or loss of the acquisition recognized as at acquisition completion date i.e. 7 March 2018. Due to the various price adjustments it is not practical to calculate the gain on acquisition as at 1 January 2017.

(5) The adjustment to the statement of profit or loss on the disposal of a 16.6% interest in HVO for the year ended 31 December 2017 comprises:

a. 16.6% of profit or loss of HVO for the year ended 31 December 2017,including the pro rata proportion of the acquisition accounting applied to the 67.6% interest in HVO recognised as part of the C&A Acquisition, attributable to the Group as if the transaction had been completed on 1 January 2017.

b. A gain on disposal of A$78 million representing;

i. the surplus of cash proceeds receivable from Glencore over the book value of the 16.6% interest in HVO. In accordance with the Asset Sale Agreement the cash proceeds receivable from Glencore is US$429 million (A$569 million) including adjustments of (i) a decrease of US$28 million (A$38 million) for the net cash inflows of the 16.6% HVO interest between completion of the C&A Acquisition and completion of the Glencore Transaction, (ii) an increase of US$2 million (A$3 million) for HVO cash, working capital and bank guarantee adjustments, and (iii) an increase of US$45 million (A$59 million) representing 27.9% of the non-contingent royalty paid to Rio Tinto on the C&A Acquisition up to the date of completion of the Glencore Transaction. The gain on disposal of A$78 million represents the gain calculated as at 1 May 2018. Due to the various price adjustments noted above it is not practical to calculate the gain on disposal as at 1 January 2017.

ii. the recognition of a US$21 million (A$27 million) receivable for the non-contingent royalty now receivable from Glencore.

iii. the de-recognition of US$31 million (A$39 million) of the contingent royalty, BLCP and ToP provisions recognised on the C&A Acquisition to be assumed by Glencore.

iv. Disposal of US$438 million (A$581 million) of book value assets and liabilities.

(ii) unaudited pro forma consolidated statements of profit or loss of the Group attributable to the owners of the Company for six months ended 30 June 2018

		Pro forma adjustments for		
	The Group as original for the six months ended 30 June 2018	**Acquisition of additional 28.9% interest in Warkworth**	**Disposal of 16.6% interest in HVO**	**Unaudited pro forma consolidated statement of profit or loss of the Group for the six months ended 30 June 2018**
	A$'M (Note 6)	*A$'M (Note 7)*	*A$'M (Note 8)*	*A$'M*
Revenue	2,347	48	(89)	2,306
Other income	115	–	(78)	37
Changes in inventories of finished goods and work in progress	24	1	–	25
Raw materials and consumables used	(337)	(9)	18	(328)
Employee benefits	(254)	(5)	10	(249)
Depreciation and amortisation	(244)	(4)	–	(248)
Transportation	(274)	(3)	7	(270)
Contractual services and plant hire	(206)	(5)	11	(200)
Government royalties	(161)	(4)	7	(158)
Coal purchases	(182)	–	–	(182)
Other operating expenses	(170)	–	3	(167)
Finance costs	(152)	–	(1)	(153)
Share of profit of equity-accounted investees, net of tax	33	–	–	33
Profit (loss) before income tax	**539**	**19**	**(112)**	**446**
Income tax expenses	(178)	(6)	34	(150)
Profit (loss) for the period	**361**	**13**	**(78)**	**296**

Notes:

(6) The audited consolidated statement of profit or loss of the Group for the six months ended 30 June 2018 is extracted from the Accountants' Report of the Group as set out in Appendix IA to this Prospectus.

(7) The adjustment to the statement of profit or loss on the acquisition of an additional 28.9% interest in Warkworth, a joint operation of the Company (representing an 18.8% economic interest in the Mount Thorley Warkworth mine complex) for the two months ended 28 February 2018 representing the pre-acquisition period, including:

a. 18.8% of profit or loss of Mount Thorley Warkworth for the two months ended 28 February 2018, including the pro rata proportion of the acquisition accounting applied to the 64.1% interest in Mount Thorley Warkworth recognised as part of the acquisition of Coal & Allied Industries Limited (the "C&A Acquisition"), attributable to the Group as if the acquisition completed on 1 January 2017.

(8) The adjustment to the statement of profit or loss on the disposal of a 16.6% interest in HVO, a joint operation of the Company, for the four months ended 30 April 2018 representing the pre-disposal period, including:

a. 16.6% of profit or loss of HVO for the four months ended 30 April 2018, including the pro rata proportion of the acquisition accounting applied to the 67.6% interest in HVO recognised as part of the C&A Acquisition, attributable to the group as if the transaction had been completed on 1 January 2017.

b. A decrease in other income of A$78 million which reflects the reversal of gain on disposal of HVO recognized in actual result for the six months ended 30 June 2018 as if the transaction had been completed on 1 January 2017. Details also set out in note 5b of this statement.

(9) No adjustments have been made to adjust any trading results or other transactions of the Group subsequent to 30 June 2018.

INDEPENDENT REPORTING ACCOUNTANTS' ASSURANCE REPORT ON THE COMPILATION OF UNAUDITED PRO FORMA FINANCIAL INFORMATION

This information set out in this Appendix does not form part of the Accountants' Reports from the joint reporting accountants', SHINEWING (HK) CPA Limited, Certified Public Accountants, Hong Kong and ShineWing Australia, Chartered Accountants, Australia, independent members of ShineWing International Limited, as set out in Appendix IA and IB, and is included herein for illustrative purposes only.

The unaudited pro forma financial information should be read in conjunction with the section heading "Financial Information" in this prospectus and the Accountants' Report of the Group set out in Appendix IA to this prospectus and Accountants' report of Coal & Allied Industries Ltd set out in Appendix IB to this prospectus.

信永中和 ShineWing

SHINEWING (HK) CPA Limited
43/F., Lee Garden One,
33 Hysan Avenue,
Causeway Bay, Hong Kong

ShineWing Australia
Level 8,
167 Macquarie Street
Sydney NSW 2000

26 November 2018

The Directors
Yancoal Australia Ltd
Level 18, Darling Park Tower 2,
201 Sussex Street,
Sydney NSW 2000,
Australia

We have completed our assurance engagement to report on the compilation of unaudited pro forma financial information of Yancoal Australia Ltd (the "Company") and its subsidiaries (collectively referred to as the "Group") by the directors of the Company for illustrative purposes only. The unaudited pro forma financial information in connection with the acquisition of Coal & Allied Industries Ltd ("C&A"), the acquisition of a further 28.9% interest in the Warkworth joint venture ("Warkworth") and the disposal of a 16.6% interest in the Hunter Valley Operations joint venture ("HVO") (collectively referred to as the "Acquisitions and Disposal") consists of the unaudited pro forma statement of consolidated statements of profit or loss of the Group for the year ended 31 December 2017 and for the six months ended 30 June 2018 and related notes as set out on pages IIB-2 to IIB-6 of Appendix IIB to the prospectus (the "Prospectus") dated 26 November 2018. The applicable criteria on the basis of which the directors of the Company have compiled the unaudited pro forma financial information are described on pages in Appendix IIB to the Prospectus.

The unaudited pro forma financial information has been compiled by the directors of the Company to illustrate the impact of the Acquisitions and Disposal on the Group's financial performance for the year ended 31 December 2017 and for six months ended 30 June 2018 as if the Acquisitions and Disposal had been taken place at 1 January 2017. As part of this process, information about the Group's financial performance has been extracted by the directors of the Company from the Group's consolidation financial statements for the year ended 31 December 2017 and for the six months ended 30 June 2018, on which the Accountants' Report of the Group has been included in the Appendix IA to the Prospectus.

Directors' Responsibility for the Unaudited Pro Forma Financial Information

The directors of the Company are responsible for compiling the unaudited pro forma financial information prepared in accordance with paragraph 29 of Chapter 4 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") with reference to Accounting Guideline 7 "Preparation of Pro Forma Financial Information for Inclusion in Investment Circulars" ("AG7") issued by the Hong Kong Institute of Certified Public Accountants (the "HKICPA").

Our Independence and Quality Control

We have complied with the independence and other ethical requirement of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants ("IESBA"), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

The firms apply International Standard on Quality Control 1 "Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements" and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Reporting Accountants' Responsibilities

Our responsibility is to express an opinion, as required by paragraph 29(7) of Charter 4 of the Listing Rules, on the unaudited pro forma financial information and to report our opinion to you. We do not accept any responsibility for any reports previously given by us on any financial information used in the compilation of the unaudited pro forma financial information beyond that owed to those to whom those reports were addressed by us at the dates of their issue.

We conducted our engagement in accordance with International Standard on Assurance Engagements 3420 "Assurance Engagements to Report on the Compilation of Pro Forma Financial Information Included in a Prospectus" issued by the International Auditing and Assurance Standards Board. This standard requires that the reporting accountants plan and perform procedures to obtain reasonable assurance about whether the directors of the Company have compiled the unaudited pro forma financial information in accordance with paragraph 29 of Chapter 4 of the Listing Rules with reference to AG7 issued by the HKICPA.

For purposes of this engagement, we are not responsible for updating or reissuing any reports or opinions on any historical financial information used in compiling the unaudited pro forma financial information, nor have we, in the course of this engagement, performed an audit or review of the financial information used in compiling the unaudited pro forma financial information.

The purpose of unaudited pro forma financial information included in an investment circular is solely to illustrate the impact of the Acquisition and Disposal on unadjusted financial information of the Group as if the Acquisition and disposal had been undertaken at an earlier date selected for purposes of the illustration. Accordingly, we do not provide any assurance that the actual outcome of the Acquisition and Disposal at 31 December 2017 would have been as presented.

A reasonable assurance engagement to report on whether the unaudited pro forma financial information has been properly compiled on the basis of the applicable criteria involves performing procedures to assess whether the applicable criteria used by the directors in the compilation of the unaudited pro forma financial information provide a reasonable basis for presenting the significant effects directly attributable to the event or transaction, and to obtain sufficient appropriate evidence about whether:

- the related unaudited pro forma adjustments give appropriate effect to those criteria; and

- the unaudited pro forma financial information reflects the proper application of those adjustments to the unadjusted financial information.

The procedures selected depend on the reporting accountants' judgment, having regard to the reporting accountants' understanding of the nature of the Group, the event or transaction in respect of which the unaudited pro forma financial information has been compiled, and other relevant engagement circumstances.

The engagement also involves evaluating the overall presentation of the unaudited pro forma financial information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion:

(a) the unaudited pro forma financial information has been properly compiled on the basis stated;

(b) such basis is consistent with the accounting policies of the Group; and

(c) the adjustments are appropriate for the purposes of the unaudited pro forma financial information as disclosed pursuant to paragraph 29(1) of Chapter 4 of the Listing Rules.

SHINEWING (HK) CPA Limited
Certified Public Accountants
Chan Wing Kit
Practising Certificate Number: P03224
Hong Kong

ShineWing Australia
Chartered Accountants
Rami Eltchelebi
Sydney

The following is the pro forma consolidated statement of financial position of the Group as at 30 June 2018 ("Pro Forma Financial Position"). It has been prepared to reflect the impact of the net proceeds from the Hong Kong IPO and the Australian Entitlement Offer (the "Capital Raising").

The Pro Forma Financial Position of the Group has been prepared in accordance with the recognition and measurement principles prescribed by International Financial Reporting Standards. It has been prepared in an abbreviated form insofar as it does not include all of the disclosures required by International Financial Reporting Standards applicable to annual financial reports prepared in accordance with the Corporations Act.

The Pro Forma Financial Position of the Group has not been audited but has been reviewed by ShineWing Australia in accordance with International Auditing Standards applicable to review engagements.

The Pro Forma Financial Position of the Group is prepared based on the consolidated statement of financial position of the Group as at 30 June 2018 as set out in the Accountants' Report of the Company, the text of which is set out in Appendix IA to this prospectus.

The pro forma adjustments have been prepared using a A$:US$ exchange rate of A$1 = US$0.73.

The following information should be read together with the other information contained in this prospectus, including the risks in risk factors section, to understand the basis, assumptions and limitations underlying the financial information presented.

	The Group as at 30 June 2018	Pro forma adjustment for net proceeds from the Capital Raising	Pro Forma Financial Position of the Group as at 30 June 2018
	A$'M (Note 1)	*A$'M (Note 2)*	*A$'M*
Current assets			
Cash and cash equivalents	485	216	701
Trade and other receivables	561	–	561
Royalty receivable	28	–	28
Non-contingent royalty receivable	18	–	18
Inventories	205	–	205
Other current assets	16	–	16
	1,313	216	1,529
Assets classified as held for sale	57	–	57
	1,370	216	1,586
Non-current assets			
Mining tenements	4,308	–	4,308
Exploration and evaluation assets	577	–	577
Intangible assets	98	–	98
Property, plant and equipment	2,938	–	2,938
Investments accounted for using the equity method	280	–	280
Trade and other receivables	348	–	348
Interest bearing loan to an associate	730	–	730
Royalty receivable	170	–	170
Non-contingent royalty receivable	7	–	7
Deferred tax assets	1,086	8	1,094
Other non-current assets	2	–	2
	10,544	8	10,552
Total assets	11,914	224	12,138
Current liabilities			
Trade and other payables	783	–	783
Interest-bearing liabilities	17	–	17
Provisions	42	–	42
Non-contingent royalty payable	64	–	64
	906	–	906
Non-current liabilities			
Interest-bearing liabilities	4,267	–	4,267
Deferred tax liabilities	990	–	990
Provisions	460	–	460
Non-contingent royalty payable	24	–	24
Other non-current liabilities	2	–	2
	5,743	–	5,743

	The Group as at 30 June 2018	Pro forma adjustment for net proceeds from the Capital Raising	Pro Forma Financial Position of the Group as at 30 June 2018
	A$'M (Note 1)	*A$'M (Note 2)*	*A$'M*
Total liabilities	6,649	–	6,649
Net assets	5,265	224	5,489
Equity			
Contributed equity	6,220	238	6,458
Reserves	(554)	–	(554)
Accumulated losses	(403)	(14)	(417)
Equity attributable to equity holders of the Company	5,263	224	5,487
Non-controlling interests	2	–	2
Total equity	5,265	224	5,489

Notes:

(1) The audited consolidated statement of financial position of the Group as at 30 June 2018 is extracted from the Accountants' Report of the Group as set out in Appendix IA to this Prospectus.

(2) **The Capital Raising**

The Pro Forma Financial Position as at 30 June 2018 includes the following pro forma adjustments as if the Capital Raising had been completed on 30 June 2018.

- An increase in cash and cash equivalents and contributed equity of A$243 million representing the proceeds of the Capital Raising. This assumes the low point of the potential high-low range of the Capital Raising and does not include any over-allotment. The high amount would be A$268 million excluding any over-allotment.

- A decrease in cash and cash equivalents and contributed equity of A$7 million representing transaction costs of the Capital Raising to be capitalised against contributed equity. This assumes the low point of the potential high-low range of the Capital Raising and does not include any over-allotment. The transaction costs capitalised against contributed equity under the high amount would increase to A$8 million excluding any over-allotment.

- A decrease in cash and cash equivalents and an increase in accumulated losses of A$20 million representing transaction costs of the Capital Raising expensed to the statement of profit and loss not recognised at 30 June 2018. A$10 million of transaction costs of the Capital Raising costs were expensed for the period ended 30 June 2018.

- An increase in deferred tax assets of A$8 million, an increase in contributed equity of A$2 million and a decrease in accumulated losses of A$6 million representing the tax effect of the A$7 million and A$20 million transaction costs capitalised and expensed, respectively.

YANCOAL
兖煤澳大利亚有限公司

GLOBAL OFFERING

Volume 2

YANCOAL AUSTRALIA LTD
(Incorporated in Victoria, Australia with limited liability)
STOCK CODE: 3668

YANCOAL
兗煤澳大利亚有限公司

YANCOAL AUSTRALIA LTD
兗煤澳大利亞有限公司*

PROSPECTUS

PART 2 OF 2

This is Part 2 of 2 of the Prospectus. Prospective investors should note this Prospectus is printed in two parts that together form the Prospectus. You should read each part of the Prospectus in conjunction with the other part in order to understand the matters to which the Prospectus relates, particularly the Hong Kong Public Offering. Prospective investors should read each part of the Prospectus before making any application in response to the Hong Kong Public Offering. Copies of the two parts of the Prospectus are available at the locations set out in the section headed "*How to Apply for Hong Kong Offer Shares*" in this Prospectus. In addition, the complete Prospectus is available at www.hkexnews.hk and www.yancoal.com.au.

* *For identification purposes only*

RPMGLOBAL

Competent Person Report

Yancoal Australia Ltd

Job Number: ADV-BR-11019
Report Date: 26 November 2018
Effective Date: 30th June, 2018

RPMGLOBAL

IMPORTANT INFORMATION ABOUT THIS DOCUMENT

1. Client

This report has been produced by or on behalf of RPM Advisory Services Pty Ltd ("RPM") solely for Yancoal Australia Ltd (the "Client").

2. Client Use

The Client's use and disclosure of this report is subject to the terms and conditions under which RPM prepared the report, which permit the Client to file the Report with The Stock Exchange of Hong Kong Limited in accordance with the requirements of Chapter 18 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong (the "Listing Rules") and prepared pursuant to the Listing Rules.

3. Notice to Third Parties

RPM prepared this report for the Client only. If you are not the Client:

- RPM has prepared this report having regard to the particular needs and interests of the Client and in accordance with the Client's instructions. It did not draft this report having regard to any other person's particular needs or interests. Your needs and interests may be distinctly different to the Client's needs and interests and the report may not be sufficient, fit or appropriate for your purposes.
- RPM does not make and expressly disclaims from making any representation or warranty to you – express or implied – regarding this report or the conclusions or opinions set out in this report (including without limitation any representation or warranty regarding the standard of care used in preparing this report, or that any forward-looking statements, forecasts, opinions or projections contained in the report will be achieved, will prove to be correct or are based on reasonable assumptions).
- RPM expressly disclaims any liability to you and any duty of care to you.
- RPM does not authorise you to rely on this report. If you choose to use or rely on all or part of this report, then any loss or damage you may suffer in so doing is at your sole and exclusive risk.

4. Inputs, subsequent changes and no duty to update

RPM has created this report using data and information provided by or on behalf of the Client [and Client's agents and contractors]. Unless specifically stated otherwise, RPM has not independently verified that data and information. RPM accepts no liability for the accuracy or completeness of that data and information, even if that data and information has been incorporated into or relied upon in creating this report (or parts of it).

The conclusions and opinions contained in this report apply as at the date of the report. Events (including changes to any of the data and information that RPM used in preparing the report) may have occurred since that date which may impact on those conclusions and opinions and make them unreliable. RPM is under no duty to update the report upon the occurrence of any such event, though it reserves the right to do so.

5. Mining Unknown Factors

The ability of any person to achieve forward-looking production and economic targets is dependent on numerous factors that are beyond RPM's control and that RPM cannot anticipate. These factors include, however are not limited to, site-specific mining and geological conditions, management and personnel capabilities, availability of funding to properly operate and capitalize the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, unforeseen changes in legislation and new industry developments. Any of these factors may substantially alter the performance of any mining operation.

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Executive Summary

Yancoal Australia Ltd
Level 18, Tower 2, 201 Sussex Street
Sydney NSW 2000
Phone: +61 2 8583 5300
26th November, 2018

RE: Competent Person Report

To Whom it May Concern,

RPM Advisory Services Limited ("RPM") has been engaged by Yancoal Australia Ltd. (ASX:YAL) referred to as ("Yancoal", the "Client" or the "Company") to undertake an Independent Technical Review ("ITR") and compile a Competent Person Report ("CPR" or the "Report") (as defined by Chapter 18 of the Rules Governing the Listing Rules of the Stock Exchange of Hong Kong (the "Listing Rules") on Multiple Coal Assets (the "Assets"). The Assets are located within the Hunter and Central Western Region of New South Wales (NSW) and Central Highlands Region of Queensland, Australia.

The Assets in NSW include Hunter Valley Operations ("HVO"), Mount Thorley Operation and Warkworth Mine (combined "MTW"), Moolarben, Ashton, Austar, Donaldson and Stratford and Duralie Operations, whilst the Queensland assets include Yarrabee and Middlemount Operations in Queensland. Collectively these assets are regarded as the "Projects" or the "Operations". The Ashton, Austar and Donaldson mines are managed by YAL on behalf of Watagan, YAL's unconsolidated, wholly-owned subsidiary. The remaining operations are owned (at various interests) and operated/managed by Yancoal with the exception of Middlemount which is a Joint Venture with Peabody and HVO with the recent formation of a Joint Venture with Glencore.

As at March, 2016 Yancoal lost accounting control of the Watagan Assets (Ashton, Austar and Donaldson), with all material decisions made by the Watagan Board, not Yancoal or its Directors. RPM understands Yancoal is the manager and operator of the mines, pursuant to mining and management services agreements and have day-to-day operational jurisdiction over the operations, however all mine plans for each year and annual capital expenditure and operational expenditure budgets are approved by the Watagan Board. The information contained within this report is based on data provided by the Company and the approved mine plans.

The process and conclusions of the ITR are presented in this Report and will be included in the HKEx prospectus prepared as part of the Initial Public Offering.

The statements of Coal Resources and Coal Reserves (as defined in ***Appendix B***) have been reported to be in accordance with the recommendations of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves JORC Code (2012 Edition) and the Australian Guidelines for the Estimation and Classification of Coal Resources (2014)

RPM's technical team ("the Team") consisted of International Competent Person's, International Senior Consultants, Executive Mining Engineers and Consultant Geologists as well as environmental/social specialists with significant coal mining experience. RPM's Hong Kong Competent Person was responsible for compiling or supervising the compilation of the Report and the JORC reported Statements of Coal Resources and Coal Reserves, stated within. The Team's qualifications and experience is detailed in ***Appendix A*** for reference.

A site visit was conducted by members of the Team to the Assets' operations to familiarise themselves with the Assets characteristics. The site visit to HVO/MTW was undertaken on the 16th February, 2017 by Ms. Trisha, Wilson Mr. Peter Ellis and Mr. Jolyon Peart while all other assets were visited during the weeks of the 23rd and 30th April, 2018. During the site visits the Team inspected the mining operations, the Coal processing plant, the tailings storage facility, the water supply system, the power distribution system and conducted general inspections of the Assets area. The visit was also used to gain a better understanding of the Assets status. The Team had open

discussions with the Company's personnel on technical aspects relating to the relevant issues. The Company's personnel were cooperative and open in facilitating RPM's work.

In addition to work undertaken to generate independent JORC Coal Resources and Coal Reserves estimates, the CPR relies largely on information provided by the Company, either directly from the sites and other offices, or from reports by other organizations whose work is the property of the Company or its subsidiaries. The data relied upon for the JORC Coal Resources and Coal Reserves estimates independently completed by RPM have been compiled primarily by the Client and the Company and subsequently reviewed and verified as well as reasonably possible by RPM. The CPR is based on information made available to RPM as at 26 November, 2018. The Company has not advised RPM of any material change, or event likely to cause material change, to the underlying data, designs or forecasts since the date of Assets inspections.

Asset Summary

- The business consists of multiple open pit and underground operating mines which exploit and process market ready coal products for international demand (***Table 1***). In addition to eight operating mines, the Assets include a re-start project (Donaldson) which is currently on care and maintenance pending re-start at the Company's discretion and the potential MTW underground project. Of importance the Assets include the large world class, low risk open cut operations, HVO, MTW and Moolarben which collectively contribute 80% of all future coal products planned to be sold over the Life of Mine ("LOM") planning period.
- The eight operating mines are located in three areas, the Hunter and Central Western Regions of NSW and Central Highland region of Queensland. Both areas contain a number of medium to large scale coal deposits which are well known geologically and have been in operation for several decades in some instances.
- Run of Mine ("ROM") coal and overburden is mined via conventional truck, shovel/excavator and/or dragline at the open cut operations and via longwall mining methods at the underground operations. The majority of ROM coal is washed at coal handling processing plants ("CHPP") and loaded on trains via dedicated train loading points. All products are transported via rail links to the deep water Ports of Newcastle in NSW and one of three ports in Queensland. A variety of product coals are produced across the group including thermal coal products and metallurgical coal products including semi soft to semi hard coking coal products and pulverised coal injection ("PCI") product. These products can be customised and quantities can be varied based on market and customer demands within each operation and between all operations where rail and port synergies exist to optimise revenue based on short term market trends.
- In addition to the mining and the surface processing plants and office infrastructure, significant regional and local infrastructure provide support to the operations and the forecast production requirements. A review by RPM of the regional and local infrastructure indicates that the area has suitable transport logistics connecting the operating assets to local and international markets for both supply of consumables and transport of product to market. The Projects are located close to well established highways, water sources with power provided via a long-term agreement with electric utility company serving the regions.
- The Assets are operated directly by Yancoal or via various joint venture arrangements with ownership proportions differing between the operations (***Table 1***). Of particular note, a Joint Venture was recently formed between Yancoal and Glencore for HVO and an Operational Integration Agreement ("OIA") allows MTW to be managed as a single integrated operation by the Company. Under the terms of the OIA, export coal can be produced from either area and is allocated between the two joint ventures based on a tonnage commitment ratio. The Middlemount mine is managed by Middlemount Coal Pty Ltd which is an incorporated joint venture between Peabody and Yancoal. Further to this the Ashton, Austar and Donaldson assets are owned by Watagan (wholly owned subsidiary of Yancoal), controlled by Independent Directors however are managed directly by Yancoal pursuant to management agreements systems, plans and the operation of equipment.

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Table 1 Ownership Control of Assets.

Asset	Yancoal Ownership[3]	Operational Control	Type
Hunter Valley Operations ("HVO") - OC	51%	Joint Venture	Met/Thermal
Mount Thorley[1] - OC	80.0%	Yancoal	Met/Thermal
Warkworth[1] - OC	84.47%		Met/Thermal
Moolarben - OC & UG	81%	Yancoal	Thermal
Ashton[2] - OC & UG	100%	Yancoal	Met/Thermal
Yarrabee - OC	100%	Yancoal	PCI/Thermal
Stratford and Duralie - OC	100%	Yancoal	Met/Thermal
Austar[2] - UG	100%	Yancoal	Met
Donaldson[2] - UG	100%	Yancoal	Met/Thermal
Middlemount - OC	50%	Joint Venture	PCI/Met

Note: Supplied by the Company
[1] Mount Thorley and Warkworth mines are referred to in the Report as one operation know as "MTW"
OC = Open Cut, UG = Underground
2 Assets owned by Watagan (wholly owned subsiduary of Yancoal) and managed directly by Yancaol.
3 Based on the ownership at Latest Applicable Date

RPM highlights that the statements contained within this Report all Coal Resources and Coal Reserves within the Assets on a 100% equity basis unless otherwise stated.

Mineral Resource and Ore Reserves Estimates

- The review undertaken by RPM of the drilling and sampling procedures indicates that in general, good practices were used with no material issues noted. RPM also notes the majority of the data used for the Resource estimations were derived from drilling which has followed the Companies procedures and protocols typically considered to be industry standard, however this varies between operations. As such, RPM considers the data which supports the resource estimations to have no material sample bias and is representative of the samples taken. Further details of the data verification and types is provided in ***Section 6***.
- Results of the independent Coal Resources estimates for the Assets as at 30th June, 2018 are tabulated in the Statement of Coal Resources in ***Table 2*** below, which were developed in line with the 2014 Coal Guidelines and reported in line with the requirements of the 2012 JORC and the reporting standards of Chapter 18 of the HKEx Listing Rules. The Statement of Coal Resources is therefore suitable for public reporting. The Statement of Coal Resources shown in ***Table 2*** and graphically in ***Figure 1*** are inclusive and not additional to the Coal Reserves reported in ***Table 3***.
- In addition to the Coal Resources for the operating assets, 16.8Mt of Indicated and 80Mt of Inferred for a total of 96.8Mt of Coal Resources is contained with the Monash Deposit located 25km south of Singleton. The Monash deposit is considered an underground coal target with limited potential for open cut mining.
- The Assets are mature open cut/underground mining operations that have approvals and license to operate for an extended period of time. As part of the Coal Resource reporting, RPM has made a number of general assumptions to define the reasonable prospects for economic extraction, these assumptions are detailed in ***Section 7.6*** for each asset.

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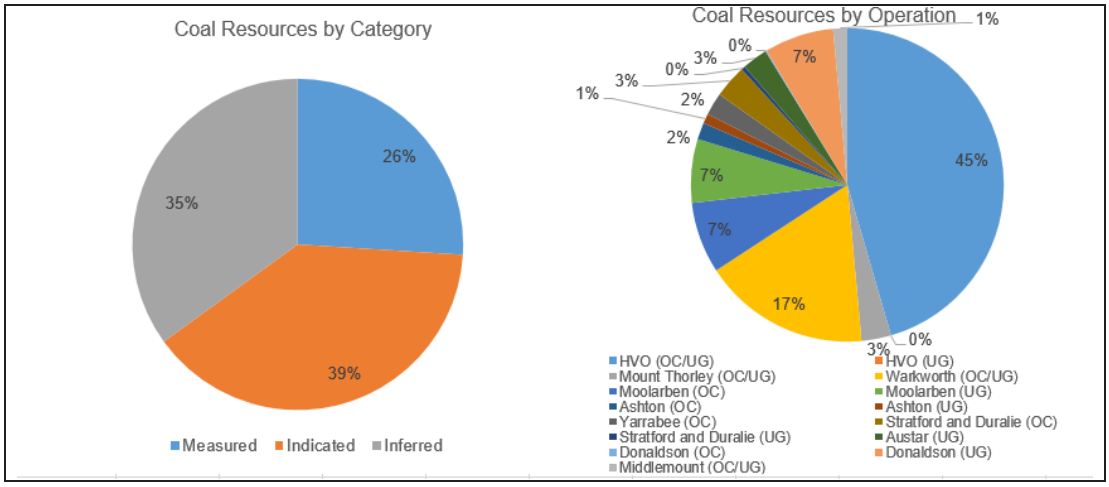
Table 2 Statement of Coal Resources by Operation as at 30th June, 2018.

Operation	Classification				
	Measured (Mt)	Indicated (Mt)	M + I (Mt)	Inferred (Mt)	Total (Mt)
HVO (OC/UG)	704	1,430	2,134	1,654	3,788
Mount Thorley (OC/UG)	27	75	102	153	255
Warkworth (OC/UG)	197	713	910	527	1,437
Moolarben (OC)	438	105	543	69	612
Moolarben (UG)	287	131	418	129	547
Ashton (OC)	25	49	74	70	144
Ashton (UG)	52	18	70	15	85
Yarrabee (OC)	94	80	174	20	194
Stratford and Duralie (OC)	11	196	207	76	283
Stratford and Duralie (UG)	-	1	1	35	36
Austar (UG)	70	80	150	69	219
Donaldson (OC)	10	-	10	-	10
Donaldson (UG)	178	326	503	95	598
Middlemount (OC/UG)	73	47	120	1	121
Total (100% Basis)	**2,165**	**3249**	**5,414**	**2,913**	**8,327**
Yancoal Attributable Share[6]	**1,610**	**2,355**	**3,964**	**1,952**	**5,916**

Notes for Table 2:

1. *The Statement of JORC Coal Resources for HVO, Mount Thorley and and Warkworth have been compiled under the supervision of Mr. Peter Ellis who is a full-time employee of RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Ellis has sufficient experience that is relevant to the style of Coal and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
2. *The Statement of JORC Coal Resources for Yarrabee and Middlemount have been compiled under the supervision of Mr. Michael Johnson who is a sub-consultant to RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Johnson has sufficient experience that is relevant to the style of Coal and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
3. *The Statement of JORC Coal Resources for all others deposits have been compiled under the supervision of Mr. Brendan Stats who is a full-time employee of RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Stats has sufficient experience that is relevant to the style of Coal and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
4. *All Coal Resources figures reported in the table above represent estimates at 30th June, 2018. Coal Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.*
5. *Coal Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Coal Reserves Committee Code – JORC 2012 Edition).*
6. *Based on the ownership at the latest applicable date*

Figure 1 Graphical Representation Coal Resources (100% Basis)



- The Independent Statement of Ore Reserves for the Project is estimated as at the 30th June, 2018 by RPM and reported in accordance with the JORC Code. RPM has confirmed suitable Modifying Factors to apply in the Ore Reserve estimation process following review of site data and technical information contained with studies of at least a pre-feasibility level of confidence. Further information taken into consideration included the proposed life of mine plans, mining method, forecast processing plant recoveries, environmental management and license to operate in addition to the historical performance of each operations. Further details ae provided in ***Section 8, 9 and 10*** for each Asset.
- The Proved and Probable Coal Reserves estimate for each Asset is summarised in ***Table 3*** and shown graphically in ***Figure 2***. The Coal Reserves estimates reported below are included in the Measured and Indicated Coal Resources quantities reported in ***Table 2*** and are not additional to. RPM highlights that approximately 80% of the Coal Reserves are contained within the large world class Tier 1 assets of HVO, MTW and Moolarben.

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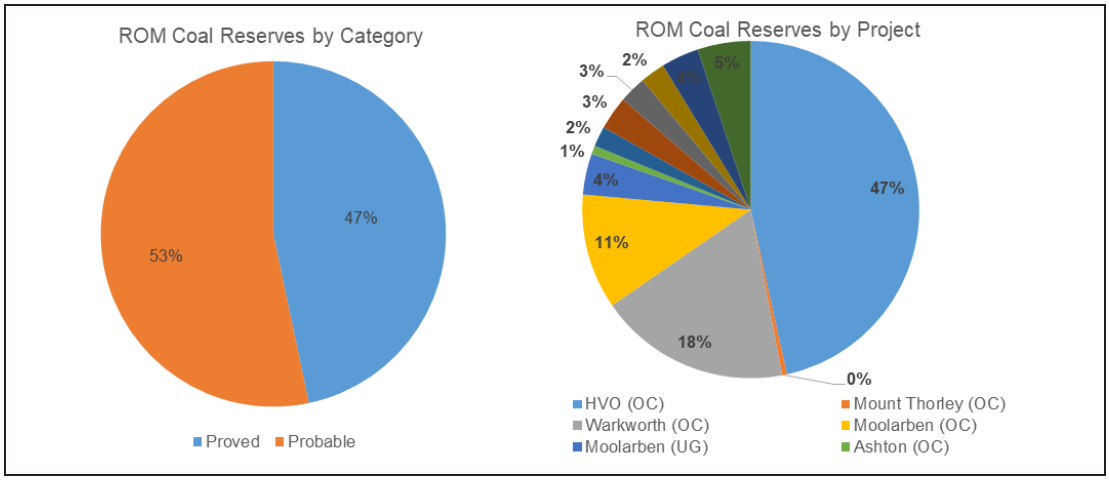
Table 3 Statement of JORC Coal Reserves Estimate within the Final Designs as at 30th June, 2018

Operation	Coal Reserves			Marketable Reserves		
	Proved (Mt)	Probable (Mt)	Total (Mt)	Proved (Mt)	Probable (Mt)	Total (Mt)
HVO (OC)	333	463	796	229	325	554
Mount Thorley (OC)	-	8	8	-	5	5
Warkworth (OC)	125	189	314	87	133	220
Moolarben (OC)	178	12	189	136	12	148
Moolarben (UG)	54	13	67	54	13	67
Ashton (OC)	-	14	14	-	7.8	7.8
Ashton (UG)	23	10	33	13	6	18
Yarrabee (OC)	36	19	55	28	14	42
Stratford and Duralie (OC)	-	44	44	-	26	26
Austar (UG)	-	41	41	-	31	31
Donaldson (UG)	-	62	62	-	32	32
Middlemount (OC)	50	37	87	40	27	67
Total (100% basis)	**799**	**912**	**1,710**	**587**	**632**	**1,218**
Yancoal Attributable Share[5]	**547**	**631**	**1,178**	**406**	**432**	**837**

Notes:

1) *The Statement of JORC Open Cut Coal Reserves has been compiled under the supervision of Mr. Doug Sillar who is a full time Senior Mining Engineer employed by RPM and is a Member of the Australian Institute of Mining and Metallurgy. Mr. Sillar has sufficient experience which is relevant to the style of Coal and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.*
2) *The Statement of JORC Underground Coal Reserves has been compiled under the supervision of Mr. Graeme Rigg who is a full time Senior Mining Engineer employed by RPM and is a Member of the Australian Institute of Mining and Metallurgy. Mr. Rigg has sufficient experience which is relevant to the style of Coal and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.*
3) *Tonnages are metric tonnes*
4) *Figures reported are rounded which may result in small tabulation errors. Coal Reserves have been estimated under the 2012 Edition of the JORC Code.*
5) *Based on ownership at the latest applicbale date.*

Figure 2 Graphical Representation JORC Coal Reserves Estimate within the Final Designs



- To determine the economic viability of the Coal Reserves, RPM undertook a variety of analyse including review of Company margin ranking/pit optimisation and independent break even strip ratio analysis to confirm appropriate pit designs as well as underground mine design reviews. Following confirmation of the design, the quantities and Life of Mine schedules were reviewed and/or updated and discounted cashflow models were constructed to confirm economic viability for each asset. RPM highlights that each asset was considered a separate standalone operation for the cashflow analysis with no blending or cross cost sharing assumed which typically occur on a short term basis. While RPM is aware blending may occur between operations, this was not included as it is difficult to quantify over the long mine lives and would present an upside case versus the assumed base case which should be utilised for the estimation of Coal Reserves.

Exploration Potential

- Exploration has been undertaken over numerous generations over the last decades with the main focus on the areas for which Coal Resources have been estimated. Although these areas have a long history of exploration, RPM considers there to be reasonable potential to define extensions to the coal seams within the Project areas both near planned mining infrastructure and within the broader exploration concession. In addition RPM considers the large concession holding of the Company within particular projects contains numerous targets which present opportunities to increase the resource base and potentially add feed sources to the plant in turn increasing the mine life. ***Section 7.5*** outlines the potential for each asset.

Mining and Production

- All mining operations at the assets are mined via conventional truck, shovel and/or dragline open cut or via underground Longwall mining methods. The majority of ROM coal is washed at coal handling processing plants ("CHPP") and loaded on trains via dedicated train loading points. All products are transported via rail links to the deep water Ports of Newcastle or one of three ports in Queensland.
- The Life of Mine schedules were developed by RPM in conjunction with the Company targeting a variety of ROM Coal production rates dependent on the operation. These vary between 2 Million Tonnes per Annum (Mtpa) at Stratford and Duralie up to 20.6Mtpa at HVO as outlined in ***Table 5***. Each open pit operation consists of numerous open pits which are mined at various times throughout the mine life, while the underground operations typically target specific seams which are mined in spatial areas (known as longwall panels) within the same seam.

- The majority of the assets are at stable production with no significant expansions required to achieve the LOM production quantities planned. As such the groups ROM and Product coal annual production is relatively stable over the next 10 years ranging between 70 and 75Mt ROM before decreasing production with assets nearing the end of their current planned mine life, such as Ashton, Austar and Middlemount. RPM has estimated the total LOM Schedule (including inferred) to achieve a variety of mine life's which range from 11 up to 43 years (***Table 4*** and ***5***). RPM notes that the key low cost assets of HVO, MTW and Moolarben each have mine life's of at least 20 years (43 for HVO) with the highest production rates in the group ranging between 17 and 20.6Mtpa.

Table 4 Operations Mine Life's as at 30th June, 2018

Operation	Mine life (Years)
HVO	43
MTW	23
Moolarben	20
Yarrabee	38
Austar	17
Ashton	13
Stratford and Duralie	35
Donaldson	11
Middlemount	20

- The CHPP facilities are well-established and capable of processing the forecast ROM Coal, with the exception of Ashton and Yarrabee. The operations require upgrades to achieve planned rates for which CAPEX is included in the forecast. While the infrastructure is comparatively old in some operations, it appears to be reasonably well maintained which is required and forecast to continue. All operations utilised CHPP's which are owned and located onsite with the exception of Donaldson which is planned to utilise a third party CHPP located 3km from site. The LOM Coal yields vary between operations based on coal qualities for each seam, however the groups LOM forecast based on the expected bypass and throughputs varies between 71% and 76% with a LOM total average of 75%.

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Table 5 LOM Consolidated Schedule

Operation	Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2060	Total LOM
HVO	ROM Coal	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Coal Processed	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Plant Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.9	69.2	69.6
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coal Product	Mt	7.3	14.4	14.5	14.6	14.6	14.7	14.8	14.8	14.6	14.6	14.5	14.2	14.3	14.2	13.9	13.8	10.7	567.4
	Effetive Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.8	69.6	69.6
MTW	ROM Coal	Mt	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			368.1
	Coal Processed	Mt	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			368.1
	Plant Yield	%	69.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.6			69.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
	Coal Product	Mt	5.9	11.5	11.8	11.9	11.8	11.9	11.8	11.8	11.7	11.6	11.6	11.4	11.6	11.6	10.4			256.5
	Effetive Yield	%	69.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.4			69.7
Moolarben	ROM Coal	Mt	8.9	18.9	20.0	20.0	20.0	18.8	18.7	18.6	17.6	15.5	12.0	11.9	11.3	11.4	1.3			270.6
	Coal Processed	Mt	6.1	13.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	12.0	12.0	11.9	11.3	11.4	1.3			212.7
	Plant Yield	%	71.8	77.1	74.6	72.8	75.4	75.4	76.4	77.7	78.4	78.5	78.4	78.4	78.4	77.8	74.1			76.9
	Coal Bypassed	Mt	2.8	5.9	7.0	7.0	7.0	5.8	6.7	6.6	5.6	3.5								57.9
	Coal Product	Mt	8.1	15.9	16.7	16.5	16.8	15.6	15.9	15.9	15.1	13.0	9.4	9.3	8.8	8.9	0.9			222.3
	Effetive Yield	%	90.8	84.2	83.5	82.3	84.0	83.0	84.9	85.6	85.3	83.4	78.4	78.4	78.4	77.8	70.2			82.1
Yarabee	ROM Coal	Mt	2.1	4.0	4.3	4.8	4.6	5.2	5.1	4.9	5.2	4.2	4.2	4.2	4.0	4.2	4.0	4.0	3.5	147.6
	Coal Processed	Mt	1.1	2.3	3.2	3.6	3.4	3.6	4.1	4.1	4.1	3.5	3.4	3.5	3.4	3.5	3.4	3.4	2.7	120.6
	Plant Yield	%	78.8	85.5	75.9	78.6	76.5	77.4	74.0	74.7	80.4	75.8	75.5	74.1	74.1	73.8	73.4	74.1	75.8	76.1
	Coal Bypassed	Mt	0.9	1.7	1.1	1.2	1.2	1.6	1.0	0.8	1.1	0.7	0.8	0.7	0.6	0.7	0.6	0.5	0.8	26.9
	Coal Product	Mt	1.8	3.7	3.5	4.0	3.8	4.4	4.0	3.9	4.4	3.4	3.4	3.3	3.1	3.3	3.1	3.1	2.9	117.5
	Effetive Yield	%	88.2	91.5	82.0	83.8	82.9	84.4	79.2	78.7	84.4	79.9	79.9	78.2	77.9	77.9	77.1	77.5	82.0	79.6
Austar	ROM Coal	Mt	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6				42.6
	Coal Processed	Mt	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6				42.6
	Plant Yield	%	0.0	86.0	79.0	74.0	70.0	73.0	68.0	70.0	73.0	67.0	73.0	71.0	77.0	73.1				72.9
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
	Coal Product	Mt	0.0	1.4	1.7	2.1	1.9	2.0	2.1	2.0	2.4	1.7	2.0	2.2	1.9	1.9				31.0
	Effetive Yield	%	0.0	86.0	79.0	74.0	70.0	73.0	68.0	70.0	73.0	67.0	73.0	71.0	77.0	73.1				72.9
Ashton	ROM Coal	Mt	1.5	3.4	2.9	2.6	2.4	2.8	3.1	5.7	6.2	5.7	5.9	4.8	0.6					47.6
	Coal Processed	Mt	1.5	3.4	2.9	2.6	2.4	2.8	3.1	5.7	6.2	5.7	5.9	4.8	0.6					
	Plant Yield	%	49.1	52.6	54.9	53.5	52.7	59.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1					56.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0
	Coal Product	Mt	0.7	1.8	1.6	1.4	1.3	1.7	1.8	3.1	3.6	3.3	3.5	2.9	0.3					27.0
	Effetive Yield	%	49.1	52.6	54.9	53.5	52.7	59.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1					56.7
Stratford Duralie	ROM Coal	Mt	0.5	1.1	1.7	1.9	1.8	1.3	1.6	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	68.2
	Coal Processed	Mt	0.5	1.1	1.7	1.9	1.8	1.3	1.6	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	68.2
	Plant Yield	%	49.9	56.9	59.4	57.8	58.3	62.4	67.6	64.8	60.1	60.5	60.8	61.4	61.3	61.2	55.3	54.4	36.2	58.4
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coal Product	Mt	0.2	0.6	1.0	1.1	1.0	0.8	1.1	1.3	1.2	1.2	1.2	1.2	1.4	1.2	1.1	1.1	0.7	38.2
	Effetive Yield	%	49.9	56.9	59.4	57.8	58.3	62.4	67.6	64.8	60.1	60.5	60.8	61.4	61.3	61.2	55.3	54.4	36.2	56.0
Middlemount	ROM Coal	Mt	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4				100.4
	Coal Processed	Mt	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4				100.4
	Plant Yield	%	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	75.9	76.1				75.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
	Coal Product	Mt	2.1	4.1	4.2	4.2	4.2	4.2	4.1	4.0	4.0	4.0	3.8	4.0	4.1	4.1				76.0
	Effetive Yield	%	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	75.9	76.1				75.7
Total	ROM Coal	Mt	**34.6**	**71.9**	**74.1**	**75.1**	**74.4**	**73.8**	**74.6**	**77.0**	**77.1**	**72.7**	**69.6**	**68.6**	**63.3**	**62.9**	**42.6**	**25.7**	**20.9**	**1,859.9**
	Coal Product	Mt	**26.2**	**53.4**	**55.1**	**55.6**	**55.3**	**55.2**	**55.7**	**56.8**	**56.9**	**52.8**	**49.4**	**48.5**	**45.5**	**45.3**	**29.3**	**18.0**	**14.3**	**1,377.7**

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- An average of 228 Million AUD (ranging between 258 Million AUD in 2021 to 535 Million AUD in 2020 over the next 10 years) is required per year for Growth and Sustaining CAPEX. The majority of the CAPEX is required at HVO, MTW and Moolarben while Yarrabee, due to it mine life, also requires significant sustaining CAPEX. As outlined in ***Section 9***, the operations require continued replacement and sustained maintenance for both mobile and fixed plant to ensure the required production performance and processing yield. New and replacement production fleet (draglines, trucks, excavators) capital encompasses the majority of the sustaining capital for operations (approximately 60%). The remainder of the capital includes replacement and maintenance of the CHPP's and site infrastructure construction. RPM considers the forecast reasonable to support the LOM schedule.
- Forecast operating costs for the LOM Schedule (including inferred) vary between the operations as outlined in ***Table 6*** for Free of Rail (FOR) and Free on Board (FOB)**.** Further breakdowns inclusive of annualised costs are provided in ***Section 14*** as well as ***Appendix G*** for reference. Review of the forecasts clearly highlights the differentiation between the HVO, MTW and Moolarben low cost operations versus the remainder. RPM considers the forecasts reasonable and achievable

Table 6 LOM Average Operating Costs

Operation	Centre	Unit	LOM Average Cost
HVO	**FOR**	**AUD/t prod**	45.8
	FOB	**AUD/t prod**	67.2
MTW	**FOR**	**AUD/t prod**	49.3
	FOB	**AUD/t prod**	67.1
Moolarben	**FOR**	**AUD/t prod**	25.9
	FOB	**AUD/t prod**	50.4
Yarrabee	**FOR**	**AUD/t prod**	85.2
	FOB	**AUD/t prod**	124.8
Ashton	**FOR**	**AUD/t prod**	67.1
	FOB	**AUD/t prod**	91.3
Austar	**FOR**	**AUD/t prod**	70.5
	FOB	**AUD/t prod**	95.6
Stratford and Duralie	**FOR**	**AUD/t prod**	80.4
	FOB	**AUD/t prod**	107.1
Donaldson	**FOR**	**AUD/t prod**	34.1
	FOB	**AUD/t prod**	93.8
Middlemount	**FOR**	**AUD/t prod**	87.5
	FOB	**AUD/t prod**	133.1

Source: Unit Costs were provided by the Company however were adjusted to reflect RPM independent Coal Reserve schedule. LOM Unit costs vary to the Company's due to unit costs changes and production schedule variations.

Environmental, Health, Social and Safety

- The Assets have exhibited a high degree of environmental compliance over recent years. Several independent audits have been completed over the past 3 years on the assets with no material issues noted. The Company have a developed Health, Safety and Environment (HSE) Management System with corresponding resources in terms of staffing and processes in place. One area in which regulatory compliance has been lagging has been the management of water on-site at HVO, including in respect to water pollution incidents. These however, are not expected to pose an ongoing regulatory risk with improved management systems implemented onsite and as such are not considered a risk to the forecast operation.
- Recent reviews of risks and exposure associated with Native Title and Aboriginal Land Claims was conducted in June 2016, the results of which are contained in the Hunter Valley Native Title and Aboriginal Land Claim Risk Register. The review states that while Native Title has not been extinguished for some areas (including land, water ways and access roads)., the majority of the Assets holdings are not subject

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to native title claims and that any outstanding areas and claims do not impact the current life of mine plan as presented in this Report.

- The MTW, Stratford and Moolarben mines have been the subject of a medium to high community complaint frequency, largely as a result of noise and dust emissions. As a result the Company has put in place several management strategies and increasingly efficient noise attenuation systems and noise and dust early warning monitoring systems. These trigger the temporary shut-down of mobile plant as noise levels in nearby communities approach regulatory limits. This implementation has resulted in a marked reduction in complaints in recent times and RPM highlights these shut downs are incorporated into the forecast utilisation. In addition, the Company has established a community management system to manage these issues as per good industry practice. Management measures in place support the assumption that the forecast plans will be ultimately accepted by communities. This includes the on-track progress in obtaining approval for the upcoming closing of a community road, which RPM is aware is nearing completion.
- In line with all operating coal mines in the regions, the Assets have accumulated heavy-metal contaminated waste rock in the disposal/storage facilities and these potential contamination factors have not been thoroughly quantified and assessed, however based on the prevailing geo-chemistry of tailings materials in the region, the risk of highly mobile and bio-available contamination is considered unlikely.
- Continuous and phased rehabilitation of mined out areas has been taking place, with an acceptable level of success measured against established criteria for the areas having had the longest regeneration time. Mine closure costs are budgeted beyond the operational expenditures associated with the continuous rehabilitation.
- Several Coal Bursts have occurred within the Austar mine which have resulted in loss of production and forced shutdowns. RPM is aware the company has introduced a number of measures to manage the issue. The longwall operation at Austar is currently not operating as the Company is seeking approval to recommence following development of revised management systems, plans and the operation of equipment.

The Key Opportunities Identified during the ITR include.

While various opportunities exist to increase the value of the Projects, including the exploration potential and the inferred material within the schedules, given the very long mine life, RPM for reference presents below what are considered to be the opportunities which could have a material effect on both the mine life presented in this report and/or the value of the Project.

- **HVO/MTW Underground** – As further outlined in ***Section 16*** this would include multiple working areas and could be undertaken in conjunction with the current open pit operations. If undertaken this would increase ROM production by up to 5 to 7Mtpa and have the added advantage of augmenting take or pay commitments of the groups operation in the short term which are included in the forecast OPEX. Further studies are required to confirm the optimised project ahead of corporate investment decision.
- **HVO Boundary Coal Pillar** – The current Coal Reserves and LOM plans excludes significant coal within the boundary pillar of the tenement holdings due to the inability of mining across the tenement boundary on the neighbouring tenement (***Figure 9-3***) without agreements in place. A high level study indicates that an additional ROM coal tonnage of between 100 and 120Mt could be exploited with extensions of the West, Carrington East, Riverview and Cheshunt Deep pits. Integrated mine planning is required to realise potential upside in LOM plans and Reserves for the site.
- **Blending** – The current LOM plan presented in this Report and the supporting cashflow analysis, assumes no blending occurs either within the operations or between the operations. The products generated by the operations are generally high value coal types and blending based on product qualities can realise additional value rather than selling single products from the operations. In addition, as the Company further incorporates HVO/MTW into its operations this blending strategy could be used to further optimise mining operations in both short and medium term planning through careful and meticulous mine plans focusing on:
  - Maximising the exploitation of the in situ resources by potentially increasing pit limits using improved revenue streams and
  - Incorporating the ability to react quickly to market condition by changing the short term mine plan to target seams with specific coal qualities.
- **Moolarben Expansion** –The expansion of the open cut involves optimisations of the approved Stage 1 and Stage 2 operations to increase site ROM coal production to 24Mtpa from the current circa 18Mtpa.

The Modification also involves a minor extension to the OC2 pit limit, minor extensions and reductions of the OC3 pit limits, rehabilitation, water management and relocated/additional surface infrastructure. The successful implementation of the Stage 2 expansion at Moolarben demonstrates the Company's ability to achieve organic growth targeting low cost/high margin coal.

The Key Risks Identified during the ITR include.

While various risks have been identified, given the very long mine life's, the risks RPM presents below are considered to be the risks that could potentially affect the Company's ability to achieve the mine life as presented in the Report and/or the value of the Project's current LOM schedule and do not include any risks associated with the upside. Further low risks as well as upside risk for the potential underground are presented in ***Section 17***.

- **Community Relations (MTW, Stratford and Moolarben):** Communities have voiced grievances against some mine operations, in particular regarding noise and dust emissions, leading to equipment downtime and subsequent investment in noise attenuation equipment for mobile and fixed plant.
- **Coal Bursts – Austar**: Several Coal Bursts have occurred within the Austar mine which have resulted in loss of production and forced shutdowns. RPM is aware the company has introduced a number of measures to manage the issue. The longwall operation at Austar is currently not operating as the Company is seeking approval to recommence following development of revised longwall management systems, plans and the operation of equipment systems, plans and the operation of equipment.
- **Austar Restart** - RPM is aware that the Austar permit for the operation of the longwall has recently been suspended following coal bursts in 2018 and now has approval for limited longwall activities under controlled conditions. Limited operations at Austar recommenced on 14 August 2018 subject to certain conditions which the mine can comply with however full scale operations are as yet to recommence.

Limitations and Exclusions

RPM's review was based on various reports, plans and tabulations provided by the Client or the Company either directly from the mine site and other offices, or from reports by other organizations whose work is the property of the Client or the Company. Neither Client nor the Company has not advised RPM of any material change, or event likely to cause material change, to the operations or forecasts since the date of Assets inspections.

The work undertaken for this Report is that required for a technical review of the information, coupled with such inspections as the Team considered appropriate to prepare this Report.

It specifically excludes all aspects of legal issues, commercial and financing matters, land titles and agreements, except such aspects as may directly influence technical, operational or cost issues and where applicable to the JORC Code guidelines.

RPM has specifically excluded making any comments on the competitive position of the Relevant Assets compared with other similar and competing producers around the world. RPM strongly advises that any potential investors make their own comprehensive assessment of both the competitive position of the Relevant Assets in the market and the fundamentals of the seaborne export coal at large.

Limited Liability

This Report has been prepared by RPM for the purposes of Client for inclusion in its Prospectus in respect of the proposed Listing of the Assets in accordance with the Listing Rules and is not to be used or relied upon for any other purpose. RPM will not be liable for any loss or damage suffered by a third party relying on this report or any references or extracts therefrom contrary to the purpose (regardless of the cause of action, whether breach of contract, tort (including negligence) or otherwise) unless and to the extent that RPM has consented to such reliance or use.

Responsibility and Context of this Report

The contents of this Report have been based upon and created using data and information provided by or on behalf of Client or the Company. RPM accepts no liability for the accuracy or completeness of data and information provided to it by, or obtained by it from Client, the Company or any third parties, even if that data and information has been incorporated into or relied upon in creating this report. The report has been produced by RPM in good faith using information that was available to RPM as at the date stated on the cover page and is to be read in conjunction with the Prospectus which has been prepared and forms part of the referenced transaction.

This report contains forecasts, estimates and findings that may materially change in the event that any of the information supplied to RPM is inaccurate or is materially changed. RPM is under no obligation to update the information contained in the report.

Notwithstanding the above, in RPM's opinion, the data and information provided by or on behalf of Client or the Company was reasonable and nothing discovered during the preparation of this Report suggests that there was a significant error or misrepresentation of such data or information.

Indemnification

Client has indemnified and holds harmless RPM and its subcontractors, consultants, agents, officers, directors and employees from and against any and all claims, liabilities, damages, losses and expenses (including lawyers' fees and other costs of litigation, arbitration or mediation) arising out of or in any way related to:

- RPM's reliance on any information provided by Client and the Company; or
- RPM's services or materials; or
- Any use of or reliance on these services or material,

save and except in cases of death or personnel injury, property damage, claims by third parties for breach of intellectual property rights, gross negligence, wilful misconduct, fraud, fraudulent misrepresentation or the tort of deceit, or any other matter which be so limited or excluded as a matter of applicable law (including as a Competent Person under the Listing Rules) and regardless of any breach of contract or strict liability by RPM.

Mining Unknown Factors

The findings and opinions presented herein are not warranted in any manner, expressed or implied. The ability of the operator, or any other related business unit, to achieve forward looking production and economic targets is dependent upon numerous factors that are beyond RPM's control and which cannot be fully anticipated by RPM. These factors include site specific mining and geological conditions, the capabilities of management and employees, availability of funding to properly operate and capitalise the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, etc. Unforeseen changes in legislation and new industry developments could substantially alter the performance of any mining operation.

Capability and Independence

RPM provides advisory services to the mining and finance sectors. Within its core expertise it provides independent technical reviews, resource evaluation, mining engineering and mine valuation services to the resources and financial services industries.

RPM has independently assessed the Assets by reviewing pertinent data, including resources, reserves, manpower requirements and the life of mine plans relating to productivity, production, operating costs and capital expenditures. All opinions, findings and conclusions expressed in this Report are those of RPM and its specialist advisors.

Drafts of this Report were provided to Client, however only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in this Report.

RPM has been paid and has agreed to be paid, professional fees based on a fixed fee estimate for its preparation of this Report. Its remuneration is not dependent upon the findings of this Report or on the outcome of the transaction.

None of RPM or its directors, staff or specialists who contributed to this Report have any economic or beneficial interest (present or contingent), in:

- the Assets, securities of the companies associated with the Assets or that of Client; or
- the right or options in the Relevant Assets; or
- the outcome of the proposed transaction.

This CPR was compiled on behalf of RPM by the signatories to this CPR, details of whose qualifications and experience are set out in ***Appendix A*** of this CPR. The specialists who contributed to the findings within this CPR have each consented to the matters based on their information in the form and context in which it appears.

RPM Qualifications and Experience

RPM's advisory division operates as independent technical consultants providing services across the entire mining life cycle including exploration and Assets feasibility, resource and reserve evaluation, mining engineering and mine valuation services to both the mining and financial services industries.

RPM is the market leader in the innovation of advisory and technology solutions that optimize the economic value of mining Assets and operations. RPM has serviced the industry with a full suite of advisory services for over 50 years and is the largest publicly traded independent group of mining technical experts in the world having completed over 14,000 studies across all major commodities and mining methods and worked in over 118 countries globally. This report was prepared on behalf of RPM by technical specialists, details of whose qualifications and experience are set out in **Appendix A**.

RPM has been paid and has agreed to be paid, professional fees for its preparation of this report; however, none of RPM or its directors, staff or sub-consultants who contributed to this report has any interest or entitlement, direct or indirect in:

- the Company, securities of the Company or companies associated with the Company; or
- The right or options in the relevant Assets.
- The work undertaken is an ITR of the information provided by or on behalf of the Company, as well as information collected during site inspections completed by RPM as part of the ITR process. It specifically excludes all aspects of legal issues, marketing, commercial and financing matters, insurance, land titles and usage agreements and any other agreements/contracts that Company may have entered into.

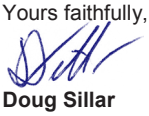
RPM does not warrant the completeness or accuracy of information provided by the Company which has been used in the preparation of this report.

The title of this report does not pass to the Client until all consideration has been paid in full.

Drafts of this report were provided to the Client, however only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in the report.

Generally, the data available was sufficient for RPM to complete the scope of work. The quality and quantity of data available and the cooperative assistance, in RPM's view, clearly demonstrated the Company's assistance in the ITR process. All opinions, findings and conclusions expressed in the report are those of RPM and its specialist advisors.

Yours faithfully,



Doug Sillar
Senior Mining Engineer (Competent Person – Hong Kong Chapter 18)
RPMGlobal

RPMGLOBAL

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1. Introduction

RPM Advisory Services Pty Ltd ("RPM") has been engaged by Yancoal Australia Ltd. (ASX:YAL) referred to as ("Yancoal", the "Client" or the "Company") to undertake an Independent Technical Review ("ITR") and compile a Competent Person Report ("CPR" or the "Report") (as defined by Chapter 18 of the Rules Governing the Listing Rules of the Stock Exchange of Hong Kong (the "Listing Rules") on Multiple Coal Assets (the "Assets"). The Assets are located within the Hunter and Central Western regions of New South Wales and Central Highlands Region of Queensland, Australia (***Figure 1-1***).

The Assets include Hunter Valley Operations ("HVO"), Mount Thorley Warkworth ("MTW"), Moolarben, Ashton, Austar, Donaldson and Stratford and Duralie Operations in NSW and Yarrabee and Middlemount operations in Queensland. All operations are owned (at various interests) and operated/managed by Yancoal with the exception of Middlemount which is a Joint Venture with Peabody and HVO with the recent formation of a Joint Venture with Glencore.

As at March, 2016 Yancoal lost accounting control of the Watagan Assets (Ashton, Austar and Donaldson), with all material decisions made by the Watagan Board, not Yancoal or its Directors. RPM understands Yancoal is the manager and operator of the mines, pursuant to mining and management services agreements and have day-to-day operational jurisdiction over the operations, however all mine plans for each year and annual capital expenditure and operational expenditure budgets are approved by the Watagan Board. The information contained within this report is based on data provided by the Company and the approved mine plans.

1.1 RPM Scope of Work

RPM's scope of work included:

- Gathering of relevant information on the Assets including resources and reserves information, Life if Mine ("LOM") production schedules and operating and capital cost information;
- Reviewing of the Company's resources and reserves, including quantity and quality of drilling, reliability of data and adequacy of resource and reserve estimation methods;
- Estimation of independent Coal Resources and Coal Reserves (as defined in ***Appendix B***) reported in compliance with the recommended guidelines of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"), prepared by the Joint Ore Reserves Committee ("JORC") and the Australian Guidelines for the Estimation and Classification of Coal Resources (2014);
- Reviewing and commenting on the exploration prospect of the Assets;
- Reviewing and commenting on forecast operating and capital expenditures in the relevant technical studies;
- Reviewing the Assets short term and long term development plans;
- High level review of the environmental, health and safety risks and management plans for the Assets; and
- Compilation of a CPR as defined under Chapter 18 of the Hong Kong Listing Rules.

1.2 Relevant Assets

The Assets are located in NSW and QLD Australia and include both open cut and underground operations with associated onsite coal processing and handling infrastructure. Coal products include a range of thermal coal products as well as semi soft coking coal products, semi hard coking products and Pulverised Coal Injection (PCI) coal products. All NSW products are currently exported through the Port of Newcastle which allows direct access to international markets via the Pacific Ocean (***Figure 1-1***), while the QLD products are exported through three ports in Queensland.

The relevant assets included in this Report are outlined in ***Table 1-1*** below.

RPM highlights that the statements contained within this Report all Coal Resources and Coal Reserves within the Assets on a 100% equity basis unless otherwise stated.

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Table 1-1 Operating Asset List

Asset	Yancoal Ownership[4]	Operational Control	Type
Hunter Valley Operations ("HVO") - OC	51%	Joint Venture	Met/Thermal
Mount Thorley[1] - OC	80%	Yancoal	Met/Thermal
Warkworth[1] - OC	84.47%	Yancoal	Met/Thermal
Moolarben - OC & UG	81%	Yancoal	Thermal
Ashton[2] - OC & UG	100%	Yancoal[2]	Met/Thermal
Yarrabee - OC	100%	Yancoal	PCI/Thermal
Stratford and Duralie[3] - OC	100%	Yancoal	Met/Thermal
Austar[2] - UG	100%	Yancoal[2]	Met
Donaldson[2] - UG	100%	Yancoal[2]	Thermal
Middlemount - OC	49.99%	Joint Venture	PCI/Met

Note: Supplied by the Company
[1] Mount Thorley and Warkworth mines are referred to in the Report as one operation know as "MTW"
OC = Open Cut, UG = Underground
2 Assets owned by Watagan (wholly owned subsiduary of Yancoal) and managed directly by Yancoal.
3 Stratford and Duralie are separate mine with a common CHPP and Management
4 Based on owenership at the latest applicable date

In addition to the operating assets listed above, an exploration asset Monash is located 16km south west of MTW. This asset has Coal Resources declared and is considered a greenfield project.

1.3 Review Methodology

RPM's ITR methodology was as follows:

- Review existing reports and data;
- Conduct a Competent Person's site visit;
- Discussions with Assets personnel of the Company prior to and following the site visit;
- Independent Estimation and Reporting of Coal Resources and Coal Reserves in accordance with the JORC Code (2012) and Australian Coal Guidelines (2014); and
- Preparation of a CPR and provision of drafts of the CPR to Client's personnel to ensure factual accuracy and reasonableness of assumptions.

The comments and forecasts in this CPR are based on information compiled by enquiry and verbal comment from the Client and Assets personnel from the Company. Where possible, this information has been checked with hard copy data or by comment from more than one source. Where there was conflicting information on issues, RPM used its professional judgment to assess the issues.

1.4 Site Visits and Inspections

RPM visited HVO/MTW operations on the date of 16th February, 2017 and the remainder between the dates of April 16th and April 28th 2018 to perform technical due diligence on the Assets. RPM's site visit team consisted of:

- Trisha Wilson, Senior Mining Engineer visited HVO/MTW in 2017 and Stratford and Duralie in 2018;
- Peter Ellis, Principal Geologist, visited MTW and HVO in 2017;
- Chris Turvey, Associate Geologist, reviewed and completed the site visit for Stratford and Duralie;
- Greg Eisenmenger, Executive Consultant, Mining; visited Yarrabee and Middlemount;
- Michael Johnson, Associate Geologist visited Middlemount and Yarrabee;
- Graeme Rigg, Principal Mining Engineer visited Ashton, Austar, Donaldson;
- David McMillian, Principal Mining Engineer, visited Moolarben and

- Brendan Stats, Senior Geologist, visited Moolarben.

RPM notes that Hong Kong Competent Person (Mr. Doug Sillar) has not visited all sites, however the JORC Competent Persons (Peter Ellis, Michael Johnson and Brendan Stats) for Coal Resource have. As part of the Hong Kong Competent Person responsibilities Mr. Sillar has relied on the relevant experts who completed the site visit as part of his confirmation of the works completed.


DARWIN
CORAL
SEA
NORTHERN
TERRITORY
Bowen
Mackay
MIDDLEMOUNT
QUEENSLAND
YARRABEE
Gladstone
BRISBANE
SOUTH
AUSTRALIA
STRATFORD / DURALIE
NEW SOUTH
WALES
ASHTON
MOOLARBEN
DONALDSON
HVO
Newcastle
MTW
AUSTAR
ADELAIDE
SYDNEY
SOUTHERN OCEAN
CANBERRA
A.C.T.
TASMAN
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VICTORIA
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HOBART
RPMGLOBAL
Operating Mine
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DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
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兖煤澳大利亚有限公司
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
GENERAL LOCATION PLAN
FIGURE No.
1-1
PROJECT No.
ADV-BR-11019
Date
November 2018

1.5 Information Sources

Several geology studies, feasibility studies, design reports, life of mine budgets and schedules were provided for the Assets as well as recent operational data. This information was either supplied via an online data room or in a bulk information download for large packages of data.

1.6 Competent Person and Responsibilities

The Statements of Coal Resources and Coal Reserves have been reported in accordance with the recommended guidelines of the JORC Code and are suitable for inclusion in a CPR as defined by Chapter 18 of the Listing Rules.

HKEx Competent Person

Mr. Doug Sillar meets the requirements of a Competent Person, as defined by Chapter 18 of the Listing Rules. These requirements include:

- Greater than five years' experience relevant to the type of deposit;
- Member of the Australian Institute of Mines and Metallurgy ("AUSIMM"), which is a Recognised Professional Organisation as per the HKEx and JORC Code;
- Does not have economic or beneficial interest (present or contingent) in any of the reported Relevant Assets;
- Has not received a fee dependent on the findings outlined in the Competent Person's Report;
- Is not an officer, employee or proposed officer for the Client or any group, holding or associated company of the issuer; and
- Assumes overall responsibility for the Competent Person's Report.

Doug Sillar (Hong Kong Competent Person) (MAUSIMM)

Team Responsibility

Additional members of the team who have worked to compile this report include the following:

- Ms. Amanda Antcliff - Amanda was responsibility for the review of the environmental and social aspects of the Assets.
- Mr. Jeremy Clark - Jeremy was responsible for internal peer review of the Report.
- Mr. Philippe Baudry- Philippe was responsible for the final internal peer review and approval of the Report.

JORC Competent Persons

The Competent Persons for JORC Coal Resources were responsible for review of the borehole database and estimation of the Coal Resources stated within this Report. The Competent Person for JORC Reserves was responsible for review of the mining parameters, mine scheduling and estimation of the Open Cut Coal Reserves stated within this Report. The persons responsible for each Asset is listed in ***Table 1-2.***

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Table 1-2 JORC Competent Person Responsibility

	Coal Resources	Coal Reserves – Open Cut	Coal Reserves – Underground
HVO	Mr Peter Ellis	Mr Doug Sillar	-
MTW	Mr Peter Ellis	Mr Doug Sillar	-
Moolarben	Mr Brendan Stats	Mr Doug Sillar	Mr Graeme Rigg
Ashton	Mr Brendan Stats	Mr Doug Sillar	Mr Graeme Rigg
Yarrabee	Mr Michael Johnson	Mr Doug Sillar	-
Stratford and Duralie	Mr Brendan Stats	Mr Doug Sillar	-
Austar	Mr Brendan Stats	-	Mr Graeme Rigg
Donaldson	Mr Brendan Stats	-	Mr Graeme Rigg
Middlemount	Mr Michael Johnson	Mr Doug Sillar	-
Monash	Mr Brendan Stats	-	-

Coal Resources

The information in this report that relates to the Coal Resources of the Relevant Assets listed in ***Table 1-2*** is based on information compiled and reviewed by **Mr. Peter Ellis**, who is a member of the Australasian Institute of Mining and Metallurgy and is a full time employee of RPM.

Mr Ellis has sufficient experience that is relevant to the style of mineralisation and types of coal deposits under consideration and to the activity he is undertaking, to qualify him as a Competent Person (as defined in the 2012 Edition of the JORC Code). He has more than fifteen years of experience in the mining industry and has visited the mine sites.

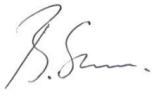
Mr Ellis has no interest whatsoever in the mining Assets reviewed and will gain no reward for the provision of this Coal Resource Statement. RPM will receive a professional fee for the preparation of this statement.

Peter Ellis BSc (Geology) (Hons) MAusIMM

The information in this report that relates to the Coal Resources of the relevant Assets listed in ***Table 1-2*** is based on information compiled and reviewed by **Mr. Brendan Stats**, who is a member of the Australasian Institute of Mining and Metallurgy and is a full time employee of RPM.

Mr Stats has sufficient experience that is relevant to the style of mineralisation and types of coal deposits under consideration and to the activity he is undertaking, to qualify him as a Competent Person (as defined in the 2012 Edition of the JORC Code). He has more than thirteen years of experience in the mining industry and has visited the mine sites or worked closely with the person who conducted the site visit.

Mr Stats has no interest whatsoever in the mining Assets reviewed and will gain no reward for the provision of this Coal Resource Statement. RPM will receive a professional fee for the preparation of this statement.



Brendan Stats BSc (Geology) (Hons) MAusIMM

The information in this report that relates to the Coal Resources of the Relevant Assets listed in ***Table 1-2*** is based on information compiled and reviewed by **Mr. Michael Johnson**, who is a member of the Australasian Institute of Mining and Metallurgy and a member of the Australian Institute of Geoscientists and is a sub-consultant of RPM.

Mr Johnson has sufficient experience that is relevant to the style of mineralisation and types of coal deposits under consideration and to the activity he is undertaking, to qualify him as a Competent Person (as defined in the 2012 Edition of the JORC Code). He has more than nineteen years of experience in the mining industry and has visited the mine sites or worked closely with the person who conducted the site visit.

Mr Johnson has no interest whatsoever in the mining Assets reviewed and will gain no reward for the provision of this Coal Resource Statement. RPM will receive a professional fee for the preparation of this statement.

Michael Johnson BAppSci (Geology) MAusIMM, Member AIG

Open Cut Coal Reserves

The information in this report that relates to the Coal Reserves of the relevant Assets listed in ***Table 1-2*** is based on information compiled and reviewed by **Mr. Doug Sillar,** who is a member of the Australasian Institute of Mining and Metallurgy and is a full time employee of RPM.

Mr Sillar has sufficient experience that is relevant to the style of mineralisation and types of coal deposits under consideration and to the activity he is undertaking, to qualify him as a Competent Person (as defined in the 2012 Edition of the JORC Code). He has more than fifteen years of experience in the mining industry.

Mr Sillar has no interest whatsoever in the mining Assets reviewed and will gain no reward for the provision of this Coal Reserve Statement. RPM will receive a professional fee for the preparation of this statement.

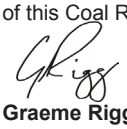
Doug Sillar BE (Min)(Hons) MAusIMM

Underground Coal Reserves

The information in this report that relates to the Coal Reserves of the relevant Assets listed in **Table 1.2** is based on information compiled and reviewed by **Mr. Graeme Rigg**, who is a member of the Australasian Institute of Mining and Metallurgy and is a full time employee of RPM.

Mr Rigg has sufficient experience that is relevant to the style of mineralisation and types of coal deposits under consideration and to the activity he is undertaking, to qualify him as a Competent Person (as defined in the 2012 Edition of the JORC Code). He has more than twenty years of experience in the mining industry.

Mr Rigg has no interest whatsoever in the mining Assets reviewed and will gain no reward for the provision of this Coal Reserve Statement. RPM will receive a professional fee for the preparation of this statement.



Graeme Rigg BE (Min)(Hons) MAusIMM

1.7 Limitations and Exclusions

RPM's review was based on various reports, plans and tabulations provided by Client or the Company either directly from the mine site and other offices, or from reports by other organizations whose work is the property of the Client or the Company. Neither Client nor the Company has advised RPM of any material change, or event likely to cause material change, to the operations or forecasts since the date of Assets inspections.

The work undertaken for this Report is that required for a technical review of the information, coupled with such inspections as the Team considered appropriate to prepare this Report.

It specifically excludes all aspects of legal issues, commercial and financing matters, land titles and agreements, except such aspects as may directly influence technical, operational or cost issues and where applicable to the JORC Code guidelines.

RPM has specifically excluded making any comments on the competitive position of the relevant Assets compared with other similar and competing producers around the world. RPM strongly advises that any potential investors make their own comprehensive assessment of both the competitive position of the relevant Assets in the market and the fundamentals of the coal markets at large.

Limited Liability

This Report has been prepared by RPM for the purposes of Client for inclusion in its Prospectus in respect of the proposed Listing of the Assets in accordance with the Listing Rules and is not to be used or relied upon for any other purpose. RPM will not be liable for any loss or damage suffered by a third party relying on this report or any references or extracts therefrom contrary to the purpose (regardless of the cause of action, whether breach of contract, tort (including negligence) or otherwise) unless and to the extent that RPM has consented to such reliance or use.

Responsibility and Context of this Report

The contents of this Report have been based upon and created using data and information provided by or on behalf of Client or the Company. RPM accepts no liability for the accuracy or completeness of data and information provided to it by, or obtained by it from Client, the Company or any third parties, even if that data and information has been incorporated into or relied upon in creating this report. The report has been produced by RPM in good faith using information that was available to RPM as at the date stated on the cover page and is to be read in conjunction with the Prospectus which has been prepared and forms part of the referenced transaction.

This report contains forecasts, estimates and findings that may materially change in the event that any of the information supplied to RPM is inaccurate or is materially changed. RPM is under no obligation to update the information contained in the report.

Notwithstanding the above, in RPM's opinion, the data and information provided by or on behalf of Client or the Company was reasonable and nothing discovered during the preparation of this Report suggests that there was a significant error or misrepresentation of such data or information.

Indemnification

The Client has indemnified and held harmless RPM and its subcontractors, consultants, agents, officers, directors and employees from and against any and all claims, liabilities, damages, losses and expenses (including lawyers' fees and other costs of litigation, arbitration or mediation) arising out of or in any way related to:

- RPM's reliance on any information provided by Client and the Company; or
- RPM's services or materials; or
- Any use of or reliance on these services or material,

save and except in cases of death or personnel injury, property damage, claims by third parties for breach of intellectual property rights, gross negligence, wilful misconduct, fraud, fraudulent misrepresentation or the tort of deceit, or any other matter which be so limited or excluded as a matter of applicable law (including as a Competent Person under the Listing Rules) and regardless of any breach of contract or strict liability by RPM.

Mining Unknown Factors

The findings and opinions presented herein are not warranted in any manner, expressed or implied. The ability of the operator, or any other related business unit, to achieve forward looking production and economic targets is dependent upon numerous factors that are beyond RPM's control and which cannot be fully anticipated by RPM. These factors include site specific mining and geological conditions, the capabilities of management and employees, availability of funding to properly operate and capitalise the operation, variations in cost elements and market conditions, developing and operating the mine in an

efficient manner, etc. Unforeseen changes in legislation and new industry developments could substantially alter the performance of any mining operation.

Capability and Independence

RPM provides advisory services to the mining and finance sectors. Within its core expertise it provides independent technical reviews, resource evaluation, mining engineering and mine valuation services to the resources and financial services industries.

RPM has independently assessed the Relevant Assets of the Assets by reviewing pertinent data, including resources, reserves, manpower requirements and the life of mine plans relating to productivity, production, operating costs and capital expenditures. All opinions, findings and conclusions expressed in this Report are those of RPM and its specialist advisors.

Drafts of this Report were provided to Client, however only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in this Report.

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- the outcome of the proposed transaction.

This CPR was compiled on behalf of RPM by the signatories to this CPR, details of whose qualifications and experience are set out in ***Appendix A*** of this CPR. The specialists who contributed to the findings within this CPR have each consented to the matters based on their information in the form and context in which it appears.

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2. Project Overview

The Assets are contained within a number of exploration and mining tenements that are located in three areas, the Hunter and Central Western regions of NSW and the Central Highland region of Queensland (***Figure 1-1***). These three areas contain a number of medium to large scale coal deposits which are geologically well known and have been in operation for several decades in some instances.

The business consists of multiple open pit and underground operating mines which process and manufacture market ready coal products to meet international demand (***Table 2-1***). In addition to the eight operating mines, the assets include a re-start project (Donaldson) which is currently on care and maintenance pending re-start at the Company's discretion and the potential MTW underground project. The Assets include the large world class, low risk open cut operations, HVO, MTW and Moolarben open cut and underground complex which collectively contribute 80% of all future coal products of the life of mine (LOM) schedules presented in this report.

Table 2-1 Overview of Projects

Area	Operation	Curent Mining Methods		LOM Mining Methods		Product type	Minelife (year)	Comments
		Open Cut	Underground	Open Cut	Underground			
NSW	HVO	✓		✓		SSCC/Thermal	43	
	MTW	✓		✓		SSCC/Thermal	23	
	Moolarben	✓	✓	✓	✓	Thermal	20	UG completed in 2026
	Austar		✓		✓	SHCC/Thermal	16	
	Ashton		✓	✓	✓	SSCC	13	OC commences in 2024
	Stratford and Duralie	✓		✓		SHCC/Thermal	35	
	Donaldson		✓		✓	Thermal	11	Not in operation
QLD	Yarrabee	✓		✓		PCI/Thermal	38	
	Middlemount	✓		✓		PCI/Coking	19	

Note Donaldson has Coal Reserves and as such can recommence production at the Company's discretion. See Section 9.1 for further details.*

Run of Mine ("ROM") coal and overburden is mined via conventional truck, excavator or shovel and/or dragline at the open cuts or via underground Longwall mining methods. The majority of ROM coal is washed at coal handling processing plants ("CHPP") and loaded on trains via dedicated train loading points. All products are transported via rail links to the deep water Port of Newcastle or one of three ports that are located in Queensland. A variety of product coals are produced across the Assets including thermal, semi soft/hard coking coal products, as well as a pulverized coal injection ("PCI") product. These products can be customised and quantities can be varied based on market and customer demands not just within each operation, however importantly between all operations that have port and product synergies to optimise revenue based on short term market trends. Further information is provided in ***Section 11.1***. All operations follow a similar work flow as described above, with an example flowsheet shown in in ***Figure 2-1***.

2.1 Assets Location and Access

The Assets are all located in regions which are readily accessible via a series of National Highways and regional excellent quality paved roads from capital cities of Sydney and Brisbane and locally from Newcastle, Gladstone and Mackay. Both the regional and capital cities connect further abroad to most eastern seaboard cities and internationally. Good quality paved highways connect the cities in the various regions to the Assets as well as providing access to further regional centres for workers and support services. Good quality gravel roads allow access throughout and across each of the mines where required.

New South Wales Group

The Assets within NSW are all located in the Hunter or Central Western region between 30 to 120km to the west of regional city of Newcastle and 160 to 200km North West of Sydney (***Figure 2-1***). All NSW operations are adjacent to (and utilise) the extensive world class Hunter Valley / NSW railway network. This network transports all coal to three deep water coal terminals located in the Port of Newcastle (***Figure 2-1***). Further information on the rail network can be found in ***Section 12***.

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HVO/MTW

The HVO/MTW operations are located in adjacent landholdings in the Hunter Valley region of NSW, Australia (***Figure 2-2*** and ***Figure C-1*** and ***Figure C-2***), approximately 150 km north of Sydney and 90 km west from Newcastle. HVO is centred 24 km northwest of the regional town of Singleton, while MTW is centred approximately 14 km south east of Singleton. Both operations can be accessed by a network of excellent quality regional roads from Singleton.

Current Operations

Mining at HVO/MTW commenced in the 1960's and has continued to the present via conventional large scale dragline and truck and shovel methods. Multiple pits are currently active enabling the operations flexibility to optimise the product blends and mining fleets to de-risk mining activities. The Company is a major regional landholder and employer. The HVO and MTW mines are considered amongst the premier high quality thermal coal providers globally.

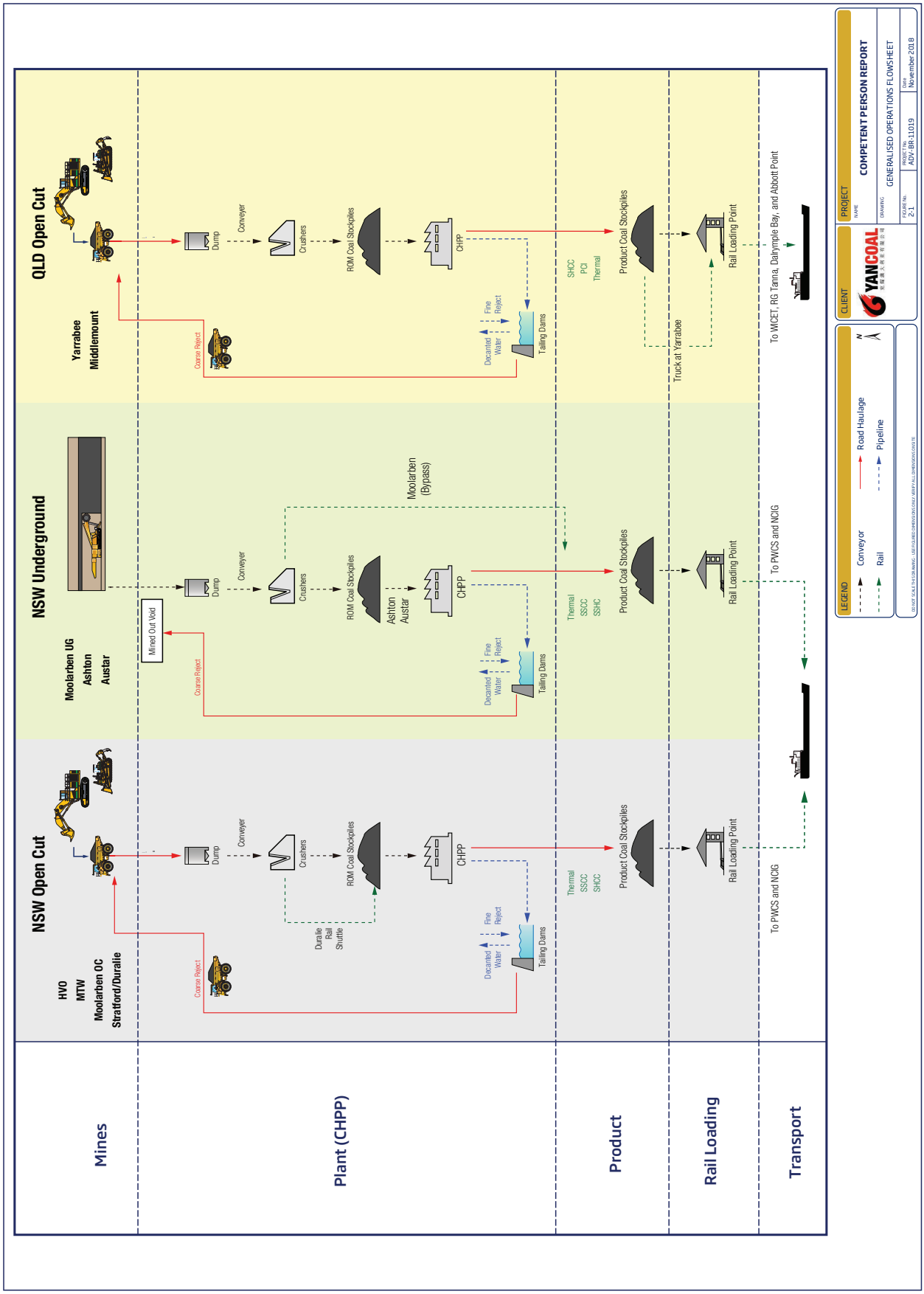
HVO currently produces thermal and semi-soft coking coal ("SSCC") from five active pits. Mining activities are geographically divided by the Hunter River into the HVO North and the HVO South areas and product coal is optimised as part of the overall blending strategy. Current mining focuses on the West and the Carrington pits in the North and the Cheshunt and Riverview pits in the South (Figure ***C-1***). ROM Coal from the pits is hauled to either of two CHPP's which have a combined nameplate throughput capacity of 20 million tonnes per annum ("Mtpa"). These include the Hunter Valley Coal Processing Plant ("HV-CHPP") at 17Mtpa and the Howick Coal Processing Plant (Howick-CHPP") at 3.2Mtpa. Currently the majority of ROM coal is hauled to the HV-CHPP, however some coal is processed at Howick-CHPP.

Product coal is transferred by haul truck from the Howick-CHPP to the Newdell Rail Loading Point and by conveyor to the Hunter Valley Rail Loading Point ("HV-Rail Loading) from the HV-CHPP. RPM notes that further blending occurs at the rail heads via conveyors to further optimise and add value to the products to meet specific customer specifications. This blending is not included the LOM Schedule or Coal Reserve estimate. Product coal is railed 99 km to the port facilities in Newcastle for export. In 2017 HVO produced approximately 19.5 million tonnes ("Mt") of ROM coal for 14.8Mt of product coal versus the planned 20.6Mt ROM Coal for 2018.

MTW produces thermal coal and SSCC from three active pits, North, West and Loders. MTW is geographically separated by the Putty Road, which separates the operation into the southern Mount Thorley and the northern Warkworth areas (***Figure C-2***). There are two coal handling and preparation plants (CHPP) at MTW which have a combined throughput capacity of 18.6Mtpa ROM Coal. The two MTW plants are the Mount Thorley CHPP ("MT-CHPP) at 8.4Mtpa and the Warkworth CHPP (WW-CHPP) at 10.2Mtpa. Thermal ROM coal is directly fed into the WW-CHPP, whilst SSCC ROM coal is trucked to the MT-CHPP as it consists of a two product washing facility enabling SSCC and thermal coal to be produced from a single seam.

Following washing the coal products are conveyed from each plant to the Mount Thorley Rail Loading Point. Blending occurs at the railhead prior to loading on rail wagons for transport 80 km to the Newcastle port. RPM notes this is the same rail line used by HVO. 11.8Mt of product coal (17.7Mt ROM Coal) was produced in 2017 versus the planned 17.0Mt ROM in 2018.

Figure 2-1 shows a generalised operational flowsheet for both the NSW and Queensland operations.


Mines
Plant (CHPP)
Product
Rail Loading
Transport
NSW Open Cut
HVO
MTW
Moolarben OC
Stratford/Duralie
NSW Underground
Moolarben UG
Ashton
Austar
QLD Open Cut
Yarrabee
Middlemount
Mined Out Void
Coarse Reject
Dump
Conveyer
Crushers
ROM Coal Stockpiles
CHPP
Fine Reject
Decanted Water
Tailing Dams
Duralie Rail Shuttle
Moolarben (Bypass)
Ashton
Austar
Thermal
SSCC
SSHC
SHCC
PCI
Thermal
Product Coal Stockpiles
Rail Loading Point
Truck at Yarrabee
To PWCS and NCIG
To WICET, RG Tanna, Dalrymple Bay, and Abbott Point
LEGEND
Conveyor
Rail
Road Haulage
Pipeline
CLIENT
YANCOAL
PROJECT
MINE
COMPETENT PERSON REPORT
DRAWING
GENERALISED OPERATIONS FLOWSHEET
FIGURE No.
2-1
PROJECT No.
ADV-BR-11019
Date
November 2018

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Moolarben

The Moolarben Complex is located 40 km north of the regional town of Mudgee in the Central West Region of NSW and can be accessed by regional paved roads. (***Figure 2-2*** and ***Figure C-3***) The operation is connected to the port of Newcastle by a 270 km rail line and National and regional paved roads. Mudgee, a major regional town in the Central-West of NSW located 270km North West of Sydney, is readily accessed via national highways and regional paved roads.

Current Operations

The Moolarben Operation consists of both underground longwall and open cut truck and shovel operations. The operation commenced in 2010 and produces up to four thermal coal products. Moolarben currently has three active open pits and a single longwall underground operation however it is forecast to complete four open cut pits over the mine life with the vast majority of production being from Open Cut 4 and two underground mining areas, Underground 1 and Underground 4. Additional potential underground mining area, Underground 3, which doesn't form part of the current LOM Plan is being considered by the Company for inclusion in future LOM Plans pending further technical studies.

All Open Cut ROM coal is washed in a single wash plant which produces three thermal coal products, while all Underground ROM coal is crushed and screened and sent directly to the market (bypass) as a low ash thermal coal product. During 2017 the operation produced 12.4Mt product coal from 13.8Mt processed and 1.1Mt bypass. In 2018 the Project is planned to increase ROM coal production to 17.8Mtpa with 9.8Mtpa produced in H1 2018 (open cut and underground combined). This increase is the result of further ramp of the underground operations as discussed in ***Section 10***.

Ashton

Ashton is located 14km north of the regional town of Singleton (***Figure 2-2*** and ***Figure C-5***) and is connected to the port of Newcastle (specifically PWCS) via a 94 km rail line and National and regional paved roads.

Current Operations

The current Ashton Operation consists of a single underground longwall operation producing between 1.5 to 2Mtpa SSCC from 3Mtpa ROM tonnes. The underground operation will be supplemented by an open cut truck and excavator operation in 2024 to produce up to 3.6Mtpa ROM coal with similar products but higher yields compared to the underground operation.

All ROM Cut ROM coal is washed in a single wash plant which is optimised to produce a single semi soft coking coal product. During 2017 the operation produced 1.2Mt product coal from 2.8Mt ROM Coal versus the planned 3.0Mt ROM Coal in 2018, with 963kt produced in H1 2018 which is planned to ramp up to 1.5Mt in H2 2018.

Stratford and Duralie

The Stratford and Duralie Operation is located approximately 2.5km north-east from the Stratford village in the Stratford and Duralie Basin, which is located about 110km north of Newcastle in NSW (***Figure 2-2***). The operation consists of the Stratford and Duralie open cut mines and is readily accessible via national and regional paved roads (***Figure C-6***).

Current Operations

The current mining activities at the Stratford and Duralie operations consist of a series of open pits mined via truck and excavator methods. Split between the Stratford and Duralie areas, four pits are currently active to produce 0.8mt ROM coal which will increase to 2Mt in 2020 for the remainder of the mine life. Duralie ROM coal is transported to Stratford CHPP by a Shuttle Train. All coal is washed at the Stratford CHPP to produce a high quality Semi Hard coking coal as well as a thermal coal.

Some blending of ROM coal from each of the mining areas may occur prior to washing to produce the required export coking and thermal product coal specifications. Blended coal products are transported by rail to the Port of Newcastle for direct export loading and/or blending with other Yancoal group coals at the port.

Open cut mining at the Duralie Pit is currently undertaken 5 days per week for 18.5 hours per day. The Stratford Pits operate for 6 days per week, 21 hours per day, with the exception of Roseville West which is approved to operate on day shift only.

The handling and processing of ROM coal at the CHPP is approved to operate 24 hours per day, seven days per week. The unloading of ROM coal from the Duralie Shuttle Train is currently conducted between 7 am and 10pm.

During 2017 the operation produced 0.7Mt product coal from 0.9Mt ROM Coal versus the planned 0.8Mt ROM Coal in 2018.

Austar

Austar Coal Mine (Austar) is located in the Newcastle Coalfield in the Lower Hunter Valley of New South Wales, Australia. The mine is located 8 kilometres southwest of Cessnock and approximately 65km by rail west of Newcastle. Austar is a wholly owned subsidiary of Yancoal Australia Ltd and in 2005 introduced Longwall Top Coal Caving technology to maximise extraction of coal from the Greta Seam.

Current Operations

Austar is not currently operating due to management of ongoing coal burst issues. Prior to this mining was undertaken in the domain known as "Bellbird South" which lies between Area 2 (Mined by Austar Coal Mine between 2008 and 2012) and Ellalong (Longwall Panel 9A last mined in 1996) (***Figure C-7***). Conventional longwall mining recommenced in Bellbird South in July 2016 with the Longwall Top Coal Caving method planned to be used again in the next mining domain, Area 3. The longwall performance is currently being impacted by coal burst issues which the Company is managing through the development of additional operating management systems, plans and procedures including the operation of equipment.

Austar Coal Mine was previously called Southland and before that was called Ellalong Pelton and Southland Colliery's which date back to 1916. The first longwall mining operation in the Greta Seam commenced at Ellalong Colliery in the early 1980's. All coal is washed onsite with product coal transported by ail 65km to the port of Newcastle. During 2017 the operation produced 1.9Mt product coal from 2.0Mt ROM Coal versus the planned 2.2Mt ROM Coal in 2018. As discussed in ***Section 10***, the 2018 production has been impacted by the recent limitation on longwall production due to management of the coal burst issues.

Donaldson

The Donaldson Project is located in the Newcastle Coalfield, 25km northwest of the port of Newcastle, NSW. It comprises the now closed (April 2013) and rehabilitated Donaldson open cut mine which extracted coal from Upper Donaldson, Lower Donaldson and Big Ben Seams where interburden thickness between those three seams was minimal. The Abel underground mine which was commissioned in 2008, has its portal entry coming off the Donaldson open cut final highwall and mined the Upper and Lower Donaldson Seams by bord and pillar extraction methods (***Figure C-8***). The Abel underground mine was placed on care and maintenance in June 2016.

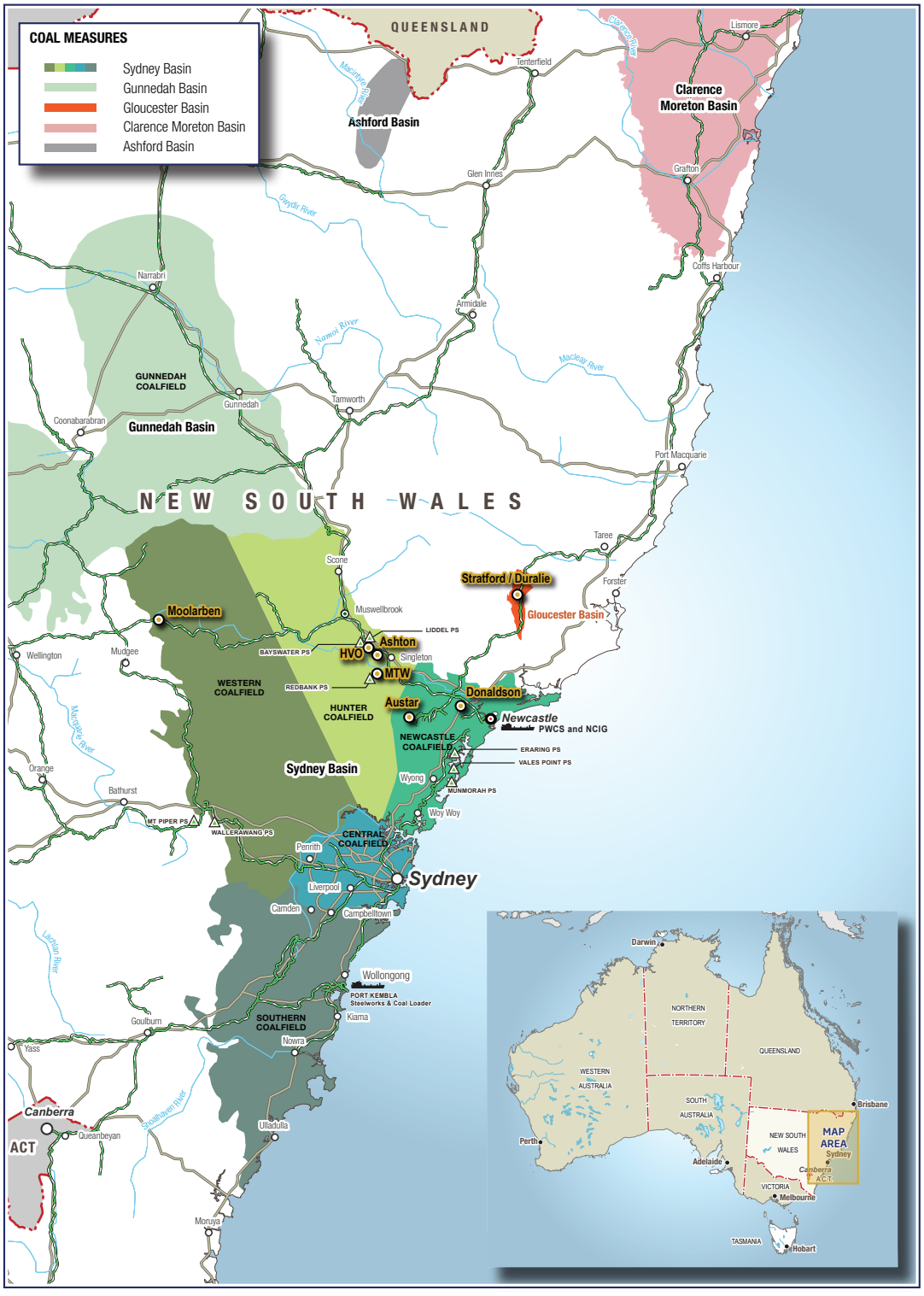
The vast majority of past mining has been completed by Stockrington No 2 mine (1952-1988), extracting the West Borehole Seam by bord and pillar method for over 35 years. Historical tracings of this mine's workings are extensive and cover an area approximately 8km by 8km.

The Abel Underground ROM coal has been washed at the third party Bloomfield CHPP located to the north of Donaldson open cut mine. ROM coal was hauled from the Abel underground mine to the CHPP by truck. Washed coal (coking and thermal) was transported by rail from the Bloomfield CHPP to the port of Newcastle for export. The operation is currently under care and maintenance with no production in 2017 pending re-start at the Company's discretion.

Monash

The Monash greenfield project is locates 17km north of Cessnock and 25km south of Singleton in the south hunter region of NSW. The project is considered a greenfield project with no mining taking place previously and only limited drilling.

The Monash site layout is shown in ***Figure C-10***.



LEGEND

Roads
Rail
Rivers / Creeks
State Boundary
Power Stations
Coal Export Terminals

0 50 100 200 km

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CLIENT

YANCOAL 兖煤澳大利亚有限公司

PROJECT

NAME
COMPETENT PERSON REPORT

DRAWING
NSW LOCATION PLAN

Figure No.	PROJECT No.	Date
2-2	ADV-BR-11019	November 2018

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Queensland Group

The Queensland Group of projects consists of the operating Yarrabee and Middlemount Mines both of which are located in the Bowen Basin in Central Queensland (***Figure 2-3***). The Central region of Queensland is accessible through a series of national highways from the state capital of Brisbane as well as the local regional hubs of Blackwater and Emerald (***Figure 2-3***).

Yarrabee

The Yarrabee Coal Mine is located 40km northeast of Blackwater in the eastern Bowen Basin of Central Queensland. The mine is located 150km west of major regional town of Rockhampton and 280km northwest of the Port of Gladstone.

Current Operations

The Yarrabee resource is characterised by an overarching south easterly syncline structure that plunges to the south and has been further folded and faulted. It contains seven coal seams that contain low volatile and low to moderate ash content coal. With steep seam dips, of up to 60° and commonly containing a large number of thrust faults, the geology can be described as moderate to complex. Five pits across Yarrabee are planned to be mined during the mine life.

Since 2009 Yarrabee has been producing low volatile PCI and thermal coal products via open cut mining methods. Coal is either washed in the Yarrabee CHPP to produce PCI coal, or crushed and sold as bypass thermal coal. CHPP reject is separated into coarse and fine streams, with the coarse reject being disposed of in the open pit voids and the fine reject being stored in tailings dam facilities. Product coal is hauled 37km by road truck to the Boonal Loadout Facility which is located adjacent to the Capricorn Highway 10km east of Blackwater and then railed up to 280km to either the Wiggins Island Coal Terminal or the RG Tanna Coal Terminal at the Port of Gladstone.

During 2017 the operation produced 2.9Mt product coal (including 1.2Mt bypass) from 3.4Mt ROM Coal versus the planned 3.4Mt ROM Coal in 2018. The H1 2018 ROM coal production for Yarrabee is reported to be 1.3Mt. The Yarrabee site layout is shown in ***Figure C-4***.

Middlemount

The Middlemount mine is located 10 km southwest of the town of Middlemount and 90 km north-east of Emerald in central Queensland. Roper Creek flows west to east in the southern part of the tenement holding.

Current Operations

Full scale operations at the open-cut mine commenced in November 2011, with mining activities using conventional truck and excavator techniques with ROM coal washed at an onsite CHPP with a capacity of 5.3Mtpa. The Middlemount site layout is shown in ***Figure C-5***.

The Middlemount mine produces low volatile pulverised coal injection coal and semi hard to hard coking coal, with contracted rail and port capacity through Dalrymple Bay Coal Terminal and Abbot Point Coal Terminal in Bowen (***Figure 2-3***). Product coal is railed 306km to the port for export.

During 2017 the operation produced 3.6Mt product coal from 5.3Mt ROM Coal versus the planned 5.4Mt ROM Coal in 2018. The H1 2018 ROM coal production for Middlemount is reported to be 2.5Mt.


PAPUA NEW GUINEA
Torres Straight
Thursday Island
Cape York
Weipa
Coen
Gulf of Carpentaria
Lizard Is
Cooktown
Mossman
Port Douglas
Cairns
Mareeba
Atherton
Innisfail
Tully
Mornington Island
Karumba
Burketown
Normanton
Croydon
Hinchinbrook Is
Ingham
Townsville
South Pacific Ocean
Camooweal
Mount Isla
Cloncurry
Julia Creek
Richmond
Hughenden
Charters Towers
Home Hill
Bowen
Proserpine
Airlie Beach
Mackay
Dajarra
Winton
Clermont
Middlemount
Yarrabee
Rockhampton
Boulia
Longreach
Barcaldine
Blackwater
Emerald
Springsure
Gladstone
Bedourie
Blackall
Rolleston
Moura
Biloela
Theodore
Bundaberg
Eidsvold
Hervey Bay
Fraser Is
Maryborough
Taroom
Gayndah
Gympie
Windorah
Augathella
Charleville
Roma
Wandoan
Miles
Kingaroy
Sunshine Coast
Birdsville
Quilpie
Dalby
Toowoomba
Ipswich
BRISBANE
Moonie
St George
Cunnamulla
Thargomindah
Warwick
Gold Coast
Goondiwindi
Stanthorpe
Texas
Tenterfield
Ballina
NORTHERN TERRITORY
QUEENSLAND
SOUTH AUSTRALIA
NEW SOUTH WALES
Coral Sea
AUSTRALIA
Darwin
NT
WA
QLD
SA
NSW
ACT
VIC
TAS
Perth
Adelaide
Sydney
Canberra
Melbourne
Brisbane
Hobart
COAL MEASURES
Bowen Basin
Calen Coal Measures
Callide Basin
Galilee Basin
Ipswich Basin
Laura Basin
Maryborough Basin
Clarence-Moreton Basin
Mulgildie Basin
Styx Basin
Surat Basin
Tarong Basin
LEGEND
Main Highways
Other Highways
Railways
Township
Coal Export Port
N
0 100 200 400 km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
兖煤澳大利亚有限公司
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
QLD LOCATION PLAN
Figure No. 2-3
PROJECT No. ADV-BR-11019
Date November 2018

2.2 Product Types

A range of product coal types are produced from the operations, these include a range of thermal products, semi soft coking coal, semi hard coking coal and PCI products. RPM presents this for information and refers the reader to the business section of the Prospectus for further information.

Thermal Coal

The Hunter Valley region has been the source of large volumes of high quality bituminous thermal coal which, for several decades, has been used as the basis for the design of power plants in the major developed economies of Japan, Korea, China and Taiwan and the developing economies in south-east Asia. The thermal coal produced and importantly planned to continue as part of the Yancoal LOM plans, is consistent with the historical high quality thermal coals and customers expected requirements. The coals are characterised by low ash, low sulphur, favourable fuel ratio, high energy and benign ash chemistry, as shown in **Table 2-2** which shows the company product specifications. The operations typically produce three thermal product coal types based on ash content, low ash, medium ash and high ash. As would be expected these three product types attract different customers and prices with specifications varying between customers. Marketing specifications are shown in the table below.

Table 2-2 Assets Average Thermal Coal Quality

Quality	Unit	MTW/HVO	Moolarben (low ash)	Moolarben (high ash)
Calorific Value	kcal/kg, gar	6,322	5,994	5,328
Ash (ad)	%	13.5	18	27
Total Moisture (ar)	%	10.0	10.5	10.5
Fixed Carbon (ad)	%	53.0	50	40.5
Sulphur (ad)	%	0.55	0.75	0.5
Volatile matter (ad)	%	31.0	29.5	30
HGI		50	47	47

Source: Provided by the Company

Semi-soft coking coal characteristics

Semi soft coking coal (SSCC) can be produced from a limited number of seams in the lower Hunter Coalfield within which the Company has a large footprint. This product coal type is highly regarded by steel mills throughout Asia, including China, for various reasons, most particularly the low ash, and impurities in the coal. Typical semi soft and semi hard coking coal specifications are shown in **Table 2-3** for reference.

The Austar and Stratford and Duralie coal products have particularly high fluidity which is a sought after property in a coking coal blend. RPM is aware the Company markets these coals as a blend for semi hard coking coal.

Table 2-3 Typical Semi Soft and Semi Hard Coking Coal Quality

Quality	Unit	MTW/HVO	Ashton	Austar	Strat/Duralie	Middlemount
Ash (ad)	%	10.0	9.5	6.5	10.5	10
Total Moisture (ar)	%	10	10	6.5	7	10
Fixed Carbon (ad)	%	55	52	49	51	69.5
Volatile Matter (ad)	%	33.5	36	42	36	19
Phosphorous (ad)	%	0.015	0.023	0.046	0.004	0.039
Free swelling index		6	7	7	7	6
Fluidity	(ddpm)	150	800	60,000	15,000	20

Source: Provided by the Company

PCI Coal and Uses

Coal deposits in the Bowen Basin of central Queensland (such as the Client's Yarrabee and Middlemount mines) include extensive resources of low and medium volatile coals that are well-suited to the PCI market.

These coals give high coke replacement ratios that assist in maintaining blast furnace productivity and exhibit good grinding characteristics.

Usage

Pulverised coal injection has become a standard practice in many of the world's major steelworks, particularly Asia which is the preferred customer of the Company. Finely ground coal is injected with the hot blast directly into the raceway of the furnace to provide energy and reductant in addition to that from the coke bed, thus replacing some of the coke with cheaper non-coking or weakly coking coal. Hence the PCI process increases the economic efficiency of steel-making by using lower cost coals to reduce consumption of higher cost prime coking coals. In addition, the PCI coal is not subject to a coke-making or other process stage, other than grinding, prior to its introduction to the blast furnace. PCI rates must be such that stable blast furnace operation is maintained while the permeability of the coke bed is not affected. The typical PCI Coal specification is presented in ***Table 2-4***.

Table 2-4 Typical PCI Coal Quality

Quality	Unit	Yarrabee YP1	Yarrabee YP4	Middlemount
Ash (ad)	%	9.5	11.5	10.5
Total Moisture (ar)	%	10.5	9	10
Fixed Carbon (ad)	%	80.3	77.8	69.5
Volatile Matter (ad)	%	8.7	9.2	18.5
Phosphorous (ad)	%	0.095	0.096	0.05

Source: Provided by the Company

2.3 Market Overview

The major traditional thermal coal markets of Japan, Korea, China, Taiwan and South East Asia are the primary customers of the Company. Japanese power utilities and some customers in Taiwan and Korea seek high energy, low ash coal to enhance boiler efficiency and/or reduce ash disposal costs. RPM is aware that the Company's coking coals are sought in significant and increasing proportions by North Asian steel mills for their coking coal blends.

The Company updates long term pricing forecasts on a 6 monthly basis using research from third party analysis. RPM is not a commodity forecasting specialist and has relied on third parties for price assumptions. As per the JORC Code (2012) reporting requirements, RPM has completed independent reviews of the Company's coal price forecasts based on public and internal pricing information and considers the price assumptions used by the Company to be reasonable.

2.4 Regional Environment

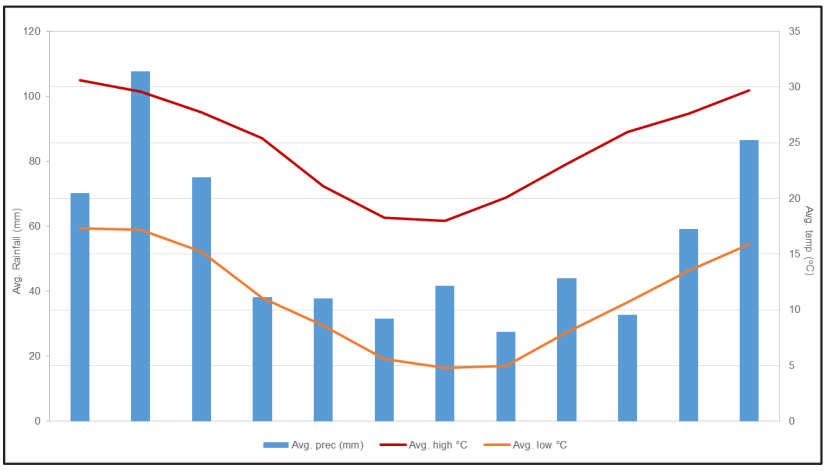
NSW Group

Geography and Climate

The Hunter region of New South Wales (***Figure 1-1***) extends approximately 120 km to 310 km north of Sydney with the land form is dominated by the major regional Hunter River and its tributaries with highland escarpments to the north and south. The Hunter Valley is one of the largest river valleys on the NSW coast and is characterised by rolling hills incised by river and creek systems.

The region has a humid sub-tropical to temperate climate with hot wet summers and cool drier winters. The rainfall observed and moderate temperature ranges result in little to no impact on mining activities and plentiful water supply. The average annual temperature is 17.6°C and has an average rainfall of 692 mm per annum with the driest month being July and the highest rainfalls occur between December and February as outlined in ***Figure 2-4***.

Figure 2-4 Hunter Valley Group Regional Average Rainfall and Temperature



Industry

Apart from mining, the other major industries in the region include Defence, tourism, light industry, vineyards, horse breeding and cattle production. The largest employment industry is coal mining, which employs 24% of the region's workforce.

Regional and Local Infrastructure

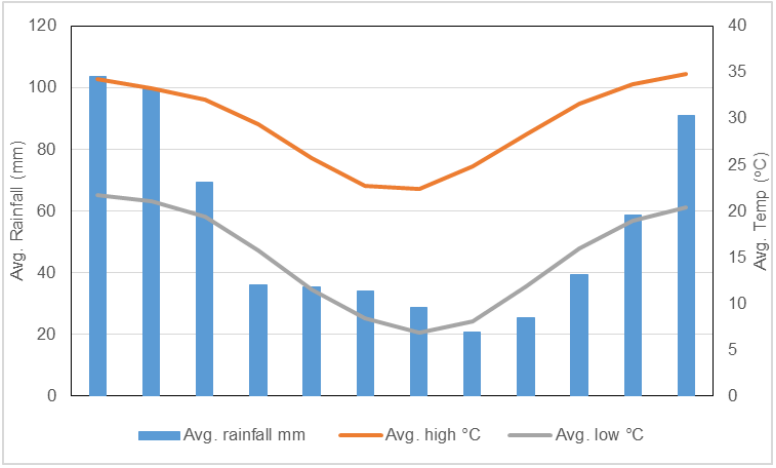
In addition to the minesite open pit mining, maintenance, surface processing plant, office infrastructure, there is significant additional offsite regional and local infrastructure that provides support to the operations and the forecast production. A review by RPM of the regional and local supporting infrastructure indicates that the area has suitable power, water and transport logistics connecting the operating Assets to international markets to support the life of mine ("LOM") production presented in this Report. The Assets are located close to well established excellent quality highways and rail infrastructure (***Figure 2-2 and Figure 2-3***), water sources and regional towns which provide accommodation and support services for the mining operation and its personnel. Further details of the supporting infrastructure are provided in ***Section 12*** and ***Section 13***.

Queensland Group

The Central Highlands region of Queensland is approximately 300km inland (west) from the coastal town of Gladstone (***Figure 1-1***), which is the location of a deep water port for export. The region hosts a large number of large scale coal mines and is the main source of employment along with farming.

The region has a humid subtropical climate with warm to hot summers and mild, dry winters. Maximum temperatures range from 34 °C in January to 22 °C in July, while minimums range from 22 °C to 7 °C with an average annual rainfall of 641.2 mm. The rainfall observed and moderate temperature ranges result in little to no impact on mining activities and plentiful water supply. ***Figure 2-5*** shows the yearly ranges of average high and low temperatures along with monthly rainfall.

Figure 2-5 QLD Group Regional Average Rainfall and temperature



Industry

Apart from coal mining, other major industries include agricultural which includes cotton farming, as well as grapes, citrus and grain growing.

Regional and Local Infrastructure

In addition to the minesite open pit mining, maintenance, surface processing plant and office infrastructure. Significant regional and local infrastructure provides support to the operations and the forecast production. A review by RPM of the regional and local supporting infrastructure indicates that the area has suitable power, water and transport logistics connecting the operating Assets to international markets to support the Life of Mine ("LOM") production presented in this Report. The Assets are located close to well established excellent quality highways and rail infrastructure **(*Figure 2-3*),** water sources and regional towns which provide accommodation and support services for the mining operation and its personnel. Further details of the supporting infrastructure are provided in ***Section 12*** and ***Section 13***.

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3. Licences and Permits

The Company holds numerous current mining tenements including mining and exploration licences (permits), business, environmental and safety permits. These enable the Company's operations including mining, major surface facilities and coal handling, management, electrical infrastructure, waste and tailings emplacement and exploration. Below is a summary of the key permits.

RPM provides this information for reference only and recommends that land titles and ownership rights be reviewed by legal experts.

RPM notes that the approved Yarrabee production rate is 4Mtpa, which is forecast to be exceeded in 2020 and an additional permit is required to expand the Middlemount pit to the North West. These approvals are ongoing and is in-line with typical approval processing in Queensland. RPM assumes as part of the reporting of the LOM plans and costs that this will be granted ahead of required timing, however notes that no material issues will occur if delays occur other than delaying the expanded production. Furthermore, as noted in the Business Section of the prospectus, RPM is aware the designed capacity at HVO is 20Mtpa ROM tonnes versus the forecast 20.6Mtpa, however the approved maximum production is 38Mtpa, as such no further permits are required. The increased designed capacity is to be achieved through CHPP efficiencies rather than material changes to the initial design plans.

3.1 Coal Concessions and Surface Rights

All key mining tenements are currently valid for the continued operation of the Assets to support the planned production rates forecast in this Report. All relevant mining and exploration licenses and authorisations held by the Company are listed in ***Appendix E*** and are shown graphically in ***Figure C-1*** through ***Figure C-10.***

3.2 Water Rights

Water required for the operations is sourced by various methods, including wells and surface water storage dams and the various local rivers. As such numerous water rights permits are required for the Assets. All permits are currently in good standing and support current production. Further information is provided in ***Section 15***.

3.3 Environmental and Operating Permits

The Company currently holds numerous environmental, construction and operating permits that are described in ***Section 15***. The permits include the waste and tailings dam facilities construction and operating permits, water bore drilling and extraction permits and various operating and environmental permits. RPM has completed an overview of these permits and considers them in good standing to support the continued operation of the Assets for the foreseeable future. RPM does note that as per typical Australian standards, various permits and licenses need to be periodically renewed as per any long standing and operating mining and processing operations. RPM is not aware of any reason for these permits to not be renewed pending the correct and suitable application procedure.

Further details on tenements, approvals and licenses held by the Company are provided in ***Section 15***.

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4. Assets History

4.1 Exploration History

The Assets have a long history of systematic exploration which has included geological mapping, geophysical and geochemical surveys as well as a large amount of surface diamond and open hole drilling as outlined below.

HVO/MTW

Prior to the acquisition of the operations by the Company, several companies and government agencies completed exploration works which include the following:

- Exploration in MTW commenced in 1949 by the Joint Coal Board (JCB) which completed a series of shallow percussion boreholes. It was not until 1976 that development of the Warkworth Mining Limited (WML) and Mount Thorley Operations (MTO) areas was considered in earnest.
- 1960's: Clutha Bargo explored the Whybrow Seam for coking coal potential.
- 1970-1975: Department of Mines conducts fully cored hole drilling program (DM Warkworth and DM Doyles Creek series).
- 1976: Warkworth Consortium formed (later established as WML) and awarded mining bid for Warkworth area. Commenced exploration program with 12 rigs drilling fully cored, HQ-size holes and large diameter (LD) core drilling in selected seams.
- 1976: Drilling program started at the Mt Thorley site – similar to Warkworth drilling program. Main concentration of drilling was in the shallower, eastern parts of the lease.
- 1980s & 1990s: The main focus at Warkworth was open-hole drilling. Mt Thorley increased open hole drilling in advance of production and made a concerted effort at core drilling during the 1990s.

HVO is an amalgamation of three previously independent mining operations, namely: Howick, Hunter Valley and Lemington. Each mine was developed at different times and was subject to different exploration philosophies and exploration work. Some of the initial exploration work is summarised below:

- Howick open-cut (west pit) – exploration initiated in the 1940s and 1950s completed by the Joint Coal Board and the Bureau of Mineral Resources. Drilling to 200m–300m spacing for cored holes and 50m–150m spacing for open holes.
- Hunter Valley No.1 & 2 mines – exploration initiated in the 1960s and early 1970s by the New South Wales (NSW) Department of Mines. Drilling to 212m spacing for cored holes and 100m spacing for open holes.
- Lemington South open-cut and underground mines – exploration initiated in the 1970s by the Joint Coal Board. Drilling to 200m– 800m spacing for cored holes.

Moolarben

- Exploration in the area commenced in 1950 but historical mining at the Ulan Mine (immediately west of Moolarben) has occurred since 1920's. A summary of key exploration periods completed by other parties is provided below:
- The New South Wales Mines Department carried out initial exploration in 1950 with 6 core holes.
- In 1977 the Joint Coal Board drilled 21 core holes.
- In the late 1970's the Energy Recycling Corporation drilled 33 core holes inside Moolarben leases and 41 core holes in the surrounding areas.
- White Industries in early 1980's drilled 25 core holes.
- In late 1980's Ulan Coal Mine drilled 38 holes (core and non-core).
- Between 1999 and 2003 the Department of Mineral Resources drilled 47 holes (core and non-core) to define potential open cut areas.

- Intensive exploration activity over recent years at Moolarben has focused on improving the classification of Ulan Seam coal resources, defining interpreted igneous and erosive (palaeochannel) features and Ulan Seam sub- crop/limit of oxidation in advance of mine operations.
- RPM notes that an additional 32 holes were drilled after the 2017 Resource model was completed and these have not been included in the model. RPM reviewed the results to ensure any potential impact on resource classification and estimation was identified and addressed prior to the completion of this resource report.

Yarrabee

Exploration in the Yarrabee area commenced in the mid-1960s with Mines Administration (Minad) and the Bellambi Coal Company (Bellambi), both holding tenure and exploring for metallurgical coal. The significant historic tenure held in the Yarrabee area is listed below with a brief description;

- EPC 16 Mines Administration Pty Ltd. (Minad) 24/02/1966 to 21/07/1967
- EPC28 Bellambi Coal Co Ltd.6/12/1965 to 24/03/1966: results of exploration describe intersections in the Burngrove Formation (Fort Cooper Coal Measures equivalent),
- EPC 34 Mines Administration Pty Ltd. 30/11 1966 to 25/03/1969: Minad identified shallow coal in the area that later became ML 1770, the initial mining area at Yarrabee.
- EPC123 Yarrabee Coal Company (YCC) 26/08/972 to 1/05/1996: The title was originally granted to Brigalow Mines Pty Limited a jointly owned company of Mount Isa Mines Limited (MIM) and Thiess Bros. Pty Limited on 26 august 1972. MIM retained the holding in Brigalow when it acquired 100% of the company in January 1990. Assignment of the EPC from Brigalow to YCC was approved by the Department of Mines and Energy (DME) on 19 August 1993. The Company was granted MDL 160 on 1 April 1996 which covered eight of the twelve sub blocks.
- EPC 190 Yarrabee Coal Company Pty Ltd 16/09/1975 to 19/04/1996: The title was originally granted to Mines Administration Pty Limited (Minad) on 16 September 1975, at which time it covered an area of 770 sq.km. Relinquishments progressively reduced the area to 125 sub blocks in 1976, 70 sub blocks in 1977, 40 sub blocks in 1978, 13 sub blocks in 1979 and 11 sub blocks in 1982. The title was transferred to CSR subsidiary Thiess Bros Pty Limited in October 1986 and later approved for sale to Yarrabee Coal Company Pty Limited in November 1989. On 1 April 1996, The YCC was granted MDL 160, which covered four of the eleven sub blocks.
- ML 1770 Yarrabee Coal Company Pty Ltd From 25/03/1976: ML 1770 was granted on 25/03/1976 and has been held by The Company and its antecedents since that date. The subsequent nine MLs were granted during the period 1998 to 2014 within the area held as MDL 160. The initial stages of exploration commenced with aerial photographic interpretation supported by geological field mapping to delineate the location(s) of the coal measures and to interpret the structural geology of the area. Exploration drilling targeted the Rangal Coal Measures (RCM) outcrop, which resulted in the delineation of the initial mining area of the Yarrabee resource that was located in ML1770.

Ashton

Ashton and previous owners have drilled over 300 surface slim holes (open and cored) for exploration, geotechnical, hydrological and seam gas purposes since 2000. Commencing in August 2013, a number of inter-seam bores (IS-series), gas drainage (GW-series) holes and piezometer bores (YAP-series) were drilled. In addition, measured section strip logs were also undertaken during gate road and longwall face mapping.

In addition to the surface holes a number of phases of underground drilling have been undertaken to optimise the underground operations, these include:

- Prior to 2016 a number of cored (NMLC-size) inter-seam holes were drilled vertically into the floor of the underground workings. These drill holes were drilled for coal quality and geotechnical purposes however were not geophysically logged due to logistical issues associated with the underground mine environment. An additional gas hole WMLC335 was available for 2015 JORC classification onward. Interseam hole ISLL54, which cored ULLD in July 2016 facilitated reclassification of Indicated ULLD resources inside the LOM in ML1533 to Measured status in 2016.
- In late 2016 core drill hole YAC-019 was drilled to test geotechnical, coal quality and interburden thickness between Upper Liddell Seam and Upper Lower Liddell Seam to facilitate decisions on the

position of the LW201 installation roadway. Non-core drill holes YAO-020 and YAO-021 were also drilled to facilitate decisions on the position of the LW201 installation roadway as the interseam between Upper Liddell Seam and Upper Lower Liddell Seam was thinning inbye. A single large diameter drill hole YAC-023 was also drilled (200mm core hole). Target seams were Lemington 12 Seam, Lemington 15 Seam, Upper Liddell Seam, Upper Lower Liddell Seam and Lower Barrett Seam for clean coal quality analysis.

- An extensive program of interseam drilling from Upper Liddell Seam northwest mains to Upper Lower Liddell Seam 200 mains, for seam level and geotechnical testing of belt chamber areas was completed in 2017. In addition interseam drilling from MG201 and TG201 will allow more confident resource classification in Lower Barrett Seam, the next underground target below the current mining operation. A series of Upper Lower Liddell Seam strip samples in MG201 and TG201 were taken for quality testing. RPM is aware this drilling will be utilised in the 2018 updated model.

Stratford and Duralie

The following provides an overview of the historical exploration at the Stratford and Duralie project including the Stratford mine are, Duralie mine area and the Grant and Chainey resource area.

- Noranda (1970s): Initial exploration drilling in the Gloucester Basin was completed by Noranda.
- BMI Mining/Noranda (1977-1981): Undertook extensive exploration drilling programs in the Gloucester Basin concentrating on drilling Stratford (Stratford Main Pit area) and Duralie.
- BMI Mining/ESSO 1981-1993): Commenced exploration drilling in Stratford North (including BRN). Completed a number of east-west and north-south 2-D seismic lines in 1982/83.
- During the 1980s extensive surface mapping was undertaken by Malcom Lenox.
- Excon: RPM is unsure if any exploration was undertaken.
- AGIP: Undertook no exploration.
- Excel Mining (1993-1995): Drilled coal quality holes. Float/sink data in the Stratford Main Deposit was later considered unreliable.
- CIM Resources (1995-2003): Mining commenced and the wash plant was upgraded. Exploration drilling was completed on target areas (such as BRN proposed pit area), but was minimal due to tight economic conditions.
- Pacific Power (1990s): Drilled nine deep stratigraphic holes to obtain data for their gas leases.
- Gloucester Coal Ltd (2003-2015): Exploration drilling increased during the time of Gloucester Coal Ltd, targeting future areas in Stratford (Roseville West, Wenham Cox Road, Stratford South, Avon North/Stratford North, Clareval seam) Duralie (Weismantel seam coal quality and Clareval seam) and Grant & Chainey. 2D seismic data from the 1980s was reprocessed over Duralie - further defining the structure of the area and leading to the discovery of the Clareval seam. During 2009-2010, intense exploration drilling was undertaken with the quality of data sometimes compromised for quantity of drilling. 2D seismic undertaken in EL6904 in 2011.
- AGL: completed 2D and 3D seismic surveys and airborne surveys (magnetic and radiometric) thought the Gloucester Basin. 2D survey undertaken in 2009 and 2012 and 3D survey over Stratford in 2010. Several deep stratigraphic drill holes were also undertaken by AGL throughout the basin.

Donaldson

Exploration at Donaldson has been carried out by various parties, commencing in 1951as outlined below:

- 1951- 1952 - 54 shallow cored holes drilled by the Bureau of Mineral Resources (BMR) targeting West Borehole Seam. A further 22 cored holes were drilled by BMR in the Buchanan area to assess open cut potential of the Donaldson, Big Ben, Tomago Thin and Rathluba Seams.
- 1952 - 10 core holes drilled by the Joint Coal Board (JCB), targeting West Borehole Seam.
- 1959-1960 - 11 core holes drilled by the JCB, on behalf of the Electricity Commission of NSW (ELCOM), to investigate thermal coal potential of Tomago Coal Measures.
- 1961-1984 - 145 core holes and 151 oxidation chip holes drilled by RW Miller (RWM) in the Ironbark area.

- 1962-1986 - 21 core holes drilled by the JCB and J&A Brown and Seaham Collieries (JABAS) in the Stockrington No 2 lease area, targeting Newcastle Coal Measures and to assess down dip potential of the Tomago Coal Measures.
- 1969 - Two core holes drilled by the JCB in the Black Hill area.
- 1980 - Five fully cored holes drilled by Gollin Wallsend Company in the Buttai area to investigate West Borehole and Sandgate Seams.
- 1996-1997 - Nine non-core holes and four core holes drilled by Donaldson Projects Pty Ltd primarily for groundwater studies. A comprehensive suite of geophysical logs run in all 13 holes.
- 1997- 2000 - 12 holes drilled in Tasman, in four phases, to improve understanding of stratigraphy, structure and coal quality. Geophysical logs run in all holes.
- 1998-1999 - 32 holes drilled by Callaghans Creek Holdings in the Surveyors Creek area to investigate open cut potential of the West Borehole Seam. Geophysical logs run in most holes.
- 2001 - 10 non-core holes and two core holes drilled by Bloomfield Collieries to evaluate open cut potential of EL5497. Geophysical logs available for 10 of the 12 holes.
- 2002 - Nine core holes drilled by Excel Coal in EL5497 down dip of Donaldson to assess open cut potential of the Donaldson and Big Ben Seams. Geophysical logs run in all holes.
- 2003 - Four non-core and 12 core holes drilled at Donaldson to improve understanding of stratigraphy, structure and coal quality in the North, Central and EW Pits.
- 2005 - 17 holes drilled at Donaldson for structural and quality control purposes.
- 2005- 2007 - 170 holes drilled to target the full Tomago Coal Measures and Newcastle Coal Measures down to the Ashtonfield Seam.
- 2014 - 18 holes drilled by Donaldson Coal targeting West Borehole, Lower Donaldson and Ashtonfield Seams.
- 2016 - Four 100mm diameter (C316-C318, C323) and two 200mm diameter core holes (C319, C322) had been completed. These holes targeted the Lower Donaldson Seam within the proposed mine plan. In addition five non-core holes (R324-R328) were drilled to investigate the parting thickness between B and C plies within the Lower Donaldson

Middlemount

The Roper Creek area was first explored by Central Queensland Coal Associates, a consortium of Utah Development Co. and Mitsubishi Development Pty. Ltd. (Utah) under Authority to Prospect (ATP) 6C. The results of exploration suggested that the coal in the Roper Creek area contained significant tonnages of thermal coal. Utah relinquished large tracts of ATP 6C in 1966 which included the Roper Creek area.

The Department of Mines carried out reconnaissance exploration in late 1972 and 1973 in the Roper Creek area to investigate the extent of the potential coal resources. Three stratigraphic holes were drilled within the current project area.

Further drilling was completed in the 1970's and 1980's by Capricorn Coal Pty Ltd (CapCoal; now Anglo). CapCoal determined that the Middlemount resource area contained low to mid volatile, low sulphur bituminous thermal coal and relinquished part of their tenure which included the Middlemount resource area on 22 February 1992. RPM notes that the PCI coal market did not exist at that time and it was extremely difficult to market low volatile (less than 22%) thermal coal at that time.

No further exploration was completed until 2006-2007 when Peabody (Custom Mining) drilled 54 holes. The Middlemount Coal joint venture have explored the deposit since 2008 and have added a further 705 holes to the resource area.

Drilling includes open holes, partially cored slim (HQ-3 and HMLC) and 4-inch diameter core holes (4C) and large diameter holes. ***Table 4-1*** summarises the drilling statistics for holes stored in the Middlemount database.

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Table 4-1 Source of Borehole Data at Middlemount

Source	Period	TOTAL	Modelled	Not Used	LAS	Cored
Department of Mines	1970's	3	0	3	0	3
CapCoal (Middlemount)	1980's	238	93	145	135	238
Anglo	1970's-1980's	52	40	12	31	37
Peabody Custom Mining	2006-07	54	39	15	37	24
Middlemount Coal	2008-17	689	547	142	609	175
Middlemount Coal Water Bore	2008-10	16	3	13	2	0
Other		24	10	14	0	4
TOTAL		**1076**	**732**	**344**	**814**	**481**

NOTE: *"Modelled" refers to Quantity Data Points used in the 2018 resource model; "Not Used" refers to holes not used in the 2018 resource model; "LAS" refer to holes that have been geophysically logged and LAS data exist.*

Two 2D seismic surveys have also been completed at Middlemount. In 2008, 7.50km of data was acquired for assistance to delineate and characterise the Jellinbah Fault. An additional 2.93km of 2D seismic data was acquired in 2017 to investigate the underground extension in the south of the deposit.

Monash

A total of 23 holes have been completed within the Monash deposit, all of which were completed prior to 2014, as such all holes were completed by the previous owners.

4.2 Mining History

As outlined above mining activities are being undertaken at all but one of the operations, with recent production shown in ***Table 4-2***. RPM highlights that during 2017 58Mt ROM were produced for 44Mt product of which approximately 80% was produced from the large world class low risk open cut operations at HVO, MTW and Moolarben. Below is an outline of the mining history of each operation.

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Table 4-2 2015 through 2017 Operations Historical Coal Production by Type and Operation

Operation	Method	Centre	Unit	2015	2016	2017	H1 2018
HVO	OC	ROM Coal	Kt	na		19,531	9,113
		Strip Ratio	bcm:t			5.4	5.9
		CHPP	Kt			19,437	8,610
		Yield	%			75	74.4
		Bypass	Kt			213	-
		Total Product	Kt			14,784	6,409
		Product type	Kt	SSCC/thermal			
MTW	OC	ROM Coal	Kt	na		17,691	8,497
		Strip Ratio	bcm:t			5.7	5.6
		CHPP	Kt			17,646	8,314
		Yield	%			67	70
		Bypass	Kt			46	214
		Total Product	Kt			11,817	6,033
		Product type	Kt	SSCC/thermal			
Moolarben	OC/UG	OC ROM Coal	Kt	9,001	11,815	12,998	6,862
		Strip Ratio	bcm:t	-	3.6	3.7	3.8
		UG ROM Coal	Kt	-	422	1,712	2,952
		CHPP	Kt	9,005	12,156	13,499	7,110
		Yield	%	77	77	84	84
		Bypass	Kt	-	-	1,085	2,814
		Total Product	Kt	6,899	9,349	12,380	8,757
		Product type	-	Thermal			
Ashton	UG	ROM Coal	Kt	3,001	2,379	2,791	962
		CHPP	Kt	2,975	2,394	2,797	937
		Yield	%	46	45	42	44.5
		Bypass	Kt	-	-	-	-
		Total Product	Kt	1,375	1,074	1,164	417
		Product type	-	SSCC			
Yarrabee	OC	ROM Coal	Kt	3,360	3,625	3,394	1,341
		Strip Ratio	bcm:t	-	10.9	12.5	15.4
		CHPP	Kt	1,930	2,088	2,192	1,020
		Yield	%	78	74	75	74.2
		Bypass	Kt	1,304	1,548	1,205	373
		Total Product	Kt	2,814	3,098	2,850	1,130
		Product type	Kt	PCI/Thermal			
Stratford and Duralie	OC	ROM Coal	Kt	1,854	1,218	873	290
		Strip Ratio	bcm:t	-	5.6	3.8	4.3
		CHPP	Kt	1,904	1,223	639	312
		Yield	%	75	71	71	69.1
		Bypass	Kt	-	-	223	-
		Total Product	Kt	1,433	864	677	215.7
		Product type	-	SHCC/Thermal			

Operation	Method	Centre	Unit	2015	2016	2017	H1 2018
Austar	UG	ROM Coal	Kt	823	1,236	2,039	371
		CHPP	Kt	829	1,214	1,866	391
		Yield	%	87	94	91	95
		Bypass	Kt	-	-	177	-
		Total Product	Kt	721	1,138	1,870	371
		Product type	-	SHCC/Thermal			
Middlemount	OC	ROM Coal	kt	5,533	5,275	5,293	2,495
		Strip Ratio	bcm:t	7.5	8.5	10.6	11.0
		CHPP	kt	5,534	5,294	5,069	2,495
		Yield	%	79	77	76	82.6
		Bypass	kt	-	-	-	-
		Total Product	kt	4,367	4,089	3,857	2,061
		Product Type		SHCC/PCI			
Donaldson	UG	ROM Coal	Kt	1,808	265	-	-
		CHPP	Kt	1,742	237	-	-
		Yield	%	77	68	-	-
		Bypass	Kt	-	34	-	-
		Total Product	Kt	1,335	193	-	-
		Product type	-	Thermal		-	-

Source: Provided by the Company
Note: HVO and MTW were not part of the Groups production in 2015 and 2016. Donaldson has no production in 2017

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HVO/MTW

The Assets are an amalgamation of five coal mining operations which combined have been in production for over 45 years via various large scale open pits and small bord and pillar underground operations at Lemington.

HVO comprises three separate previous mines namely Howick, Hunter Valley and Lemington Assets which included the following:

- The Lemington Mine, which began production in 1971, was acquired and merged into HVO in 2001.
- Coal production began at the Howick Coal Mine in 1968 in what is known as the West Pit at HVO. In 2000 the Howick Coal Mine became part of Rio Tinto's Hunter Valley Operations as a result of the merger with Hunter Valley Mine.
- The Hunter Valley No. 1 Mine began production in 1979.

In 2000 the Howick and Hunter Valley mines merged to create the Hunter Valley Operations. The Lemington mine was acquired and merged into Hunter Valley Operations in 2001. Yancoal acquired HVO and MTW as part of the acquisition of Coal and Allied in 2017.

MTW comprises the Mt Thorley and Warkworth Assets and includes the following:

- Mount Thorley has been in operation since 1981 and after a business restructuring of mining company R.W. Miller, Coal & Allied became managers of the mine in 1989.
- Warkworth Mining began operations in the same year as Mount Thorley in 1981 and in 2001 Coal & Allied purchased an interest in the mine. In January 2004, the two mines were integrated to improve efficiency by operating as one business.

Mining is ongoing at MTW and HVO with recent production outlined in **Table 4-2**.

Moolarben

Moolarben leases overlie an area of approximately 105 km2 and have been explored since the 1950's by several private companies, the New South Wales Mines Department and the Joint Coal Board.

Yancoal acquired Moolarben mine through the purchase of Felix Resources in December 2009.

The Moolarben Coal Project Stage 1 was assessed in the Moolarben Coal Project Environmental Assessment Report (MCM, 2006) and was approved by the NSW Minister for Planning on 6 September 2007 (Project Approval [05_0117]). The Moolarben Coal Project Stage 2 was approved by the Planning Assessment Commission (PAC) (as a delegate of the NSW Minister for Planning) on 30 January 2015 (Project Approval [08_0135]). The Stage 2 included the addition of the open cut mine OC4 and two underground mines UG 1 and UG 2 plus supporting infrastructure. The now completed and integrated Stage 1 and Stage 2 projects have approval to mine up to 21Mt per annum ROM coal.

Coal mining operations commenced on the site in 2010 and currently include both underground and open cut operations. Production ramped up to 8.3Mt ROM by 2013 as part of the Stage 1 approval and maintained this level of production until 2015. Following the Stage 2 approval the project has developed OC4 and ramped up ROM coal production to a total of 14.7Mt by 2017 which will be further ramped up to 20Mtpa by 2020. Underground development commenced in 2016 and the longwall commenced operation in 2017 in-line with forecasts.

Yarrabee

The construction of the Yarrabee Coal Mine started in 1981 and commercial production commenced in 1982 in ML 196. Ownership of Yarrabee at that time was by CSR Limited. Initial production from Yarrabee was a range of raw coal products having different ash and phosphorus content. A premium brand coal was produced by toll washing at a nearby coal handling and preparation plant (CHPP).

The Yarrabee Coal Company became the owners of the Yarrabee asset in November 1989. Production rates of PCI and thermal coal ranged from 0.35Mtpa to 1Mtpa. Felix Resources operated the Yarrabee Mine from July 2003 to December 2009 when Yancoal acquired Yarrabee mine through the purchase of Felix Resources. Production at Yarrabee during that period was 1.7Mtpa.

From December 2009 ownership of Yarrabee passed to Yancoal. The CHPP was completed and commissioned in June 2009. The mining areas at Yarrabee are shown in ***Figure C-4***. RPM notes that the term DOM refers to DOMAIN, which refers to an area that is structurally separated from other areas due to faulting and folding.

Ashton

Yancoal acquired Ashton mine through the purchase of Felix Resources in December 2009.

The only previous open cut mining operation within the Ashton leases is the North East Open Cut (NEOC) where open cut mining was conducted by Ashton from 2002-2010. The remnant NEOC void is utilised as the course reject emplacement area for the current operation.

Ashton underground operations commenced in 2005 with development entries driven from the remnant highwall of the NEOC. Extraction using longwall commenced in 2007 with an approved mine plan to extract four seams: Pikes Gully, Upper Liddell, (ULD), Upper Lower Liddell (ULLD and Barrett. The longwall is currently operating in the ULLD seam with the Pikes Gully Seam having been fully extracted and the ULD seam having been partially extracted.

Approval for the South East Open Cut (SEOC) was gained in 2015.

Ashton ownership was transferred to Watagan in 2016. Watagan is a wholly owned unconsolidated subsidiary of YAL.

Stratford and Duralie

Open cut mining first commenced in the Stratford and Duralie basin in June 1995. In 2012, Yancoal acquired both the Stratford and Duralie mines through the merger with Gloucester Coal.

The Stratford and Duralie coal project is an open cut coal operation located approximately 100 km north of Newcastle, New South Wales in the Gloucester Basin. Stratford Coal Pty Ltd is the owner and operator of the Stratford Mine and is a wholly owned subsidiary of Yancoal.

The nearby Duralie Coal Mine is also owned by Yancoal and is located approximately 20 km south of the Stratford Mine. Stratford and Duralie mines collectively comprise the Stratford and Duralie Basin operations which are jointly operated and managed.

Austar

Austar is an aggregate of the former Pelton, Ellalong, Cessnock No1 (Kalingo) and Bellbird South Collieries with the current operations dating back to 2005. Austar Coal Mine was previously called Southland and before that was called Ellalong Colliery which date back to 1916. Yancoal acquired the Southland mine (renamed Austar) in December 2004. The first longwall mining operation in the Greta Seam commenced at Ellalong Colliery in the early 1980's. RPM notes the area to the north of Austar has been mined.

Austar is currently mining the domain known as "Bellbird South" which lies between Area 2 (mined by Austar Coal Mine between 2008 and 2012) and Ellalong. Conventional longwall mining commenced in Bellbird South in July 2016. The next mining Domain is Stage 3 where operations will recommence with the Longwall Top Coal Caving mining method.

Austar has introduced the Longwall Top Coal Caving (LTCC) mining method with development by continuous miner. The longwall top coal caving technology is used to maximise recovery of the thick Greta seam. Longwall Top Coal Caving is the extractive method of which has been utilised successfully since 2006. Longwall Top Coal Caving has been included in the estimated Coal Reserves for Stage 3 mining area.

Austar ownership was transferred to Watagan in 2016. Watagan is a wholly owned unconsolidated subsidiary of YAL.

Donaldson

Mining at Donaldson began in 2001 with the Donaldson open cut mine which was closed and rehabilitated in 2013. Donaldson lodged the EIS for the Abel underground mine in 2006, with approval granted in June 2007 and development commencing in March 2008. It was planned as a bord and pillar mine for greater

flexibility, particularly around creek and cliff lines. The amount of coal extracted would be varied to control subsidence to protect a range of surface features.

Yancoal acquired Donaldson mine through the merger with Gloucester coal in 2012.

Abel Mine operated as a bord and pillar mine from 2008 to 2016 (when it was placed on care and maintenance), producing up to 2.5Mtpa of ROM coal to wash thermal and SSCC products for export. Production was predominantly from the Upper Donaldson Seam. A combination of total extraction and partial extraction was incorporated across the target area, with partial extraction used below sensitive surface areas and infrastructure.

A modification to the Abel Project Approval (MOD3) was approved by the Department of Planning in December 2013 that allows for a change in mining method to longwall mining and an increase in annual ROM output of 6Mtpa.

Donaldson ownership was transferred to Watagan in 2016. Watagan is a wholly owned unconsolidated subsidiary of YAL.

Middlemount

The Middlemount Mine is managed by Middlemount Coal Pty Ltd which is an incorporated Joint Venture between Peabody and Yancoal. Yancoal acquired its interest in Middlemount Mine with the merger of Gloucester Coal in 2012.

A trial pit was completed during 2008-09 in the centre of ML70379 to extract coal from the Pisces Upper seam for bulk sample testing. Open cut mining commenced at Middlemount in 2011 and by the end of 2012, approximately 2.8Mt of coal had been mined, mostly from the Pisces Upper seam. Saleable production currently amounts to approximately 4.1Mtpa from some 5.4Mtpa of ROM output. The location of the mined out and planned open cut areas are shown in ***Figure C-9.*** The mining method at Middlemount open cut is conventional truck and excavator mining. The operating method is well proven and suitable for the deposit.

All ROM coal at Middlemount is washed to produce two product types: a semi-hard coking product at 10.5% ash with CSN of 6 and CSR of 58 to 63 and a low-volatile PCI coal at 10.0% ash. The CHPP is a 700tph single stage plant with two product coal handling systems and uses industry standard technology, operating at high availability.

Monash

No mining has occurred.

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5. Geology

RPM has reviewed the geology of the operations, on both a regional and deposit scale and considers the geology to be well understood and developed through the generations of geological mapping, data acquisition from drilling, geophysical surveys, interpretation and development of three-dimensional models. Below is a summary of the key geological features of the Assets.

RPM notes that the below summary has largely been derived from information provided by the Company from various reports and sources, however it has been reviewed and edited based on RPM's opinion and site visit observations.

5.1 HVO / MTW / Ashton/ Monash

Regional Geology

The HVO/MTW and Ashton assets are located in the Hunter Coalfield, which is located in the northern part of the Sydney Basin as shown in ***Figure 1-1***. The Sydney Basin forms part of the composite Permian-Triassic age Sydney-Gunnedah-Bowen Basin (SGBB) system, which extends for approximately 1,700 km from southern NSW into central Queensland. The SGBB represents a 1,700 km long foreland basin of Early Permian to Late Triassic age. The Sydney Basin is bounded by the New England Fold Belt to the north and this boundary is marked by the structurally complex, Hunter-Mooki Thrust. To the west and south, the basin strata lap onto older rocks of the Lachlan Fold Belt and to the east, the basin's limit is marked by the edge of the continental shelf.

The Sydney Basin is one of the world's premier coal provinces containing multiple stacked sequences of thick bituminous-rank Permian age coal measures. The Permian coal measures in the Sydney Basin are only weakly to moderately folded and faulted and as such are generally amenable to high productivity surface and underground mining methods.

The SGBB system evolved during the Late Carboniferous to the Middle Triassic (approximately 310 to 230 million years ago (Ma)) as a series of contiguous basins which formed along the eastern part of the Gondwana continental margin. The SGBB has been subject to a complex, multiphase geological history including early rifting in a back-arc environment and thermal subsidence evolving into a retro-arc foreland basin.

Coal measure sedimentation in the Sydney Basin began in the early Permian and was terminated towards the end of the Permian by major uplift and basin tilting. The earliest Permian units were deposited in fluvial, coastal plain and marine environments on older Palaeozoic basement rocks. This deposition was followed by rapid subsidence in the middle Permian, providing more space for sediment accumulation, with the main period of coal deposition occurring in the late Permian.

The sedimentary pile in the Sydney Basin has asymmetrical thickness distribution. The thickest accumulations are along the easterly-dipping Hunter-Mooki Thrust Fault System suggesting that subsidence was greatest along that fault. The sedimentary sequence thins to the west due to the sediments onlapping into the basement rocks in the west. The Hunter Coalfield is a district-scale north-eastern subdivision of the Sydney Basin (***Figure 2-2***). The Permian coal bearing stratigraphic section occurs within the Whittingham Coal Measures.

Regional Stratigraphy

The Late Permian Whittingham coal measures are the main focus of operations and its stratigraphy is outlined in ***Figure 5-1***. The existing operations exploit more than 100 individual seams (or seam plies) contained in more than 20 seam groups (or members) across the Vane and Jerrys Plains Subgroups of the Whittingham Coal Measures. Coal seams split and coalesce in various combinations at all stratigraphic intervals.

Whittingham Coal Measures

The Whittingham Coal measures are subdivided in to two Subgroups, namely Jerrys Plains and Vane as outlined below and shown in in ***Figure 5-1***.

The Whittingham Coal Measures were deposited in a retroact foreland basin during the Late Permian at a time when the Sydney-Bowen Basin complex was undergoing east–west compressional tectonics. The sediments were largely derived from the north (Hunter-Mooki Thrust) and the east, shedding off a contemporaneous high associated with the New England Fold Belt and the already developed Hunter-Mooki Thrust System.

Palaeocontemporaneous highs such as the Loder Dome found in the Lower Hunter area probably influential the coal seam deposition at that time by acting as a basement high resulting in thinner Permian sediment deposition. Subsequent burial, rifting and recent compressional tectonics has all influenced the structural character of the area. The coal seams generally dip to the south and west at less than 4 to 6º.

The Whittingham Coal Measures are typically 100 to 300m thick and where they crop out around the Lochinvar Anticline are 60m to 75m thick. Igneous activity occurred at various stages of geological history, particularly during the Jurassic, Late Cretaceous and Tertiary, after deposition of the coal seams and as such cross cut the coal measures and influence continuity and coal qualities in the local vicinity.

Jerrys Plains Subgroup

The Jerry's Plains Subgroup represents a complete cycle of terrestrial coal measure sedimentation that is up to 800m thick. Interseam lithologies are typically lithic sandstones, shale and conglomerate, with siltstone, carbonaceous claystone and tuff also occurring throughout the sequence. This Subgroup is the major source of coal mined in the Hunter Coalfield and due to extensive work has been subdivided in various formations and further into seam members as outlined in ***Figure 5-1***.

The Bayswater Coal Member is the lowest coal seam in the Jerry's Plains sequence and was formed in a back-barrier coal swamp environment. The Archerfield sandstone which occurs below the Bayswater seam represents a phase of prograding beach complex. Deposition of alternating interdistributary bay laminites and upwards coarsening crevasse-splay sandstones occurred in a lower delta plain environment, with the thin and banded Broonie Coal Member and Vaux Coal Member forming part of this sequence. Upper delta plain conditions then resulted in thicker and laterally continuous seams such as the Piercefield Coal Member and Mount Arthur Coal Member, after which lower delta plain conditions were re-established with the deposition of the Glen Munro through to the Whybrow Coal Member. Deposition of the Jerrys Plains Subgroup ended with a marine transgression, forming the base of the Denman Formation. Coal distribution in the Jerrys Plains Subgroup of the Whittingham Coal Measures is more variable compared to that of the Vane Subgroup stratigraphically below. Although the majority of the upper delta plain seams are laterally extensive, some of the largest variations occur in the Blakefield, Mount Arthur and Piercefield coal members. The lowest seam, the Bayswater Coal Member seam, varies in thickness from about 1 to 14 m and has a dull character with high inertinite content. The brighter coals such as the Broonie through to the Warkworth coal members are subject to extensive splitting.

Vane Subgroup

The Jerrys Plains Subgroup and the Vane Subgroup are separated by a marine incursion, which is represented by the Archerfield Sandstone. The Jerrys Plains Subgroup has been subdivided into two formations, namely the Bulga and Foybrook Formations and various seam members as outlined in ***Figure 5-1***.

The lower seams of the Vane Subgroup generally have similar thicknesses and are characteristic of the facies change from lower to upper delta plain deposits, with the Liddell Coal Member being the thickest coal-bearing unit, up to 14m in the Foybrook area. The majority of the seams are characterised by multiple splitting, thus, individual coal seams tend to be thin and of inferior quality to the upper Jerrys Plains Seams.

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Figure 5-1 Generalised Stratigraphic Column for the Whittingham Coal Measures

	Subgroup	Formation	Member
Whittingham Coal Measures	Denman Formation		
	Jerrys Plains Subgroup	Mt Leonard Formation	Whybrow Seam
		Malabar Formation	Redbank Creek Seam
			Wambo Seam
			Whynot Seam
			Blakefield Seam
		Mount Ogilvie Formation	Saxonvale Member
			Glen Munro Seam
			Woodlands Hill Seam
		Milbrodale Formation	
		Mount Thorley Formation	Arrowfield Seam
			Bowfield Seam
			Warkworth Seam
		Fairford Formation	
		Burnamwood Formation	Mt Arthur Seam
			Piercefield Seam
			Vaux Seam
			Broonie Seam
			Bayswater Seam
	Archerfield Sandstone		
	Vane Subgroup	Bulga Formation	Lemington Seam
		Foybrook Formation	Pikes Gully Seam
			Arties Seam
			Liddell Seam
			Barrett Seam
			Hebden Seam
	Saltwater Creek Formation		

Coal Mineralogy and Rank

Vitrinite

Vitrinite is the dominant maceral group in coals of the Jerrys Plains Subgroup (generally greater than 50%) with the content of the coal at MTW and HVO typically ranging between 70 and 80%. Inertinite is most abundant in seams from the Bowfield Coal Member to the Bayswater Coal Member, which could indicate greater extent of oxidation during deposition of coals in that part of the Jerrys Plains Subgroup

Coal Rank

Coals in the south of the Hunter Coalfield are generally of higher rank in comparison to those in the north for the same depth, all generally increasing linearly with increasing depth. Vitrinite Reflectance (Rv max) is used as a measure of coal rank. In the south of the coalfield RV max varies within a broad range between 0.56 and 1.15%, although most are greater than 0.75%. Rv max of 1% or more occurs at depths of greater than 700m with the central regions, Rv max is about 0.72 to 1.00%, whereas in the west Rv max is between 0.65 and 0.95% Rv max in the HVO area does not show any consistent trends and any potential down dip trend of increasing Rv max is within the repeatability range of the vitrinite reflectance measurement and cannot be interpreted as a trend.

A number of seams demonstrate that CSN increases to the south east in HVO rather than down dip. The CSN at MTW appears to follow the south-easterly increasing trend with CSN values that are generally greater than those values at HVO down to the Mount Arthur Seam. The CSN for the Piercefield to Broonie

seams appear to have similar values at both MTW and HVO. The CSN values in MTW appear to increase down dip.

The MTO CHPP splits coal at plus and minus 16mm, with the minus 16mm size fraction producing SSCC from certain coal seams. Splitting the coal by size fraction is a way of concentrating vitrinite into the minus 16mm fraction, which enables the coal product to be marketed as SSCC.

RPM considers that increased CSN at MTW and HVO is related to the increased vitrinite content of the coal. Coal rank in the range Rv max 0.75 to 0.8% at MTW and HVO is not a significant driver for caking properties. Additionally RPM concludes that Rv max should not be used as an indicator for determining increased potential for semi soft coking coal down dip, however the relationship between vitrinite content and CSN should be investigated in detail to develop an understanding of how increased value can be obtained from the MTW and HVO resources.

Deposit Geology

The surface geology of the HVO, MTW and Ashton coal leases is dominated by outcrops of the Jerry's Plains and Vane Subgroups which form the Whittingham Coal Measures. The main rock types of this sub-group include sandstone, siltstone and conglomerate, which occur with subordinate coal and tuffaceous claystone

Hunter Valley Operations

HVO is located on the asymmetric southerly plunging Bayswater Syncline. The Auckland area is located on the western flank of the Camberwell Anticline and dips more steeply than the western limb of the Bayswater Syncline. The West Pit is located on the eastern flank of the Muswellbrook Anticline.

The Barrett seam outcrops in the east of the Auckland area on the Camberwell Anticline. A cross section through the HVO resource is shown as ***Figure 5-2***.

Mount Thorley and Warkworth

The Wollombi Coal Measures overlie the Whittingham Coal Measures and outcrop in the far southwestern corner of CCL753. Alluvial deposits associated with the Hunter River and Wollombi Brook cover the coal bearing strata over the northern and eastern parts of CCL753.

The strata within the MTW area dip to the west and southwest between 4 and 6° with increased dips in excess of 60 degrees in the south-eastern corner of the MTO area, known as the Mount Thorley Monocline, which is located on the western flank of the Loder Anticline.

A cross section through the MTW resource is shown as ***Figure 5-3***.

Ashton

The Ashton area is located on the Camberwell Anticline which has a north north-west to north-west orientation and plunges to the north-west. The Camberwell Anticline is asymmetric with a moderately dipping (9° to 18° degrees) eastern limb which is situated in ML1529 and a gently dipping (6° to 9°) western limb which is situated in the remainder of the area as shown in ***Figure 5-4***. The western limb at Ashton contains the seams that are equivalent to those in the Auckland area at HVO.

The Ashton area contains all coal seams from the Bayswater Seam to the Hebden seam which in stratigraphic descending order are:

- Bayswater;
- Lemington;
- Pikes Gully;
- Arties;
- Liddell;
- Barrett; and,

- Hebden.

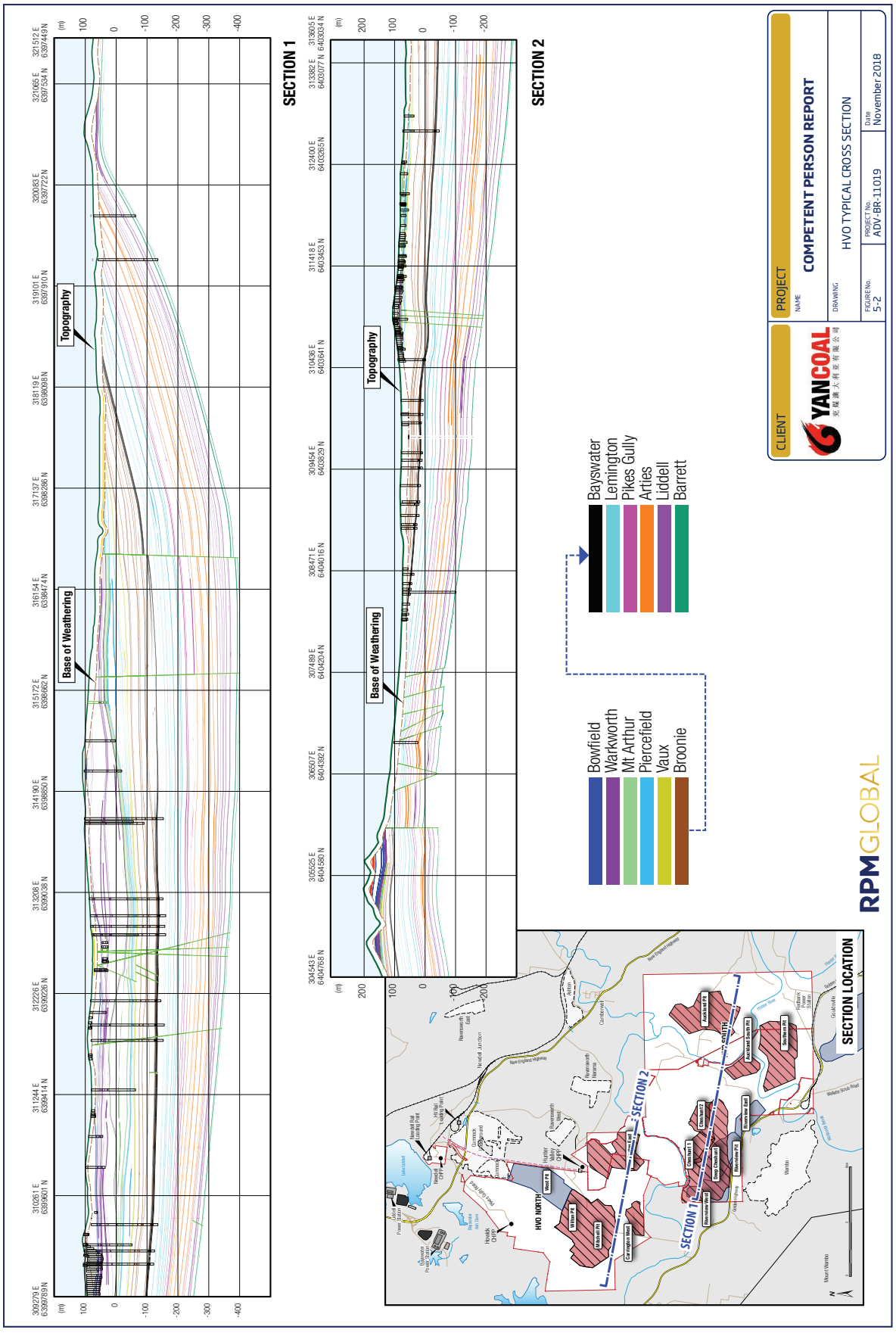
The coal seams at Ashton exhibit the same degree of seam splitting, seam thickness and have similar raw coal ash ranges to the equivalent coal seams at MTW and HVO.

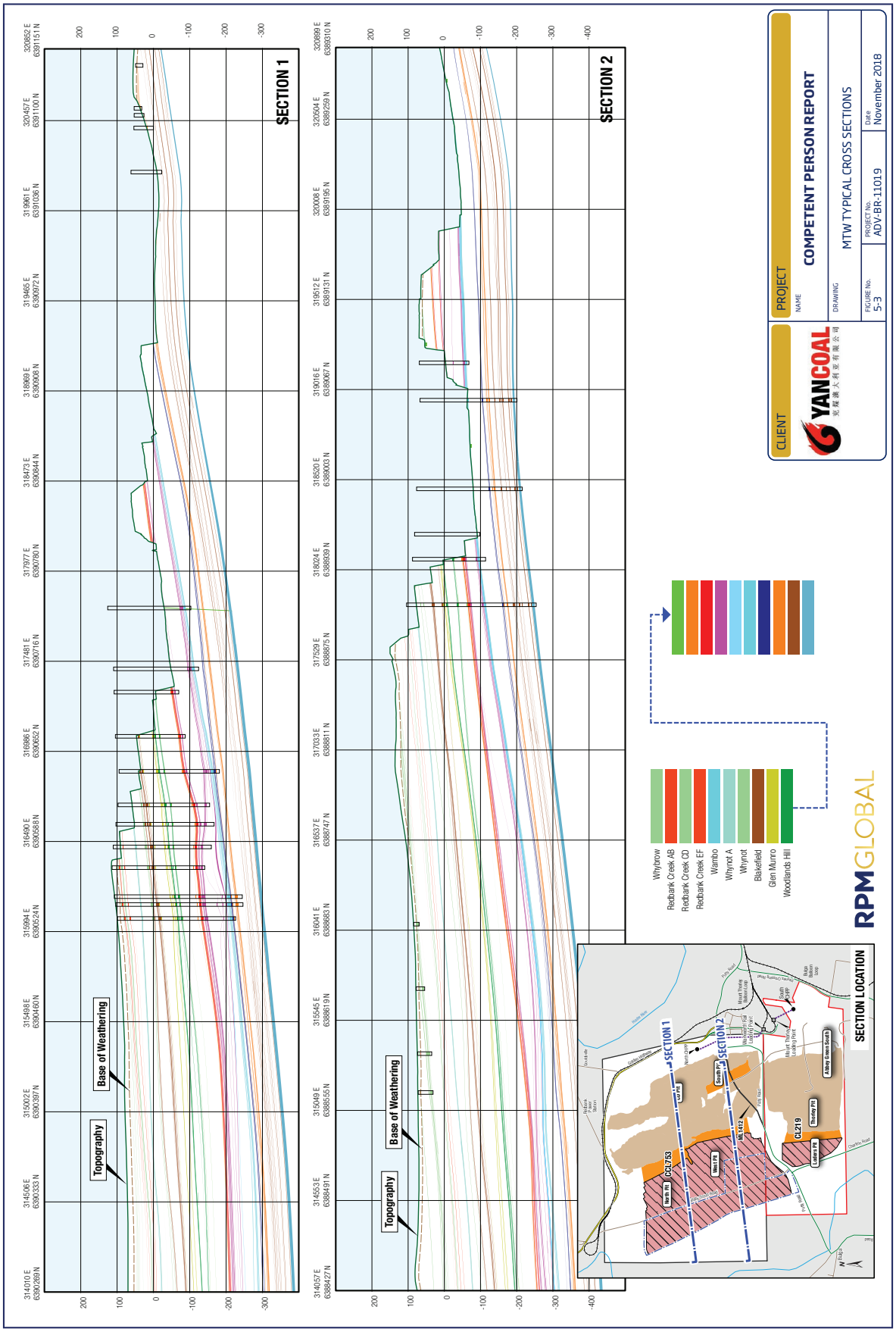
The Barrett Seam outcrops on the Camberwell Anticline south of the New England Highway and joins with the outcrop of that seam to the south in HVO. The stratigraphically higher coal seams above the Barrett Seam crop out sequentially from east to west throughout the Ashton area. The coal seams in the Ashton area are equivalent to the coal seams present in the Auckland area at HVO.

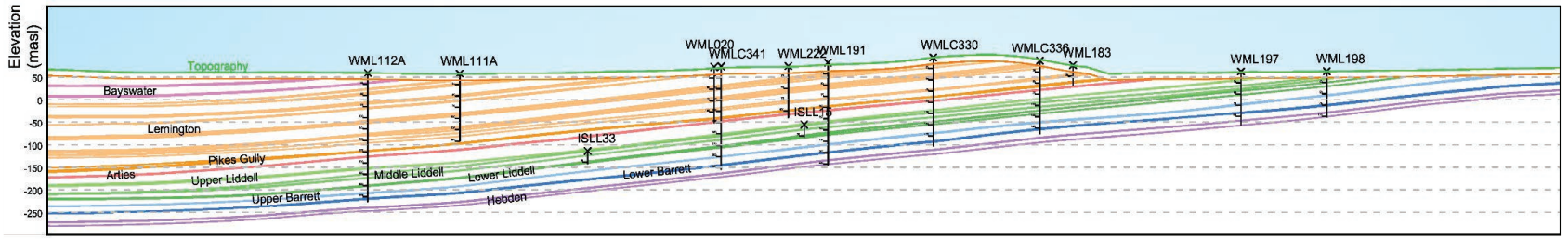
Monash

The Monash area contains stratigraphy from the Newcastle Coal Measures and Jerrys Plains Subgroup of the Whittingham Coal Measures. Regional dip of strata is shallow (<5 degrees) generally towards the southwest. Triassic Narrabeen Group sediments up to 400m thick overlie the Newcastle Coal Measures and form prominent escarpments. Coal seams in this remote portion of the Lower Hunter Valley exhibit a high degree of splitting and so thickness and ash content varies considerably throughout the deposit. The stratigraphy is similar to that outlined in ***Figure 5-1*** and the coal seams contained in the Monash resource in stratigraphic descending order include:

- Fassifern;
- Borehole;
- Whybrow;
- Whynot;
- Woodlands Hill;
- Arrowfield; and,
- Bowfield.


SECTION 1
SECTION 2
Topography
Base of Weathering
Bayswater
Lemington
Pikes Gully
Arties
Liddell
Barrett
Bowfield
Warkworth
Mt Arthur
Piercefield
Vaux
Broonie
SECTION LOCATION
HVO NORTH
HVO SOUTH
SECTION 1
SECTION 2
RPMGLOBAL
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
HVO TYPICAL CROSS SECTION
FIGURE No.
5-2
PROJECT No.
ADV-BR-11019
Date
November 2018


SECTION 1
Topography
Base of Weathering
SECTION 2
Topography
Base of Weathering
Whytrow
Redbank Creek AB
Redbank Creek CD
Redbank Creek EF
Wambo
Whynot A
Whynot
Blakefield
Glen Munro
Woodlands Hill
SECTION LOCATION
SECTION 1
SECTION 2
CL753
CL372
CL219
RPMGLOBAL
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MTW TYPICAL CROSS SECTIONS
FIGURE No.
5-3
PROJECT No.
ADV-BR-11019
Date
November 2018



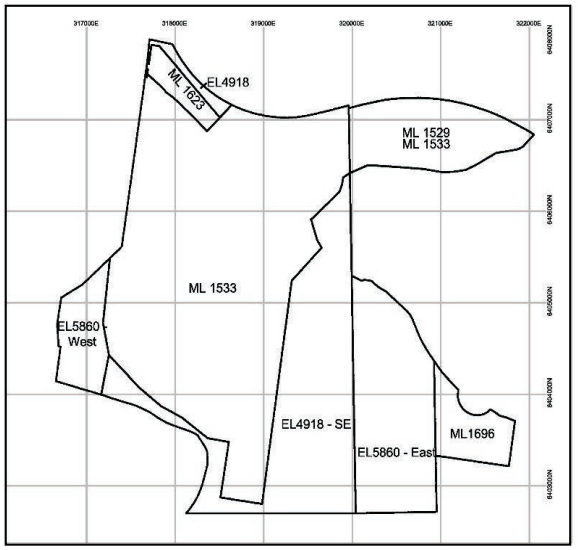


Figure Source: MBGS Ashton Coal Mine Competent Person Report December 2017

CLIENT
YANCOAL 兖煤澳大利亚有限公司

PROJECT
NAME
COMPETENT PERSON REPORT

DRAWING
ASHTON - TYPICAL WEST TO EAST CROSS SECTION

Figure No.	PROJECT No.	Date
5-4	ADV-BR-11019	November 2018

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5.2 Moolarben

Regional Geology

The Moolarben deposit is located on the western margin of the Western Coalfield within the Sydney Basin where sedimentary strata of Permian, Triassic and Jurassic age dip towards the northeast at 1° - 3° and overlie Carboniferous granite and folded metamorphic basement. The Permian strata comprise the coal-bearing Illawarra Coal Measures and the underlying Shoalhaven Group, which in turn uncomformably overlies the Lachlan Fold Belt basement rocks (***Figure 5-5***). Surface Quaternary alluvial deposits and remnant Tertiary basalt flows are common in the area.

The Illawarra Coal Measures are equivalent to the basal section of the Newcastle Coal Measures and the Wittingham Coal Measures in the Hunter Coalfield. Extrusive basaltic lavas and intrusive igneous activity was common during the Tertiary era (< 65 million years ago). These igneous features are usually not significant for open cut mining but for underground operations the impact of unidentified igneous intrusions can be serious from a safety as well as a cost perspective. RPM is aware the Company and its operators are well aware of this issue and continue to monitor and explore to minimise their impact.

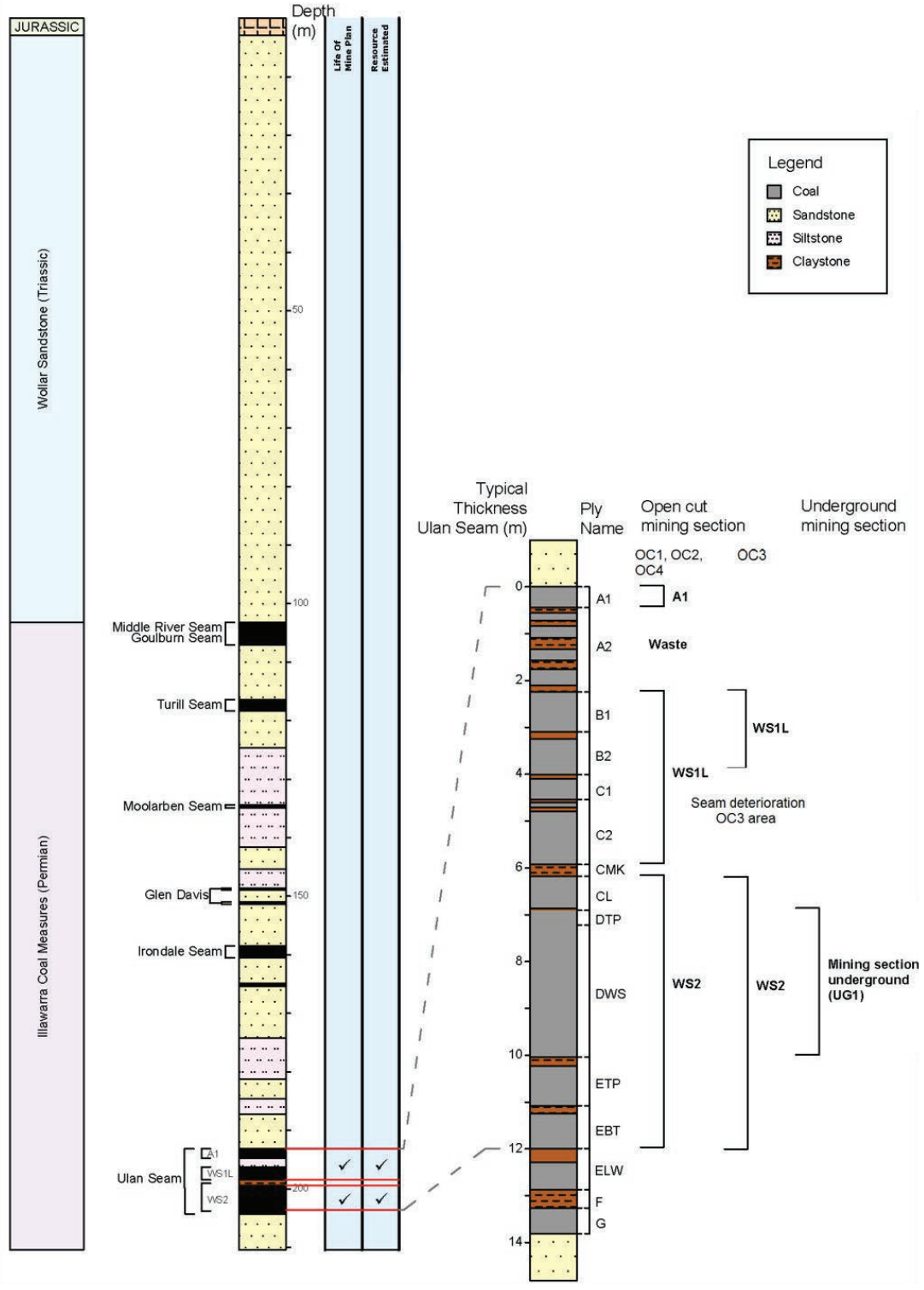
Regional Stratigraphy

The Illawarra Coal Measures are typically 80 to 100m thick within the Moolarben resource area and comprise a sequence of interbedded siltstone, sandstone, minor claystone with up to eight coal intervals, of which the Ulan Seam is the only seam mined (***Figure 5-5)***. Regionally, the Wollar Sandstone which is a 120m thick sandstone sequence within the Narrabeen Group, overlies the coal measures forming cliffs and escarpments. The Pilliga Sandstone and Purlawaugh Siltstone, both of Jurassic age, overlie the Narrabeen Group to the north and east of Moolarben, with a combined thickness of up to 120 m. The Pilliga Sandstone is an aquifer of regional significance.

The Ulan Seam includes several partings and on a regional basis is up to 12m thick. A tuffaceous parting (C Marker – CMK) approximately 0.3m thick occurs in the middle of the seam and separates the upper (WS1L) and lower (WS2) open cut working sections. East of Moolarben the CMK interval increases to 15m thick. The Lithgow Seam, which is up to 15m below the Ulan Seam is the basal seam within the Illawarra Coal Measures throughout the Western Coalfield.

The seam depth increases towards the northeast due to regional dip (***Figure 5-6***). Overburden thickness north of the railway in the north of EL6288 reaches 300m and in the south of EL6288 severe topographic relief caused by remnant Triassic escarpments, limit the extent of open cut development even though overburden thickness tends to be less than 150 m.

The Ulan Seam is typically 11m thick throughout much of tenure although in the south of EL6288 and within EL7073, deterioration of some upper coal plies in the WS1 results in a decrease in overall seam thickness to less than 6 m.



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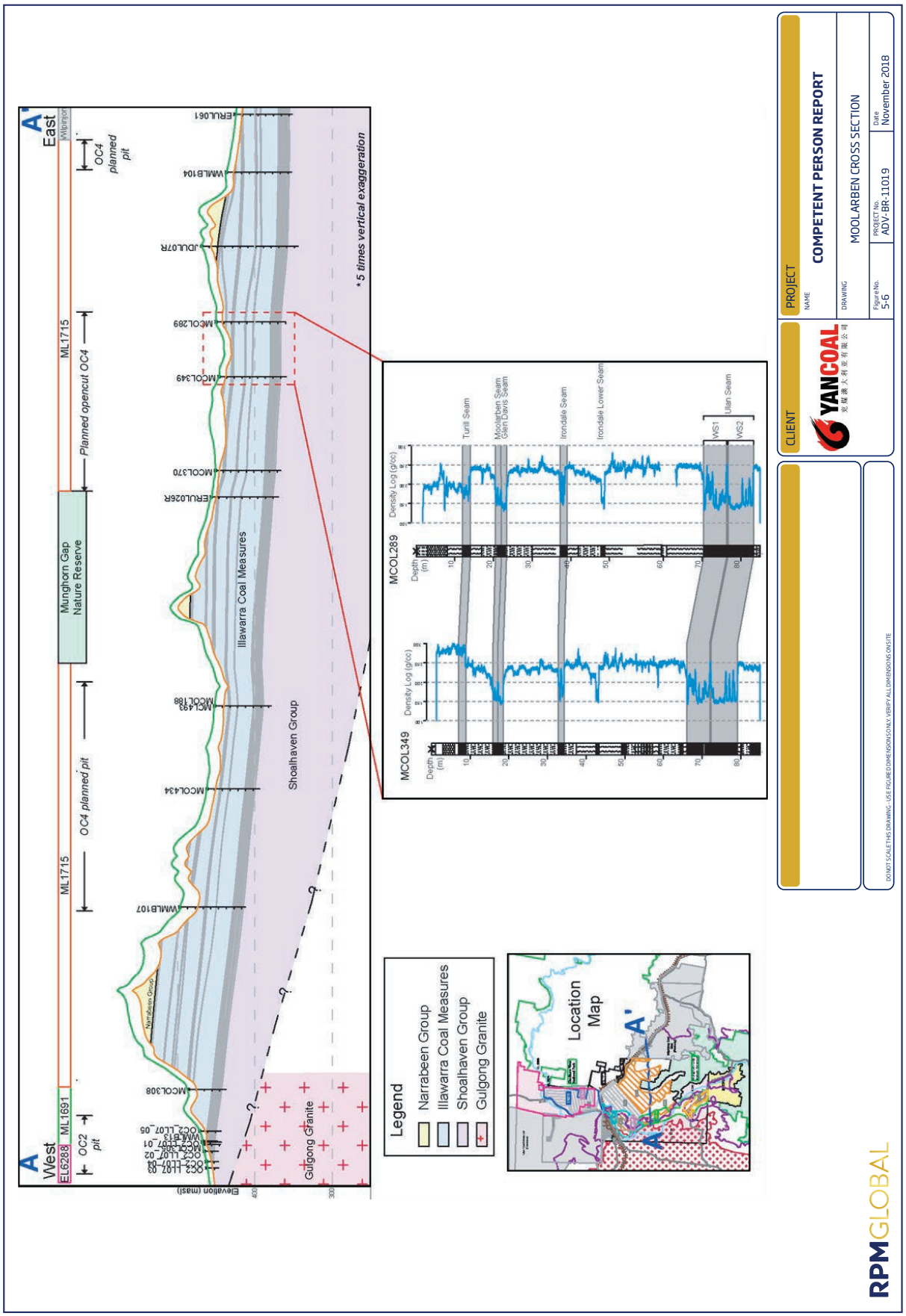
PROJECT

NAME COMPETENT PERSON REPORT

DRAWING MOOLARBEN STRATIGRAPHIC COLUMN

Figure No. 5-5 | PROJECT No. ADV-BR-11019 | Date November 2018

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE


A West
A' East
EL6288
ML16911
ML1715
ML1715
OC2 pit
OC4 planned pit
Munghorn Gap Nature Reserve
Planned opencut OC4
OC4 planned pit
Wipinjor
* 5 times vertical exaggeration
Illawarra Coal Measures
Shoalhaven Group
Gulgong Granite
Elevation (masl)
Legend
Narrabeen Group
Illawarra Coal Measures
Shoalhaven Group
Gulgong Granite
Location Map
MCOL289
MCOL349
Density Log (g/cc)
Depth (m)
Turrit Seam
Mountarbon Seam
Glen Davis Seam
Irondale Seam
Irondale Lower Seam
Ulan Seam
WS1
WS2
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MOOLARBEN CROSS SECTION
Figure No.
5-6
PROJECT No.
ADV-BR-11019
Date
November 2018
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5.3 Yarrabee

Regional Geology

The Yarrabee deposit is situated in the eastern portion of the Central Bowen Basin in central Queensland adjacent to the Dawson Tectonic zone. The stratigraphic sequence is made up of thin Quaternary soils, Tertiary sands and gravels, the Triassic Rewan Formation and the Upper Permian Rangal Coal Measures. The coal measures consist of interbedded siltstones and sandstones with some mudstones and shales. The Rangal Coal Measures are separated from the lower Burngrove Formation by the Yarrabee Tuff, which, when present, can be used for correlation purposes.

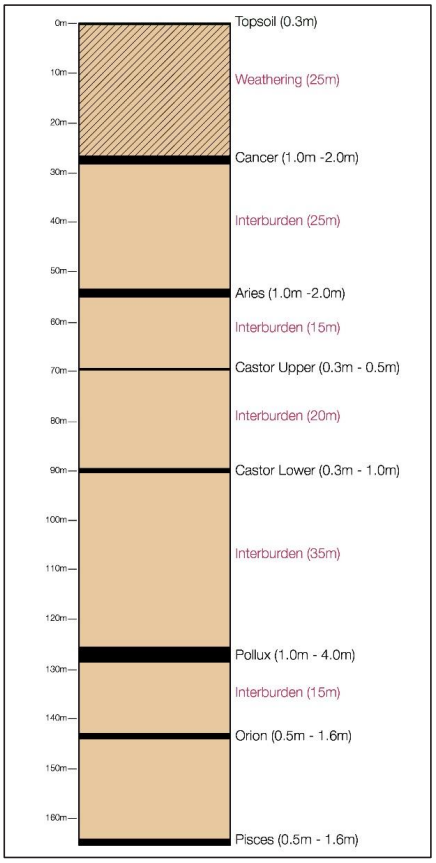
The Tertiary material is dominated by sand and gravel, the thickness of which increases with proximity to the Mackenzie River. Thicknesses of the Tertiary range from 40 meters depth in the north to zero meters in the south. The base of weathering is typically between 5 and 15 meters below the Base of Tertiary surface.

The seams at Yarrabee in stratigraphic order (as shown in ***Figure 5-7***) are: Cancer, Aries, Castor Upper, Castor Lower, Pollux, Orion and Pisces Lower) have been modelled and resourced where supported by adequate data. The lower Orion and Pisces seams are generally thin and of poor quality and thus are not resourced, with the exception of the Yarrabee East South (YES) and Domain 2 South pit areas. In these zones the seams thicken and improve in quality sufficiently to be resourced. ***Figure 5-7*** shows a schematic of the Yarrabee seams.

Deposit Geology

The Yarrabee deposit is located within a fault slice of the Rangal Coal Measures of the Blackwater Group, between the Yarrabee fault on the east and another fault on the west, both faults being thrusts and upthrown to the east, ***Figure 5-8***.

Figure 5-7 Yarrabee Resource Stratigraphic/Seam Sequence



The overarching structure of the Yarrabee area is an asymmetric south easterly plunging syncline, the Yarrabee Syncline, with the greatest amount of compressional deformation located on the western limb and the northern nodal part of the syncline. The Yarrabee Syncline is shown by the dark blue line in ***Figure 5-8***. The Yarrabee Mine is located between two significant fault structures (most likely faulted zones, rather than single faults) on the east and to the west. Faults strike in a NNE-SSE direction and are upthrown to the east.

The Yarrabee Syncline is itself folded and faulted by smaller fold structures and faults, shown in ***Figures 5-8***. The anticline structures are typically faulted in the more compressed parts of the Yarrabee area and coal is only present in the synclines. ***Figure 5-9*** shows two cross sections which are located in the vicinity of the Yarrabee East North (YEN) pit. Six thrust faults have been interpreted with the lowest angle faults being located in the east and subsequent faults located to the west steepening to the west. In addition fault plane angles are lowest in the north and steepen to the south, which can be observed by comparison between cross section 1 and cross section 2 in ***Figure 5-9***.

Figure 5-8 Yarrabee East Mine Area and Location of Cross Sections

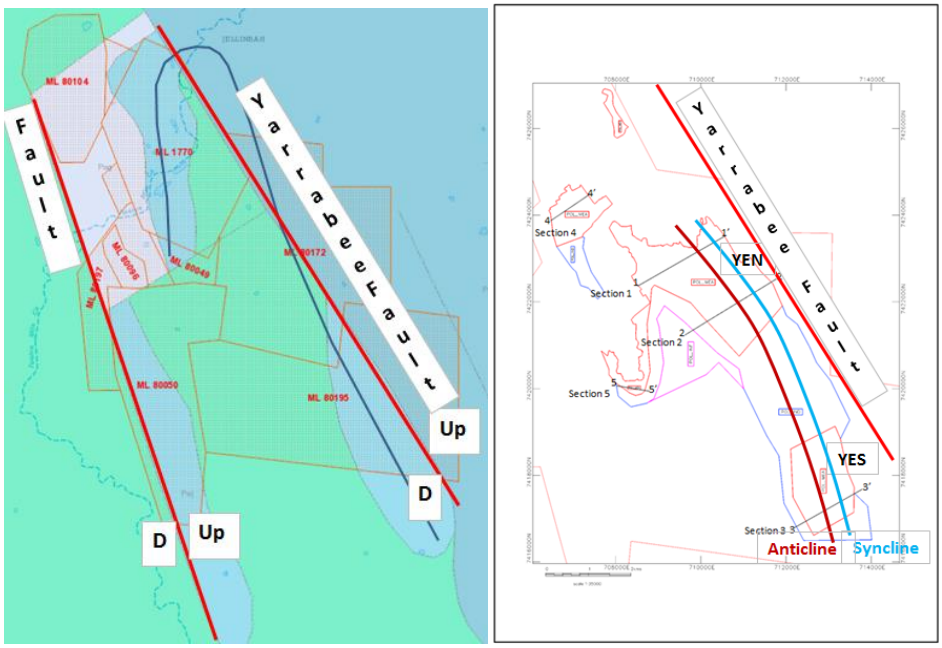
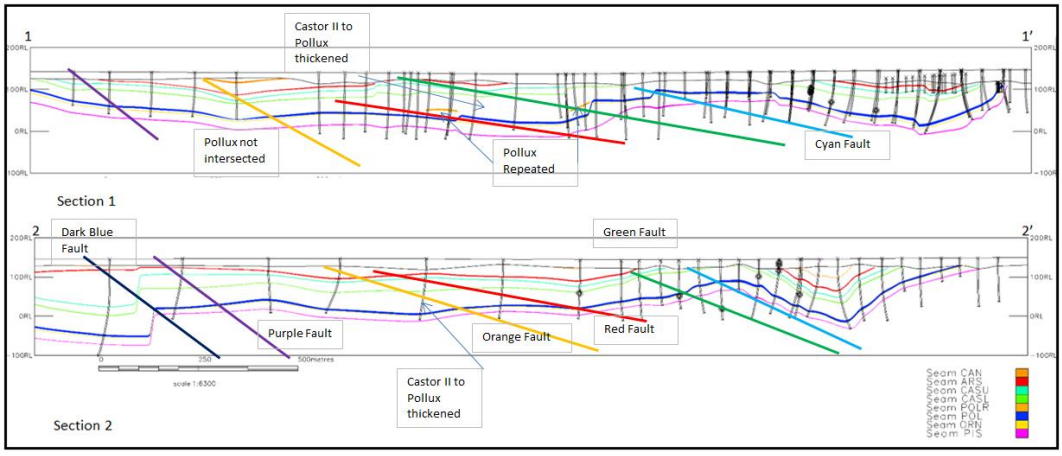


Figure 5-9 Yarrabee Typical Cross Section



The Pollux seam is the only seam that is subsampled with multiple ply samples taken. The other seams are typically sampled as a single sample unless the geologist determines that the seam intersection has been structurally thickened by faulting and in those cases additional samples are taken to ensure correct representation of the seams coal quality attributes.

The Pollux seam is stratigraphically equivalent to the Leichardt or Elphinstone of the Northern Bowen Basin and the DU and D seam of the south-eastern Bowen Basin at Moura. The RPM Competent Person is familiar with the characteristics of the Pollux seam throughout the Bowen Basin.

The Pollux seam is subdivided into four coal intervals which are listed below. The upper and lower sections of the Pollux seam are subdivided at the medial stone band which is a Bowen Basin wide marker in the Leichardt / Elphinstone seam. Typical sampling for each of the four intervals is described below and shown in ***Figure 5-10***:

1) Wash Top - The Wash top ply is sampled as a single interval, because it is typically less than 30cm thick,

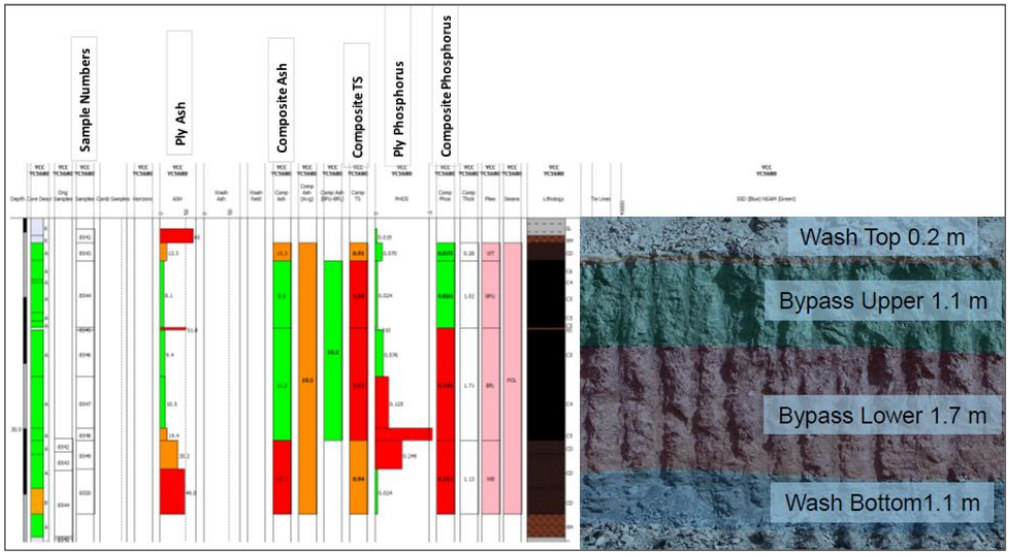
2) Bypass Upper - The Bypass Upper is typically sampled as a single interval because it has uniformly consistent coal quality,

   Medial Stone Band

3) Bypass Lower - The Bypass Lower is sampled as a number of intervals to characterise the raw coal ash and phosphorus. In general a minimum of three samples is required.

4) Wash Bottom - The wash Bottoms is also sampled as a number of intervals to characterise the raw coal ash and phosphorus and a minimum of three samples is required.

Figure 5-10 Pollux Seam Sample and Mining Sections



5.4 Stratford and Duralie

Regional Geology

The Stratford and Duralie Operations comprises the Stratford mine in the north and the Duralie Mine in the south. The Operations are located in the Gloucester Basin in NSW and is approximately 55km long and 15km at it's widest. The coal bearing strata package is over 1km thick and contains 10-15 significant seams. The stratigraphic sequence of the Gloucester Basin is shown in ***Figure 5-11***

The Basin primarily contains in stratigraphically descending order the Late Permian strata of the Gloucester Coal Measures and Dewrang Group. The Stratford and Duralie Basin is a relatively small Permian basin which has undergone significant east-west tectonic compression that has resulted in a tight north trending synclinal structure that is disrupted by considerable normal faulting that strikes east-west and reverse faulting that strikes north-south.

The, Roseville, Marker 3, Marker 8, Marker 1, Bowens Road, Glen View, Marker operation is located on the eastern limb of the Stroud Gloucester syncline, where the strata dip to the west, ranging from 10 to 50°, however is steeper in localised areas resulting in a relatively complex deposit compared to its regional peers in the Hunter Valley. The deposit comprises multiple seams with extensive splitting and coalescing both down dip and along strike. The coal seams that are exposed on the eastern side of the Stroud Gloucester Syncline include: Linden, Marker 7, Marker 6, Bindaboo, Deards, Cloverdale2, Avon, Triple, Weismantel, Cheerup and Clareval Seams. It is expected that all coal mined at Stratford and Duralie will be washed and if required blended with other seams to produce both coking and thermal coal products as is currently site practice.

The Gloucester Coal Measures are considered to be equivalent to the Late Permian Wittingham Coal Measures of the Hunter Coalfield, northern Sydney Basin. The coals in the Gloucester Coal Measures are generally vitrain rich and intensely cleated

Stratford Deposit Geology

The western portion of the operation strata from the Woods Road, Bucketts Way and Wenham Formations dip to the west at 10-50° and contain ten coal seam packages (Marker 7 to Bowens Road) over a stratigraphic thickness of approximately 600m**.** A stratigraphic column of the seam sequence at Stratford West is shown in ***Figure 5-11***.

East-west/northeast-southwest normal faulting is present with the most prominent feature a growth fault at the boundary of the BRN Pit (***Figure 5-12***), with displacement up to 40m are present in the Stratford West area and can be traced for a distance of up to 3km. A number of smaller displacement reverse faults have been interpreted from borehole data to have vertical displacements of up to several metres.

Further complexity occurs with sedimentary changes prevalent in these seams resulting in seam splitting and thinning of plies to the northern areas of the tenement holdings. Changes in interburden and ply thickness can occur over reasonably short distances making correlation of borehole data difficult. Rare igneous intrusions have been intersected in boreholes, due to the location of these intersections a possible dyke has been interpreted trending parallel to the east-west faults. Coal seams in Stratford West from Marker 7 to Marker 1 are generally reasonably coalesced in the south and start to split apart northwards.

The majority of seams in the Gloucester Coal Measures have raw ash content of 25-35% and total sulphur values average 0.5-0.8%. Washability data shows coal seams are able to produce coking and thermal coal products with low to moderate sulphur content after beneficiation.

Avon North is an area northeast of the Stratford Main Pit and the strata present are from the Avon Sub- group. Seams dip steeply toward the west at 35-50° and sub-crop to the east (***Figure 5-12***). North-south trending reverse faults have been identified from borehole intersections, two of which are steeply dipping (in the order of 70° to the west). Additional reverse faults have been identified however there is insufficient data to refine the interpretation.

The Avon seam is the main economic target in this area. It contains up to 13 coal plies, and is disrupted by 5 or 7 thrust faults. The upper part of the Avon seam has an overall product yield of 80% with coking coal yield of 65% (ash 10% and CSN 8-9) and thermal middlings yield 10-15% (ash 25-30%). Raw coal analyses show the Avon Seam contains low sulphur (generally <0.5%).

The Stratford East area is a narrow elongated resource area located east of Stratford. Strata dip steeply to the west and contain the Weismantel, Cheerup and Clareval Seams. These coal seams are from the stratigraphically lower Dewrang Group which is approximately 500m deeper (stratigraphically) than the Avon Seam at Avon North. The Weismantel seam is located some 150m stratigraphically above the Clareval.

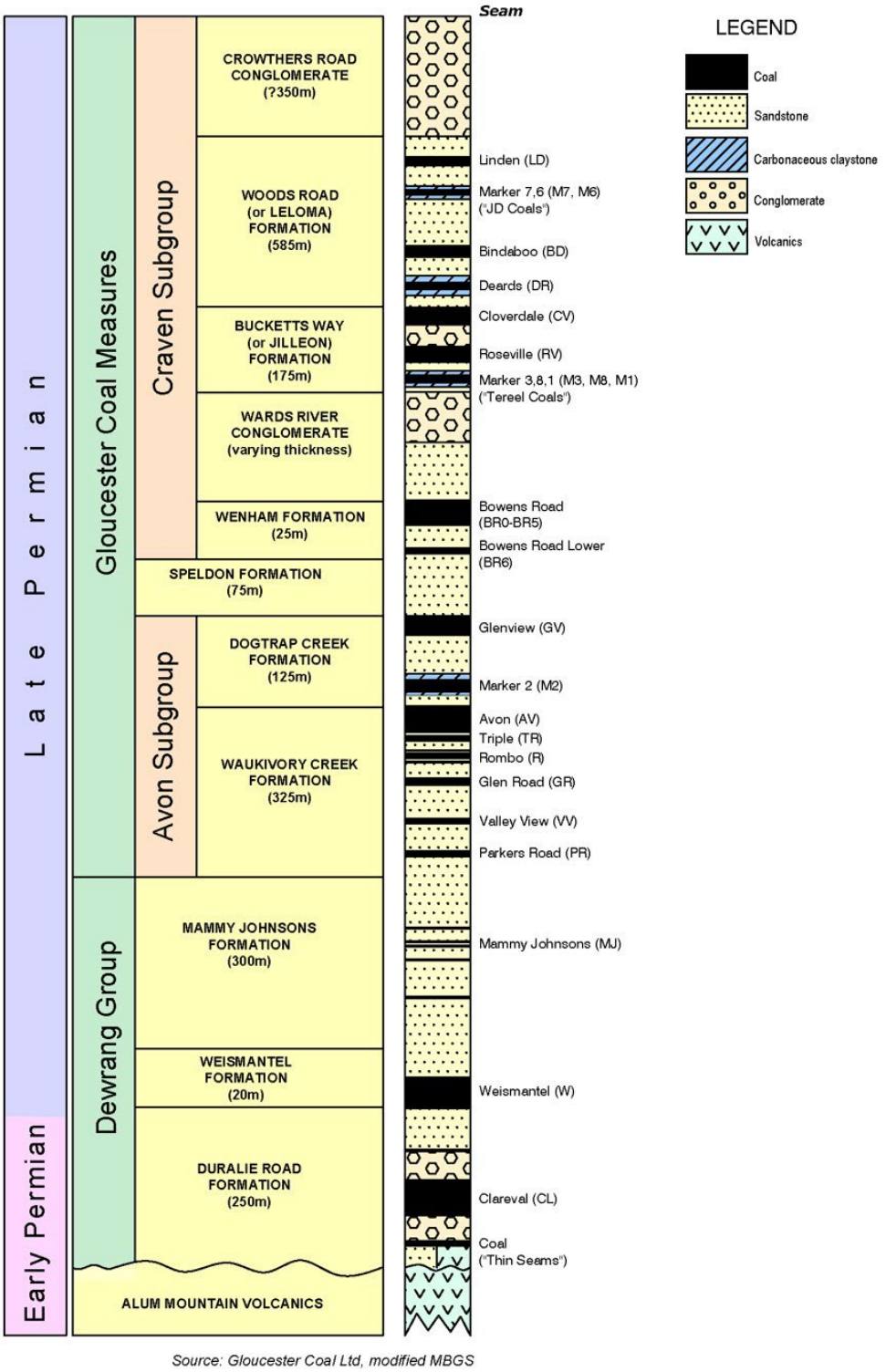
The Weismantel seam at Stratford is considerably deteriorated compared to the Weismantel Seam at Duralie (See below). There is very limited quality data for this seam however the data available indicates a high ash (40-50%), moderate sulphur (1.5-1.6%) thermal coal. Limited raw data on the Cheerup Seam indicates a variable sulphur (0.5-9%), high ash (30-45%) coal. Raw quality on the Clareval Main Seam plies indicates low to moderate sulphur (0.5-1.6%) and medium to high ash (24-45% including thin stone partings). The Clareval Seam at Stratford East would provide product coal with similar quality to the Duralie Northwest area, however with reduced overall yield due to thin stone partings within the seam.

Duralie Deposit Geology

Mining at Duralie focuses on two seams, the Weismantel and Clareval Seams. The Weismantel Seam comprises four plies (W1-W4) and has raw ash content of 20-35% (ad). Total Sulphur in the upper portion of the seam is high (4-5%) while the remainder of the seam reports 1-3% Total Sulphur. Multiple ROM coal types are beneficiated at the Stratford CHPP to produce high sulphur and moderate sulphur thermal coal and moderate sulphur coking coal.

Open cut extraction of the thick (4-20m) Clareval Seam which underlies the Weismantel Seam (by approximately 200m), commenced in the Clareval Pits. These Pits are also located on the western limb of the syncline (up to 3km north from the original Duralie Pit). The Bowl area Pit is a highly structured area with numerous reverse faults and tight folds (including the Holmes Syncline and Cheerup Anticline). This seam has been divided into Clareval Upper, Clareval Middle and Clareval Lower Seams. Raw ash content is in the order of 15-30% and Total Sulphur is similar to Weismantel Seam with high sulphur of 4-5% (ad) in the Clareval Upper and 1-2% (ad) in Clareval Middle and Lower Seams. Clareval Seam is washed to produce both thermal and coking coal products.

Structural complexity has been identified from drilling and is observed in the open cut operation. Thrust faulting can generate seam repeats and thicken seams considerably. In current mining areas seam dips are steep (generally 30-60^{o}, however locally can be steeper) and typically dip to the east (except in zones of structural complexity).



Source: Gloucester Coal Ltd, modified MBGS

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STRATFORD DURALIE STRATIGRAPHIC COLUMN

Figure No.	PROJECT No.	Date
5-11	ADV-BR-11019	November 2018

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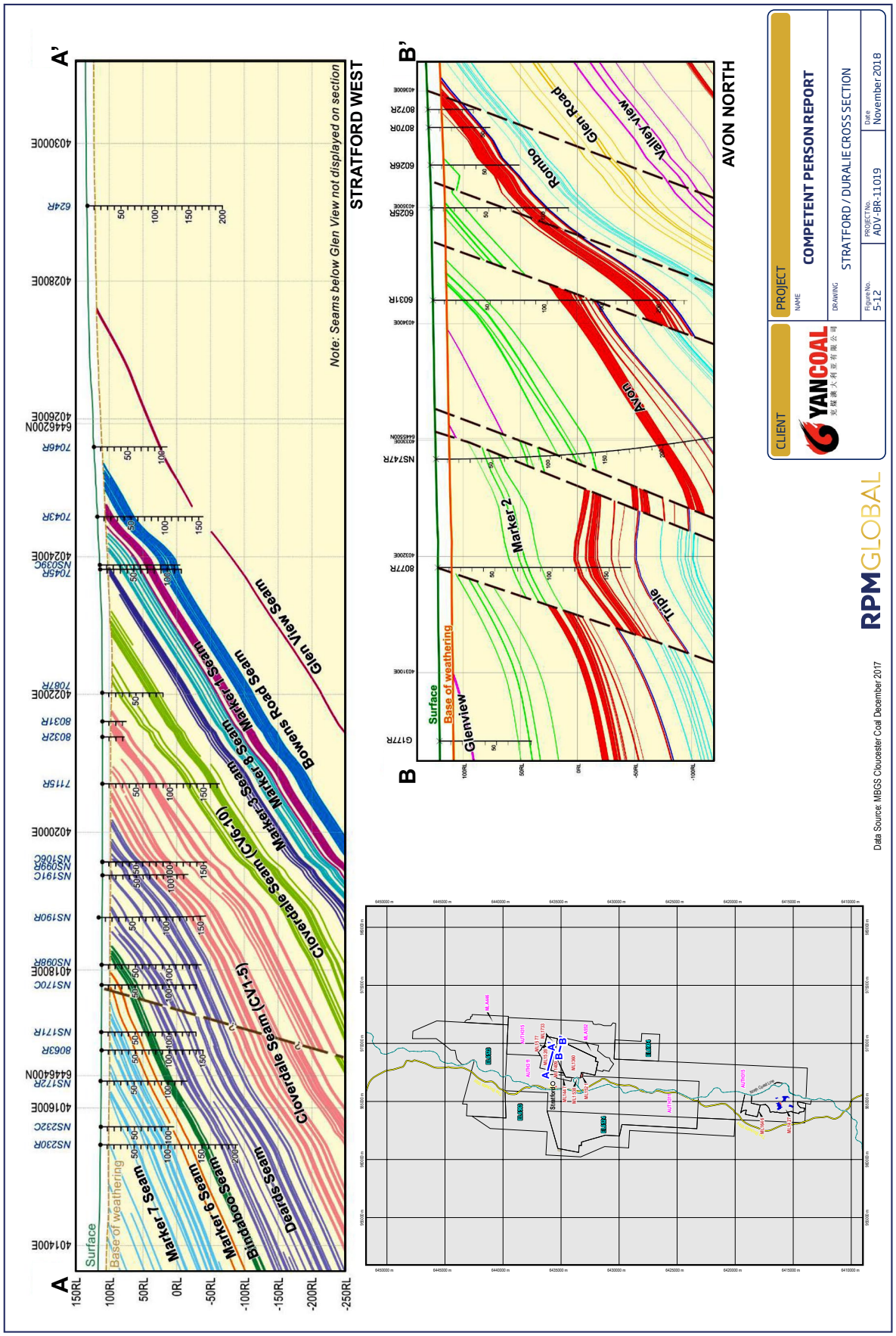
A'
STRATFORD WEST
Note: Seams below Glen View not displayed on section
Glen View Seam
Bowens Road Seam
Marker-8 Seam
Marker-4 Seam
Marker-3 Seam (CV6-10)
Cloverdale Seam (CV1-5)
Deards Seam
Blindaboo Seam
Marker 6 Seam
Marker 7 Seam
Surface
Base of weathering
A
B
B'
AVON NORTH
Glen Road
Valley View
Rombo
Avon
Triple
Marker-2
Glenview
Surface
Base of weathering
CLIENT
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PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
STRATFORD / DURALIE CROSS SECTION
Figure No.
5-12
PROJECT No.
ADV-BR-11019
Date:
November 2018
Data Source: MBGS Clouceste Coal December 2017
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5.5 Austar

Regional Geology

The Austar Operation exploits the Greta Coal Measures in the South Maitland Coalfield, on the western side of the Newcastle Coalfield. As shown in the stratigraphic Column in ***Figure 5-13***. The Greta Coal Measures overlie volcanic sediments of the Dalwood Group at the base of the Permian succession. The thick (up to 2,000m) barren Maitland Group sediments (Branxton Formation, Muree Sandstone, Mulbring Siltstone) overlie the Greta Coal Measures and separate the Greta Coal Measures from the next coal measure sequence – the Tomago Coal Measures. These Coal Measures are the distal equivalent to the Whittingham Coal Measures located further to the northwest (approximately 50km) in the Hunter Coalfield. Overlying Tomago Coal Measures are the Newcastle Coal Measures which are in turn overlain by Early Triassic Narrabeen Group quartz rich sediments.

Greta Coal Measures are of Early Permian age (approximately 270 Ma) and in the Cessnock area comprise the following Formations:

- Paxton Formation (youngest)
- Kitchener Formation – Greta Seam
- Kurri Kurri Conglomerate – Homeville Seam
- Neath Sandstone (oldest)

Igneous dykes are present in the South Maitland Coalfield and although infrequent, were intersected at Ellalong and in old workings to the north. Dykes usually occur as a pair of dykes rather than a single dyke. The south trending Central Dyke (1-2 dykes) defined the eastern limit to longwall mining in the Stage 2 mining area. Recent exploration drilling, a review of mapping from past workings to the north (at Kitchener) and two ground magnetometer surveys has confirmed another southeast trending narrow zone of intrusive activity comprising two dykes (Kitchener Dyke) extending south into the Stage 3 mine area. From historical mapping and Austar's experience when intersecting dykes, there has been no evidence of intrusive sill bodies migrating horizontally from the dyke into the seam.

Deposit Geology

The major regional Lochinvar Anticline has a significant impact on the Greta Seam dip and strike, as well as the style of faulting which is observed within the South Maitland Coalfield. The deposit is located on the eastern flank of the south westerly plunging Lochinvar Anticline, with seam dip of approximately 4^{o} and strike ranging from east to northeast. Knowledge of the local geology from surface and subsurface mapping and an extensive array of 2D seismic and borehole data has defined a number of significant faults that will impact on, or limit mining:

- The Quorrobolong Fault Zone (Stage 3 area);
- The Abernethy Fault Zone (Stage 3 area);
- The Swamp Fault Zone (Bellbird area),and
- The Barraba Fault Zone (Bellbird area).

These zones are well mapped and defined and have been included in the structure model. Two cross sections of the Austar resource are shown as **Figure 5-14**.

The Greta Seam

The Greta seam has a well-defined trend in thickness and quality from west to east within the tenement holdings. In the western portion, past mining extracted the Greta Seam where it was typically 3m-3.5m thick.

The Greta Seam thickness increases from 6 to7m in the central areas (Bellbird and eastern part of Stage 3) and comprises dull and bright to bright banded coal. The basal 4m of coal is generally devoid of claystone bands, while the upper 2m - 2.5m contains several thin claystone bands. When seam thickness is 6 to 7m Austar attempts to use LTCC methods to mine the coal.

Towards the east additional thin claystone bands gradually emerge in the basal half of the seam and eventually the seam splits into an upper 4m thick section and lower 1.5m thick section, along a broadly north south trending split line. The Upper Greta Seam has been intersected in old boreholes further to the east, in the eastern portion where it gradually thins over several kilometre distance to a minimal thickness of 2m. The Lower Greta Seam thins and deteriorates to the east and east of the split line is not considered a resource.

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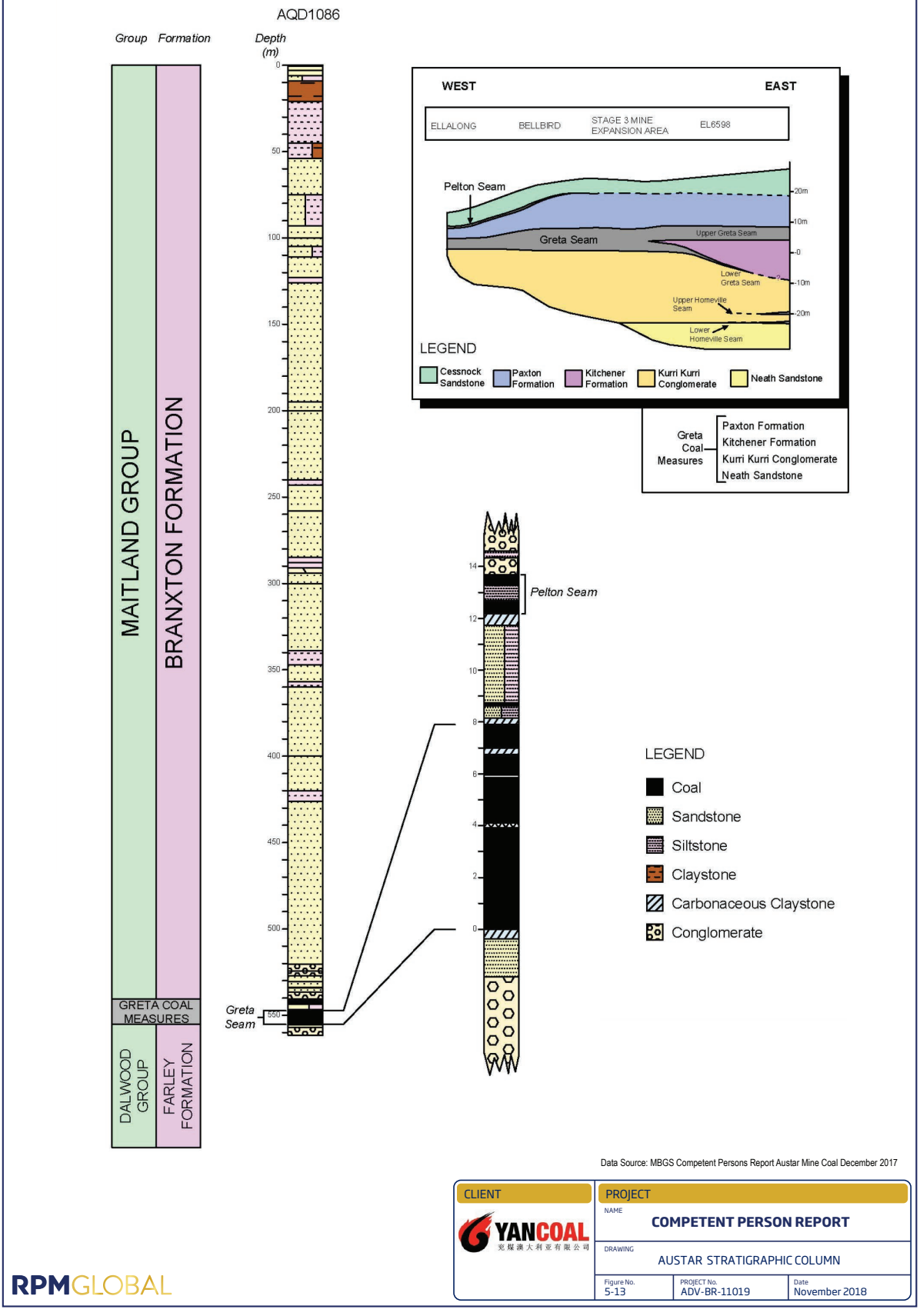
Coal Qualities

The Greta Seam is a low ash bituminous coal with high specific energy and importantly very good coking properties (Crucible Swell Number "CSN") – 6.5, Maximum fluidity – 20,000, Maximum dilatation – 450). The seam, however also has high sulphur content which is interpreted to be influenced by environmental conditions at the time of deposition. High sulphur concentration towards the top of the seam is thought to be related to increasing marine influence during peat deposition.

Total Sulphur content in the basal half to two thirds of the seam typically ranges from 0.8%-1.2%. This Total Sulphur content increases to greater than 3% in the upper portion, close to the top of the seam. Analytical tests indicate Organic Sulphur is the major component of the Total Sulphur content, as such by the marine influence on deposition. Organic sulphur is more difficult to remove by beneficiation by a CHPP.

Raw ash for full Greta Seam is generally less than 12%, however in the eastern portion, ash increases to greater than 20% with the gradual increase in claystone bands, as noted above. RPM notes that in general coal seams at the proposed depths of mining at Austar normally contain significant quantities of methane or carbon dioxide seam gas, however the Greta Seam at Austar surprisingly has very low seam gas content.



Data Source: MBGS Competent Persons Report Austar Mine Coal December 2017

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	DRAWING: AUSTAR STRATIGRAPHIC COLUMN		
	Figure No.: 5-13	PROJECT No.: ADV-BR-11019	Date: November 2018

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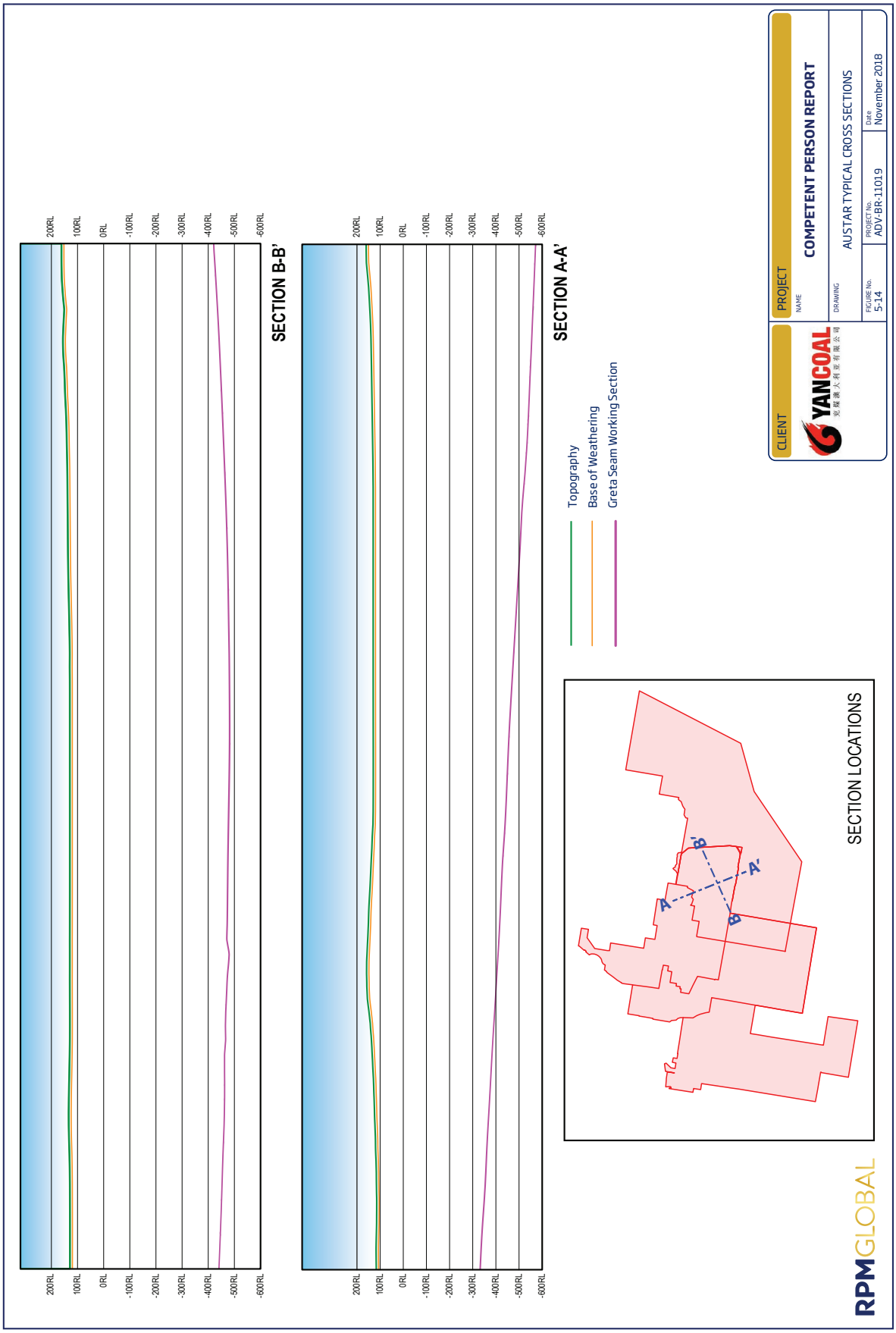
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SECTION A-A'
200RL
100RL
0RL
-100RL
-200RL
-300RL
-400RL
-500RL
-600RL
Topography
Base of Weathering
Greta Seam Working Section
SECTION LOCATIONS
A
A'
B
B'
CLIENT
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PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
AUSTAR TYPICAL CROSS SECTIONS
FIGURE No.
5-14
PROJECT No.
ADV-BR-11019
Date
November 2018
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5.6 Donaldson

Regional Geology

The Donaldson Mine is located in the northern-central portion of the Newcastle Coalfield, which forms the northern portion of the Permian/Triassic Sydney Basin. The stratigraphy comprises Late Permian Tomago Coal Measures overlain by the Newcastle Coal Measures (***Figure 5-15***). These Coal Measures overlie the Greta Coal Measures which host the Austar deposit as discussed in ***Section 5.5***. The non-coal bearing Triassic Narrabeen Group overlies the Newcastle Coal Measures and forms steep topographic relief which includes Mt Sugarloaf and Mt Vincent.

The north east trending Lochinvar Anticline fold axis is located west of the Donaldson leases, while the Macquarie Syncline fold axis trends in a north of north westerly direction through the central portion of the Donaldson leases. The overall structural fabric of the Donaldson area is north of north westerly The seams dip gently both to the east and west due to the Macquarie Syncline, which plunges to the south.

A zone of steeply dipping strata, known as the Buchanan Monocline, is located between these regional features, along the western boundary of Donaldson leases with stratigraphy dips steeply (up to 50°) toward the east. Immediately north of Donaldson are two north trending parasitic folds associated with the Macquarie Syncline, namely the East Maitland Syncline and the Four Mile Anticline. These two structures affect the Tomago Coal Measures however not in the tenement holding of the Company.

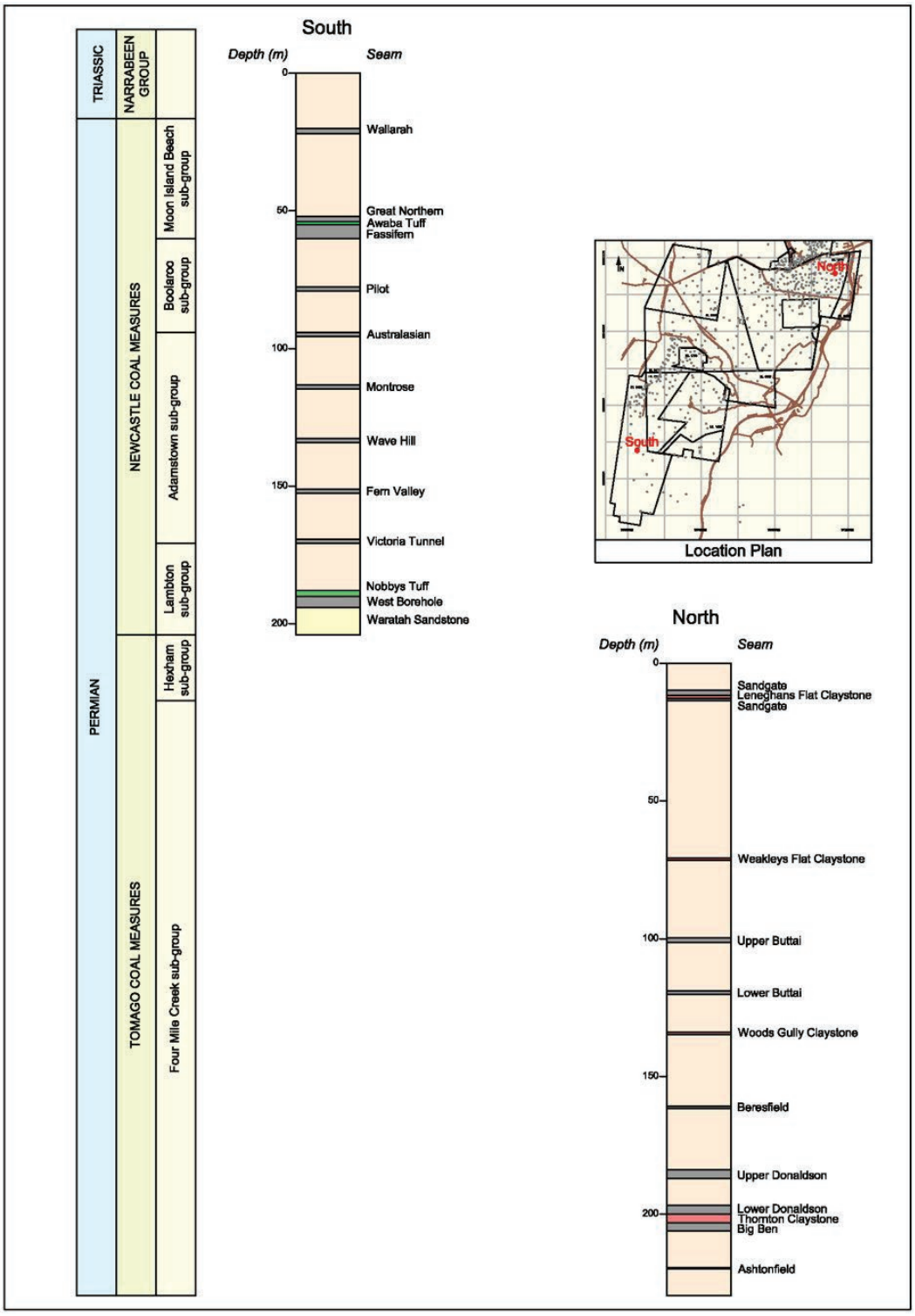
Local Geology

The long production history at Donaldson has highlighted the presence of faults and dykes which have impacted mining. Information provided to RPM indicates that the northwest trending dykes are generally 1 to 5m wide and produce limited cindered zones within surrounding coal. No sills have been identified, however drilling has identified minor intrusions within coal seams and associated cindered coal closely associated with the dyke activity. Small scale faulting with displacement less than 1m has been observed in Abel, Tasman and Stockrington No 2 mine workings, however a number of faults have been observed with throws between 2.5 and 6m. Faults and dykes in general have north of north westerly orientations that conform to the local geologic structural fabric.

Stratigraphy

The Tomago Coal Measures comprising up to 12 coal seams occur only on the eastern side of the Lochinvar Anticline and sub-crop toward the west between Hexham and Maitland. Beyond Hexham, the Coal Measures are covered by large deposits of unconsolidated Quaternary sediments. Near Maitland the Tomago Coal Measures stratigraphic pile is approximately 600m thick, which increase to over 1,000m toward the east. These Coal Measures exhibit variable characteristics such as splitting, coalescing and deterioration.

The Newcastle Coal Measures also occur on the eastern side of the Lochinvar Anticline. These Coal Measures occur over a large area from south of Maitland, to the middle reaches of Lake Macquarie and east to the coastal fringes. On the eastern flank of the Macquarie Syncline the Coal Measures are approximately 350m in thickness and contain up to 16 individual coal seams. (***Figures 5-15 and 5-16***) On the western flank of the Macquarie Syncline the Coal Measures decrease in thickness to approximately 250m and contain no more than 12 individual coal seams. The Coal Measures exhibit variable characteristics such as splitting, coalescing and seam deterioration.



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DONALDSON STRATIGRAPHIC COLUMN

Figure No.	PROJECT No.	Date
5-15	ADV-BR-11019	November 2018

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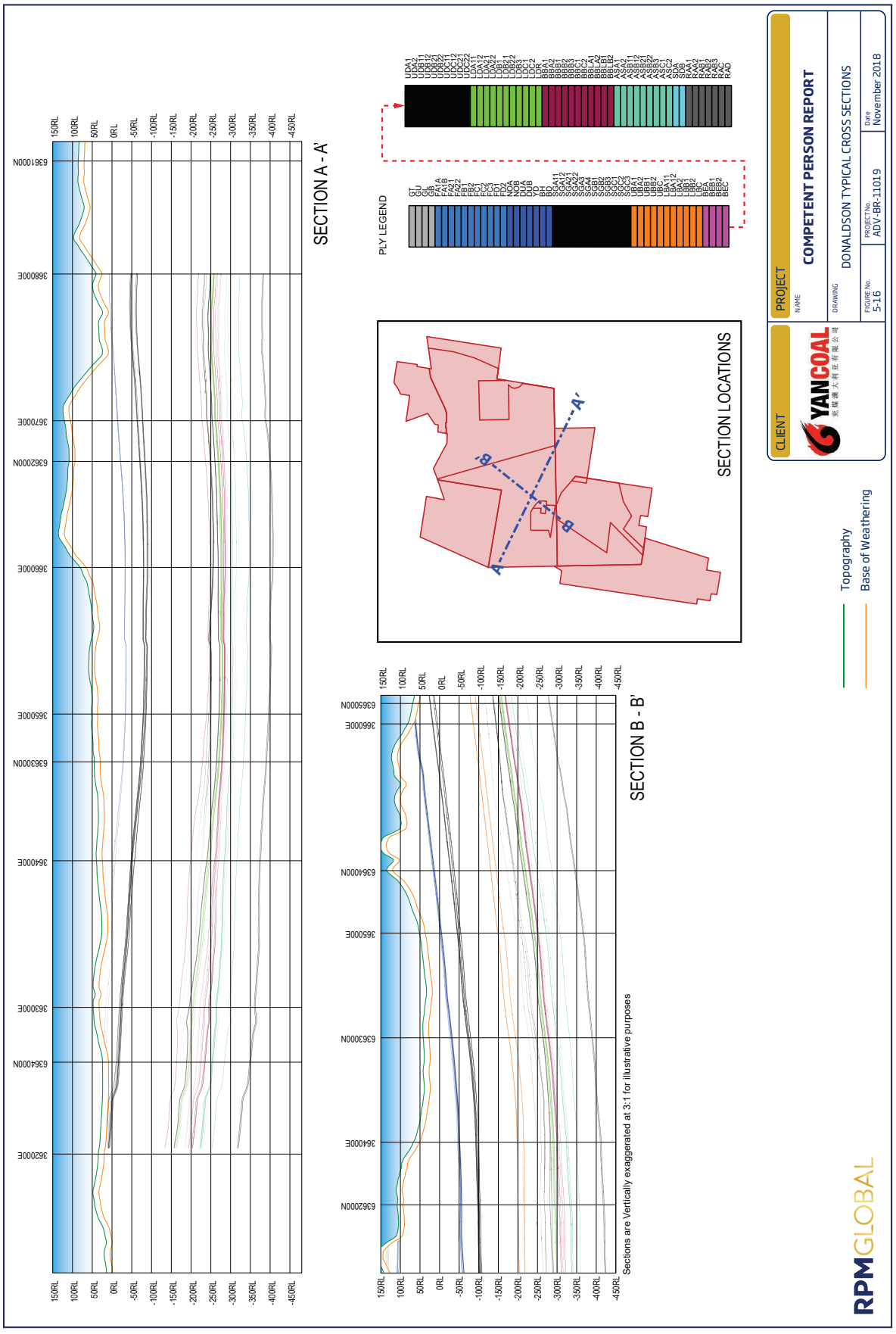
SECTION A - A'
SECTION B - B'
PLY LEGEND
SECTION LOCATIONS
A
A'
B
B'
Topography
Base of Weathering
Sections are Vertically exaggerated at 3:1 for illustrative purposes
CLIENT
YANCOAL
PROJECT NAME
COMPETENT PERSON REPORT
DRAWING
DONALDSON TYPICAL CROSS SECTIONS
FIGURE No.
5-16
PROJECT No.
ADV-BR-11019
Date
November 2018
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5.7 Middlemount

Regional Geology

The Middlemount deposit is located in the central region of the Bowen Basin which covers an area of approximately 200,000 sq.km, Figure 2.3. The Basin consists of a sedimentary sequence of Permo-Triassic clastic sediments with a maximum thickness of 9,000m which are divided into number of tectonic units comprising north north-west to south south-east trending platforms or shelves that are, separated by sedimentary troughs.

Regionally, the stratigraphic sequence consists of the Permo-Triassic sediments, overlain by a thin covering of unconsolidated Quaternary alluvium and colluvium, poorly consolidated Tertiary. The Permian Blackwater Group coal measures and associated over- and interburden are located below the Triassic strata and overly the Back Creek Group, the basement.

Local Geology

The Middlemount resource contains the coal seams of the Rangal Coal Measures and Burngrove Formation of the Blackwater Group. The target seams within the resource consist of the Roper, Middlemount, Tralee and Pisces Upper seams (in descending order) which belong to the Rangal Coal Measures, while the Pisces Lower and Girrah seams belong to the Burngrove Formation and are not considered to have economic potential based on current studies.

Overlying the Rangal Coal Measures are alluvial sediments, inferred to be Tertiary in age, with a thickness of up to 30m. The depth of weathering averages 45m, ranging from 20m in the southeast to over 60m in the central and northern areas of ML70379.

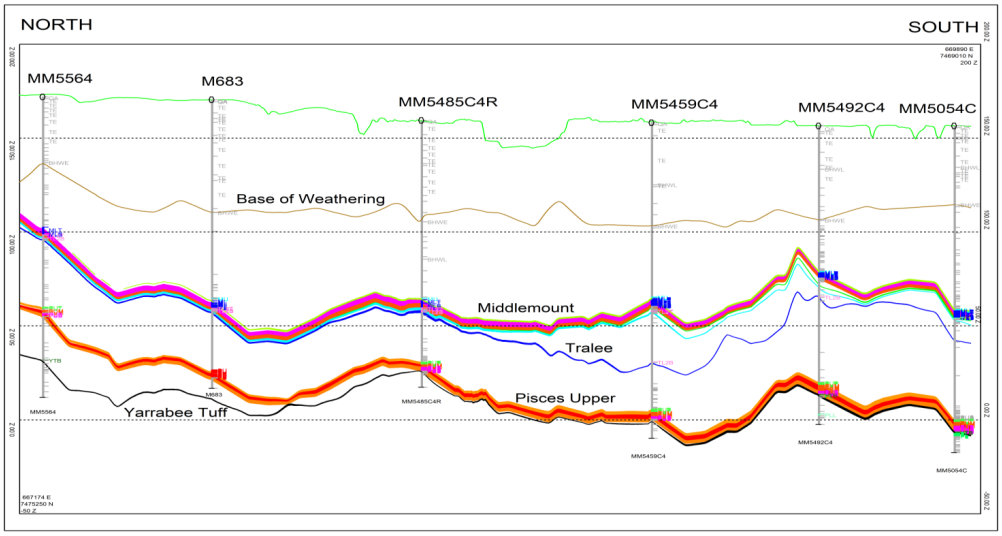
The Middlemount and Pisces seams have been subjected to the majority of the exploration mining works. The Middlemount seam averages 4.0m thick in the area west of the Jellinbah Fault, ranging from less than 2 to over 7 m. The Middlemount Upper working section is a high ash section that is present over most of the Middlemount area – the exception is in the north, where it is less than 0.3m thick. The top section of the Middlemount Lower Section is predominantly dull with some bright banded coal with an average raw coal CSN average of 1 to 1.5. The base section of the Middlemount seam has more bright coal than the top section and the average raw coal CSN is 4 to 5.

The Tralee seam underlies the Middlemount seam. At Middlemount, it ranges in thickness from 0.5 to 1.0m when it occurs just below the Middlemount seam (within 10m). The Tralee seam is divided into three working sections (TL1, TL2T and TL2B, top down) and similar to the Middlemount Lower seam the working section division is predominantly based on coal brightness. Where the seam splits further from the Middlemount seam, the Tralee seam thins to usually less than 0.3m.

The Pisces Upper seam averages 4.8m thick in the area west of the Jellinbah fault, ranging from 2 to over 6 m. Thickening and thinning of the seams is interpreted to be the result due to the same structural effects as noted for the Middlemount seam, while intersections outside this range were similarly excluded from the coal thickness model. The Pisces Upper seam is divided into three working sections (PUT, PUM and PUB, top down) and similar to the Middlemount Lower seam the working section division is predominantly based on coal brightness.

The Middlemount Seam is stratigraphically equivalent to the Leichhardt seam or Elphinstone seam of the Northern Bowen Basin, or the Pollux Seam of the Central and Southern Bowen Basin and the DU and D seam of the south-eastern Bowen Basin at Moura. The Pisces Seam is the stratigraphically equivalent to the Vermont or Hynds Seam of the Northern Bowen Basin and the E seam of the south-eastern Bowen Basin at Moura. The RPM Competent Person is familiar with the characteristics of the Middlemount and Pisces seams throughout the Bowen Basin.

Figure 5-17 Middlemount Section showing coal seam stratigraphy



The potential open cut coal area strikes north-northwest and dips to the east at between 3- and 7-degrees; the deposit is approximately 7km long and 2km wide. The resource is limited to the east by the Jellinbah Fault; a major regional thrust fault which is oriented north-northwest and has displacement greater than 300m. This fault is located close to the boundary of ML70379 and ML 70417. The coal seams of the Rangal Coal Measures crop out to the west of the Jellinbah Fault, where the majority of the coal exploration has been completed. The strata present on the eastern or upthrown side of the Jellinbah Fault are from the Burngrove Formation, which are becoming visible in the highwall of the mining excavation. ***Figure 5.17*** shows a typical long section through the Middlemount resource area.

Exploration drilling and mining has identified that the deposit is complicated by localised thickening of seams in the vicinity of faults. Other than the Jellinbah fault, the deposit contains small-scale (<10m) normal and thrust faults, which is evidenced by the thickened and thinned Middlemount and Pisces seam intersections and by the changes in structural elevations between boreholes.

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6. Data Verification

RPM completed a review of the geological and digital data supplied by the Client to ensure that no material data issues could be identified and that there was no cause to consider the data inaccurate or not representative of the underlying exploration results. RPM visited the Assets at HVO/MTW assets in March, 2017 and the reminder of the assets in April 2018 and reviewed the Assets operations. RPM concluded that the geological data was adequately acquired, validated and managed in databases according to a range of good to industry best practices as outlined below.

6.1 HVO / MTW

Bore Hole Data

Geological data acquisition has been ongoing in the MTW and HVO areas since 1949 when the Joint Coal Board commenced exploration in the MTW area. Exploration activity increased in the late 1960s and 1970s in response to increasing world energy consumption and demand for both thermal and metallurgical coal, with the Howick Mine commencing operations in 1968, closely followed by the Lemington Mine in 1971 and the Hunter Valley No. 1 operation in 1979. Mt Thorley and Warkworth Mines commenced operations in 1981.

The long history of HVO has led to the utilisation of a number of different data and planning practices and in particular seam correlations between the Howick, Hunter Valley and Lemington mine sites. During 2007, Minescape software was introduced to HVO as the preferred tool for technical mine planning functions, including geological database and geological modelling. A GDB borehole database called HVO was created from Minex seam interval data, with "stone" used to designate non-coal units within boreholes. Geological data acquired since 2007 was loaded with all detail into the HVO GDB database.

It became apparent to the Company's antecedent (previous owner) that significant proportions of pre 2007 geological data had not been uploaded into GDB and / or was unsuitable for geological model development and could not be easily validated compared to the original primary data. As a result, the Company's antecedent referred to all exploration data acquired prior to 2007 as legacy data. The Company's antecedent undertook a project referred to as the 'Hunter Valley Legacy Data Project' between mid-2013 and October 2015 whereby all legacy data for HVO was converted from non-digital to digital format, validated and added to the HVO geological database.

The MTW operation transitioned to Minescape software in 2006, with all legacy data being validated and uploaded to the GDB database by the end of 2006. RPM considers that the 'Legacy Data Project' has achieved a significantly complete geological data set which now can be used with a high level of confidence for geological modelling and Resource estimation.

RPM is aware that the Company's antecedent completed a significant tranche of work in 2015 whereby seam nomenclature and correlation was standardized for the Jerrys Plains and in particular the Vane Subgroup across the Howick, Hunter Valley and Lemington areas. This tranche of work enabled a single HVO geological model to be developed.

While RPM has not reviewed primary data sources such as geological logs, geophysical logs and laboratory coal quality reports as part of its data verification however has relied upon review of the following:

- Standards and Procedures (QA and QC) followed by the Company's antecedent for data acquisition, interpretation and database and model development and
- Data contained in the database and the geological models has been reviewed by several authors previously including third party competent persons and
- The laboratories which undertook the majority testing are ISO certified.

RPM conclude that the digital geological data for MTW and HVO has been adequately reviewed and validated using industry best practices as outlined below.

In addition, RPM is aware that the Company is performing a review of the geological data it acquired from its antecedent so that it meets the internal Company Standards.

Digital Data Base

The Company's antecedent utilised ABB's Minescape suite of geological database, modelling and mine design software which includes the system's Oracle-based geological database (GDB) and stratigraphic modelling package (Stratmodel). GDB is a relational database comprising a number of indexed tables linked by key variables including borehole collar, lithology, geophysics, coal quality (raw, wash and composite data) and geotechnical data.

As a result of the long exploration history and amalgamation of operations the HVO database includes data from multiple data sources and formats (Howick Mincom Geodas database, the Lemington Minex borehole database and Vulcan format database files from Hunter Valley No's 1 and 2 and Prolog files generated by field geologists). The majority of the data, with the exception of the Howick data, was a set of seam pick files consisting of from and to depths which could not be easily validated. During 2009 the original data was sourced, reformatted and in many cases encoded from English logs to populate the ABB GDB based borehole database. However, that work completed in 2009 was only an interim step and it was not until the completion of the Hunter Valley Legacy Data Project in 2015 that all geological data was transformed into a digital format and could be loaded to the GDB database.

The MTW database was subject to an extensive upgrade and validation process by 'Measured Resources' in 2012 where data quality, accuracy and completeness was improved significantly. As part of this validation a number of underlying "business rules" where built into the GDB database to ensure consistency and integrity of data including, however not limited to:-

- Relational link between geological, down hole geophysical and coal quality data
- Exclusion of overlapping geological intervals
- Restriction of data entry to the interval of the defined hole depth
- Use of defined rock type and stratigraphic codes
- Coal quality upper and lower limit bounds
- Basic coal quality integrity checks such ensuring data is within normal range limits, which proximate analyses add to 100 percent etc.

Drilling Types and Core Recoveries

Geological data generated since 2002 has followed the antecedent's data acquisition standards, documentation, systems and protocols for drilling, logging and sampling of bore core and chip samples, in pit mapping of rock exposures and geophysical data acquisition, interpretation and database management.

Data acquired prior to 2007 has been subject to the protocols of the Legacy Data Project and conforms to the standards followed by the Company's antecedent..

Both core and open holes have been completed at MTW with coring predominantly undertaken via HQ3-sized bit (63 mm) and open hole to an equivalent hole diameter size. RPM notes that seven holes at 150 mm and 49 holes at 200 mm diameter sizes were completed for evaluation of coal preparation properties. A total of 503 open holes and 230 cored holes were completed at MTW during the period 2004 to 2015 as shown graphically in Figure 6-1 while a summary of the holes completed since 2004 are provided in ***Table 6-1***.

Commencing with the 2008 drilling program a borehole grid design based on an equilateral triangular grid with cored boreholes spaced 250m apart and open holes spaced 125m apart was used at MTW. The MTW mined out area is largely supported by cored borehole data at 250m to 500m centres and open hole data at variable spacing but generally 125m apart. The intensity of core drilling is greater at Mount Thorley than it is at Warkworth, where there is a need to continue closing in core drill spacing to improve the status of Coal Resources. Borehole spacing of cored holes that intersect large parts of the sequence located west of Wallaby Scrub Road is relatively sparse and the spacing is 500 to 1,500m.

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Table 6-1 Summary of Holes Completed since 2004

Type	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Totals
Open Holes	35	11	71	75	23	62	103	39	45	6	28	5	**503**
Cored Holes	7	1	6	19	18	17	24	47	44	31	13	3	**230**
Totals	**42**	**12**	**77**	**94**	**41**	**79**	**127**	**86**	**89**	**37**	**41**	**8**	**733**

Source: Provided by the Company

HVO

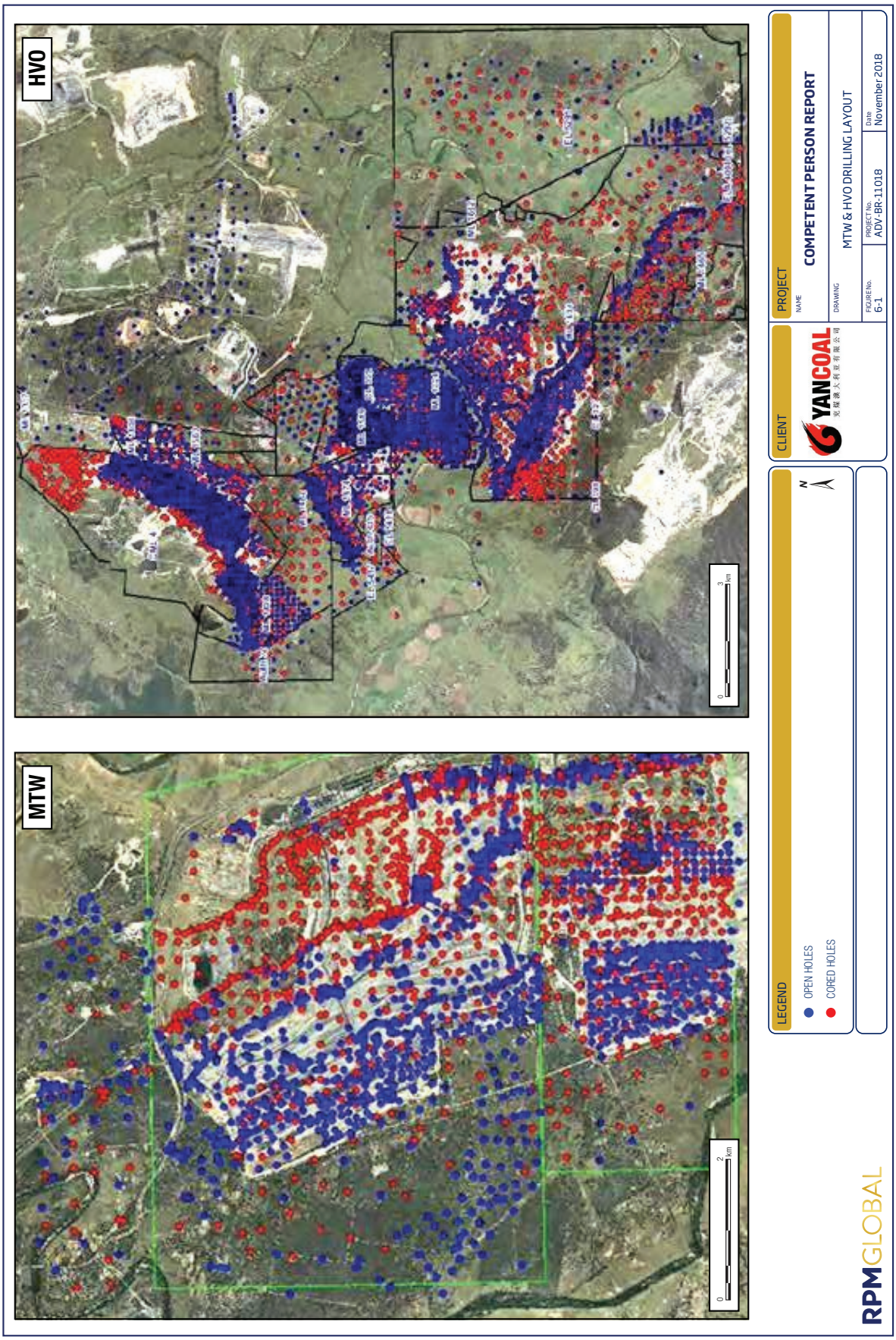
A combination of open holes (predominantly for structural definition) and cored (for coal quality, geotechnical and gas sampling) have been used for delineation of the HVO resource with the location of exploration boreholes at HVO is shown in ***Figure 6-1***. Borehole spacing for core holes is on an equilateral triangle grid of 500m or less, while open holes spacing is on a 250m or less equilateral triangle grid. Coring has predominantly been completed using a HQ3-sized (63mm) bit and open hole drilling to an equivalent hole diameter size. In addition a number of large diameter (LD) holes have been drilled with 103 holes at 101mm (4") and six holes at 200mm (8") diameter sizes.

A total of 1,010 open holes and 253 cored holes were completed at HVO during the period 2002 to 2015 as summarised in ***Table 6-2***.

Table 6-2 Summary of Drill Type for HVO Since 2002

	Area/Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Open Holes	Carrington	43	20	31							11	102				**207**
	Cheshunt	23	7	2	6	16	43		3	19	51		2	15		**187**
	West	37			25		9	134	38			6	5	4		**258**
	Mitchell	13										43				**56**
	Riverview	84			8		29		26	14	47		24	33		**265**
	Southern										12	25				**37**
	Totals	**200**	**27**	**33**	**39**	**16**	**81**	**134**	**67**	**33**	**121**	**176**	**31**	**52**		**1,010**
Cored Holes	Carrington		1	7				17	4		5	40				**74**
	Cheshunt	10	1		5	5	8		4	8	8	4		2		**55**
	West	4	7		8		3	7	4	4	3	9		2		**51**
	Mitchell										5	1				**6**
	Riverview				1	1			1	15	8	2				**28**
	Auckland											18			6	**24**
	Southern										15					**15**
	Totals	**14**	**9**	**7**	**14**	**6**	**11**	**24**	**13**	**27**	**44**	**74**	**0**	**4**	**6**	**253**

Source: Provided by the Company.


HVO
MTW
0
3
km
0
2
km
LEGEND
OPEN HOLES
CORED HOLES
N
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MTW & HVO DRILLING LAYOUT
FIGURE No.
6-1
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL

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Topography and Collar Locations

The topographic surface at MTW is derived from a combination of 2m and 5m contour data digitised from topographic maps and 10m digitised data from the Bulga 1st edition topographic map covering the mined areas. This data was combined with surveyed borehole collars and mine survey data to form the final topographic map of the mined area. The topographic surface at HVO was developed from combinations of Lands and Property Management Authority ("LPMA") 10m contours which originated from the early 1980s and recent (September 2008) 2m contours derived from an AAM Hatch flyover. RPM notes that the historical mine out surfaces were on a coarse grid size, which doesn't allow suitable level of accuracy for the bench and batter definition. As such the depletion is potentially inaccurate however any potential change is not material and does not impact the forecast Ore Reserves.

Since 2007, borehole collars at MTW and HVO were surveyed post drilling by licensed surveyors using differential global positioning system with an accuracy of ±10 mm. RPM is aware that the Legacy data borehole collars have been converted to the MGA coordinate system and reviewed by the HVO survey team, while boreholes surveyed to local coordinate grids have not been converted to MGA where insufficient survey information was available and have not been used for model development.

Borehole collars have been compared with the natural topographic surface with reports nothing that the majority of borehole collars are located between 0 and 2m above the natural topographic surface. Some 1,100 boreholes have differences of greater than +/- 10m above or below the natural topographic surface, however all of these boreholes are located on in pit benches or on spoil and as such are considered suitable for geological model development that is used for Resource estimation.

RPM notes that all surveyed coordinates are within Map Grid of Australia 1994 MGA ("MGA94") Zone 56 projection using datum GDA94.

RPM considers that the topographic surfaces and borehole collar locations at both MTW and HVO have been developed with sufficient rigor to enable reliable Resource model development and Coal Resource estimation.

Down the Hole Survey

Geophysical logging at both MTW and HVO only became a common occurrence in the 1980's and 1990's respectively, while down hole borehole deviation data has only been acquired since the mid 2000's, however only deviation from 239 boreholes is loaded to the GDB database.

RPM considers that the historical lack of down the hole surveying is not material as the strata at both MTW and HVO are relatively shallow dipping and that borehole deviation particularly for HQ-3 cored holes will be negligible.

Geophysical Logging

Geophysical logging of boreholes has been carried out since the 1980's at Mt Thorley Warkworth and in general from the 1990s at HVO. Hard copy geophysical logs of boreholes are stored at each site. The suite of geophysical logs acquired generally includes natural gamma, short and long spaced density, compensated density, calliper, neutron, sonic and resistivity. Verticality surveys and acoustic and optical televiewer data has only been acquired since the mid 2000's. In 2006, LAS files were organised and stored on a server dedicated to mine planning. Not all geophysically logged boreholes have LAS data due to the borehole pre dating the time when geophysical data was acquired digitally.

RPM notes that down hole geophysical data is acquired by the geophysical service provider according to Company Standards and protocols.

Geological, Geotechnical and Geomechanical Logging

MTW and HVO are mature mining operations with the local and regional geology and geotechnical characteristics of the two areas well understood from open cut and underground mining operations and geotechnical logging and testing of bore core that have occurred over the past forty years.

Geological logging and sampling is performed by qualified geologists at the drill rigs in accordance with the Company Standards and procedures with all core logged for geology and geotechnical characteristics. Open

hole chip samples are taken every 1m and logged for lithology. Quantitative logging for lithology, stratigraphy, texture and hardness is conducted using standard dictionary definitions, while colour and any additional qualitative descriptions are also recorded. Geological interpretation occurs by the following series of steps:

- Preliminary seam correlations are carried out with reference to geophysical logs and known marker intervals.
  - The primary marker intervals such as the Milbrodale Claystone, Fairford Claystone and Archerfield Sandstone are identified to provide the overarching stratigraphic framework for the Jerrys Plains Subgroup. The Archerfield sandstone is located below the Bayswater seam and has a distinctive bronze colour. The Fairford Claystone is located between the basal Warkworth ply and the uppermost Mt Arthur ply and the Milbrodale Claystone is located between the Arrowfield Zero and One seams;
  - Broad brush seam correlations are completed by use of 1:200 scale geophysical logs; and
  - The broad brush correlations are checked by referencing existing boreholes in the GDB database to ensure consistency with existing data and interpretations.
- LogCheck software which has similar business rules as the GDB database is used to encode lithology data.
- The lithology and seam data loaded into GDB are validated using GDB's business rules and validation tools.
- The LogCheck and GDB software business rules include but are not limited to:
  - relational link between geological, down hole geophysical and coal quality data;
  - exclusion of overlapping geological intervals;
  - restriction of data entry to the interval of the defined hole depth;
  - use only of defined rock type and stratigraphic codes;
  - basic coal quality integrity checks such as ensuring data is within normal range limits, that proximate analyses add to 100 percent etc;
  - Other checks are performed either periodically or before export of the data for loading into GDB include:-
    - missing or unlogged geological intervals highlighted;
    - stratigraphic picks out of correct stratigraphic sequence;
    - missing stratigraphic codes;
    - missing, anomalous, non-zero thickness, multiple or inappropriate (e.g. within overlying stratigraphy rather than host stratigraphy); and
    - Base of Weathering.
- A structural geology model is developed from which borehole postings, sections and contours are created and used by the geologists to validate seam correlations.
- Anomalous or incorrect seam correlations are corrected and the checking process repeated until the geological practitioner is satisfied with the integrity of the correlations.
- Fault locations and displacement are determined from surveyed seam roof or floor data, in pit mapping, from direct evidence in bore core and interpretation of missing or repeated sequences in boreholes.
- Fault displacements are calibrated by review of supporting seam roof or floor survey data in addition to ensuring that borehole seam data is honoured.
- Base of weathering data is interpreted from visual data from the original exploration boreholes.
- Geotechnical logging is completed by qualified geotechnical personnel and follows the Company Guidelines and Standards and is completed for all core boreholes at MTW and HVO. RPM also notes the following.
  - Geotechnical logging is completed by qualified geotechnical personnel and followed the previous owners Guidelines and Standards and is completed for all core boreholes at MTW and HVO.
  - The 'synthetic' formation strength is estimated from a regression equation developed from cross plots of Uniaxial Compressive Strength ("UCS") of bore core samples and sonic velocity correlations.

- Data acquired from acoustic or optical televiewer images provide more detailed information about defect orientation, spacing and intensity and the direction of horizontal stress.
- Additional geotechnical and structural data is acquired by field measurement by hand held compass and Maptek I-Site three dimensional laser scans of the excavation.

RPM considers that the recorded information is sufficient for reliable geological Resource and geotechnical models for development of reliable and safe LOM plans.

Bulk Density Determination

The density of coal and the immediate seam roof and floor have been determined from analysis of bore core samples while the density of interseam formations density is estimated from density logs. A range of relative density testing has been performed at MTW and HVO, with some samples having been tested for

- True RD analysis;
- Both ARD and true RD; and
- The majority of samples that have had ARD determined.

The relationships between ARD and true RD were determined from the paired sets of ARD and true RD analyses.

The relationships between ARD and true RD were determined from the paired sets of ARD and true RD analyses include:

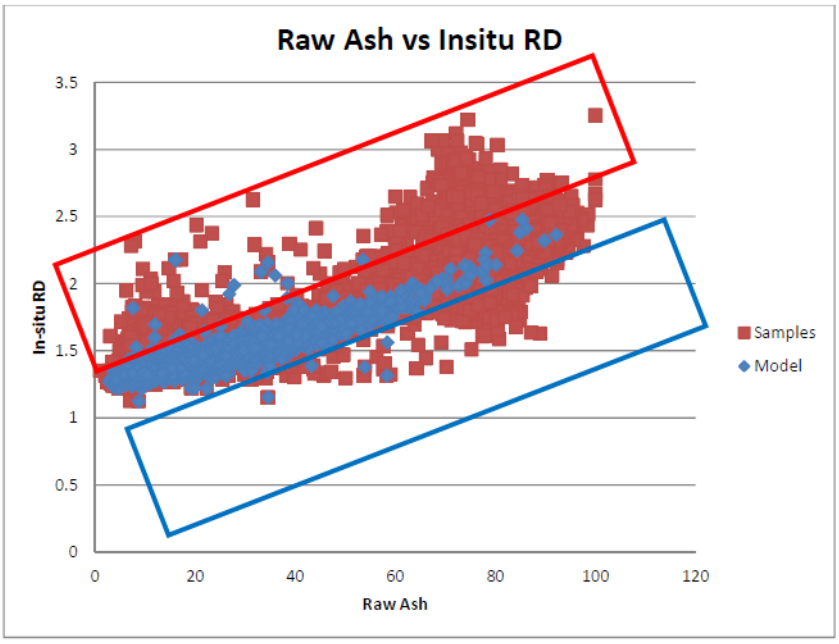
- MTW - The relationships used at MTW to populate the ply by ply data that has missing ARDs or true RD value are:
  - RD = 1.0003 x ARD 1.0645
  - ARD = 1.0045 x RD 0.9316
- HVO - The relationships used at MTW to populate the ply by ply data that has missing ARDs or true RD value are:
  - RD(ad) = 1.042 x ARD (ad) – 0.018
- The in situ relative density; i.e. the density of materials at an in situ moisture basis, was calculated using the Preston and Sanders equation:
  - RD2= [RD1*(100-M1)]/ [100+RD1*(M2-M1)-M2].

In situ moisture has been estimated by the equation moisture air dried + 4% for both HVO and MTW. Air dried moisture is typically 2% to 4% thereby in situ moisture will range between 6 and 8%. RPM considers this appropriate for the coal rank at HVO and MTW. In general the stratigraphically higher coal seams, such as Arrowfield, have total moisture closer to 8% and the Bayswater seam will have total moisture closer to 6%.

RPM considers that the work performed by previous owners to populate the ply by ply density data in the GDB database at MTW has resulted in a poor to average relative density data set. The cross plot of ply by ply un-composited relative density and ash values show that relative density is overestimated, as shown in ***Figure 6-2.*** This plot shows that the raw ash and relative density cross plots contain a large percentage of outlier relative density data values, both overestimated (red polygon) and underestimated (blue polygon). RPM is unaware of any coal measure sediment samples for coal where the rank as measured by vitrinite reflectance (Rv max) is less than 1% Rv max:

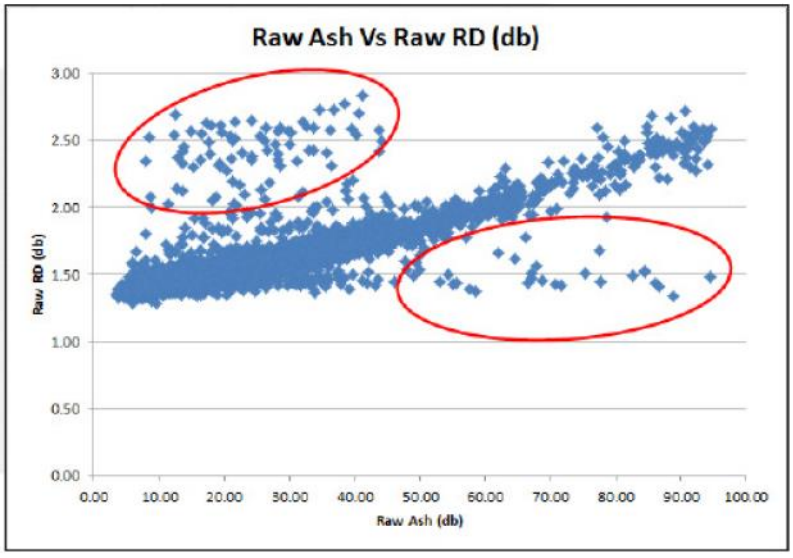
- Having ash content of less than 40% and relative density values greater than 1.8 and
- For coal seams to have relative density greater than 2.2 (and up to greater than 3) when ash values range from 60% to 80%.

Figure 6-2 Cross Plots of Raw Ash and In situ RD for All Samples and Modelled Seams at MTW



The HVO database contains similar relative density outliers to MTW, as shown in ***Figure 6-3***, where 141 composited raw coal sample outliers have been identified.

Figure 6-3 Cross Plots of Raw Ash and In situ RD for All Samples and Modelled Seams at HVO



RPM considers that the MTW and HVO database contains a large number of outlier relative density values that are causing both under and overestimation of relative density. RPM consider that potential estimation errors of

relative density will not have a material impact on the Resources and Reserves estimate, because the number of overestimated and underestimated values will have a negating effect.

Good practice has been followed at HVO to develop relative density models for estimation of Coal Resources and Reserves. Outlier relative density values (those values above or below 1.5 times the interquartile range) were excluded from coal quality model development.

Sampling and Sample Preparation

The Company's antecedent followed the procedures outlined in the document 'Coal and Allied's Hunter Valley Borecore Testing Programme' documentation for coal sampling, preparation and testing which was introduced in March 2011. RPM is unaware of any documentation describing coal sampling, preparation and testing prior to 2011 but understands that relatively consistent informal practices were followed at both MTW and HVO prior to 2011.

Washability testing at MTW has historically been carried out at a range of different densities. In 2007, washability data was loaded into spreadsheet based LIMN simulation software to standardize the washability data into a consistent format.

All HQ-3 (63 mm diameter) core samples are weighed, air-dried and then re-weighed before being crushed to an 11.2 mm top size. Subsequently coal quality testing was completed over a three stage process consisting of:

- Raw coal quality testing;
- Washability; and
- Clean coal composite testing of washed coal fractions to simulate product quality.

Table 6-3 and ***Table 6-4*** summaries the analytical testing procedure followed by Company's antecedent for raw coal, float and sink and clean Product Coal composites. As noted previously a limited number of large diameter ("LD") holes have been drilled at MTW for evaluation of coal preparation properties. Testing of the LD holes was for eleven size fractions with a top size of 50mm.

Prior to May 2013 samples were analysed by ALS (previously named ACIRL) at their Steel River, Newcastle laboratory. Post-May 2013, samples have been sent to the Bureau Veritas laboratory in Brendale, Queensland. All sample treatment and analysis is conducted according to procedures which adhere to Australian (or International equivalent) standards in a National Association of Testing Authorities certified laboratory.

Table 6-3 Analytical Tests for Raw Coal and Stone Ply Samples

Raw Samples	Raw Coal Analysis	
	COAL	STONE
Relative Density ad (AS 1038.21.1.1 - 2002)	√	√
Moisture (ad)	√	√
Ash (ad)	√	√
Volatile Matter (ad)	√	
Fixed Carbon (ad)	√	
Calorific Value (gad)	√	
Total Sulphur (ad)	√	√

Source: Provided by the Company

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Table 6-4 Analytical Tests for Float Sink Testing

Sample Type	Fractional Separation Density	Standard	Detailed
COAL	F1.3		√
	F1.4	√	√
	F1.5		√
	F1.6	√	√
	F1.7		√
	F1.8	√	√
	S1.8*	√	√
STONE	F1.6	√	√
	F1.8	√	√
	S1.8*	√	√

Source: Provided by the Company
(*) Denotes testing for total Sulphur on selected samples for acid rock drainage.

Table 6-5 Analytical Tests for Clean Coal Composite Testing

Borehole Analysis type	STANDARD		DETAILED		
Composite Type	**CF1.40**	**CF1.60**	**BYPASS**	**CF1.40**	**CF1.60**
Moisture (ad)	√	√	√	√	√
Ash (ad)	√	√	√	√	√
Volatile Matter (ad)	√	√	√	√	√
Fixed Carbon (ad)	√	√	√	√	√
Calorific Value (gad)	√	√	√	√	√
Total Sulphur (ad)	√	√	√	√	√
CSN	√	√	√	√	√
Moisture Holding Capacity			√		
Carbonate carbon (ad)		√	√	√	√
Ultimate Analysis		√	√	√	√
Ash Analysis		√	√		√
Ash Fusion (reducing)		√	√		√
Trace element analysis			√		√
Chlorine			√		
HGI			√		o
Abrasion Index					o
Petrography - macerals/reflectance				√	o
Giesler				√	o
Gray-King Coal Type				√	o
A-A Dilatometer				√	o
Forms of sulphur			√	√	o

Source: Provided by the Company
o = Optional

Core Recovery

Core recovery is recorded by the drill rig geologist while logging the bore core. Overall, linear core recovery of greater than 95 per cent was required by the Company's antecedent. Linear core recovery less than 95% in

coal requires that section of the borehole to be re-drilled. Ply samples masses are also checked for representativeness against a theoretical mass after raw coal quality analysis and prior to composite definition. Open hole chip recovery is assessed qualitatively by the rig geologist.

Quality Assurance Quality Control

RPM is aware that non-formalised quality assurance/quality control (QA/QC) checks involving duplicate samples are regularly undertaken as per standard coal industry practices. In addition, RPM understands that check laboratory round robin and basic reproducibility tests are flowed both by ALS or Bureau Veritas. All coal quality results were assessed by the Company's antecedent using a range of validation methods that included:

- The sum of all percentages reported for proximate analysis, ultimate analysis and petrographic analysis should total 100%. The exception is ash analysis, for which the sum of the oxides has an allowable range between 98% and 102%.
- Ash Fusion Temperatures: Check deformation flow temperatures to ensure they are always increasing for the one sample.
- Review of classical statistics for the significant seams of each raw analytical element and produce relevant histograms from the quality samples used in model development.
- Review cross-plots of related parameters such as relative density and ash, energy and ash.
- Check that yields add up to 100%.
- Check sizing and relative density fractions to ensure they are reported in the correct order.

Data transfer from site is covered by the agreed protocol Company's antecedent.

Sample Security

All drilling activities prior to the Company's management were managed by its antecedent's on-site geological teams at each of the individual sites. Subsequent to the Company's management all drilling activities have been completed by contractors under the Company's supervision by Company staff geologists.

Due to the style of drilling undertaken within the Assets the personnel of the Company's antecedent completed core sample handling rather than the contractors. These activities include the drilling crews being responsible for delivering the core to the core logging facility where geologists log and sample the coal core and box the non-coal core. The geologist transports the coal core samples and core boxes to the core shed, where the coal samples are stored in a locked secure core shed until the cored hole has been completed. Samples from an entire cored hole were transported by a dedicated courier to the laboratory. Core samples from MTW are stored in a refrigerated unit in the MTW core shed prior to dispatch to the laboratory.

RPM considers these procedures to be industry standard and regards the sample security and the custody chain to be adequate, however notes that no details were provided for sample security prior to 2007.

Data Verification Statement

The review undertaken by RPM of the drilling and sampling procedures indicates that in general, good practices were used with no material issues noted.

RPM also notes the majority of the data within and used for the resource estimation were derived from drilling from post 2007 and have followed the relevant Company procedures and protocols. Data acquired prior to 2007 has been subject to the relevant Company procedures and protocols that were implemented as part of the HVLDP and as such all data is considers to be of good standard.

RPM considers that the data which supports the resource estimation has no material errors.

6.2 Moolarben

Bore Hole Data

Exploration in the resource area commenced in 1950 and is currently ongoing. A total of 1,025 drill holes have been completed..

Drill hole spacing varies from <250m to >1 km towards the edges of the lease. Drill hole data intersecting the Ulan Seam exist outside the MCC tenements and two coal mines mining the Ulan Seam (Ulan and Wilpinjong) are located adjacent to MCC, which is further confirmation of coal seam continuity.

Digital Data Base

Drill hole data is stored and validated in Geobank database. Geobank is a drill hole database software package that provides an environment for capturing, validating, storing and managing geological data.

Drilling Types

The Moolarben area includes contains 1,025 boreholes:

- 517 core holes, most of these holes were pre-collared to within 20m of the target Ulan Seam and then diamond cored using HQ size triple tube (HQTT) core barrels to core below the seam floor. Several holes have been fully cored to gather geological and geotechnical information on the full stratigraphic package and at least five large diameter holes (6") for full washability analysis.
- 285 rotary holes.
- 223 rotary air blast for limit of oxidation definition.

Topography and Collar Locations

Borehole collars and mined surfaces have been surveyed by registered surveyors using GPS equipment. The current grid system is GDA94 in Zone 55.

A LiDAR topography survey was acquired in 2010 to an accuracy of +/- 0.1m which is considered very accurate for the resource estimation process and mined out areas are surveyed by registered site surveyors.

Down the Hole Survey

All holes were drilled vertically which is considered the most appropriate given the flat lying nature of the deposit. As such no down hole surveys were completed which RPM considers suitable

Geophysical Logging

Most recent MC, MCOL and WMLB series holes (except redrills, some pilot holes and piezometer holes) have been geophysically logged to total depth and core has been photographed.

Groundsearch Australia Pty Ltd geophysically logged most of the holes. Groundsearch follows their calibration protocols for all the tools before using them on site.

An airborne magnetic survey was carried out over the planned underground longwalls (UG1 and UG2) to identify magnetic features. This survey identified a number of potential igneous bodies which may affect underground mining. Drilling targeted two main features and confirmed two diatremes. RIM borehole to borehole survey has been undertaken to define the size and shape of the diatremes at seam level however one of these features requires further investigation.

Geological, Geotechnical and Geomechanical Logging

All holes have detailed lithological logging through the whole length of the hole (100%), which have been used for seam correlation supported by geophysical logs where available. Core holes include geotechnical logging, point loading tests and selected samples are sent to geotechnical labs to support mining studies.

The amount, type and detail of information collected from logging of the boreholes is considered by RPM to be appropriate to support the Resource Estimate.

Bulk Density Determination

Relative density (RD) has been determined for most analysed samples on an air dry basis using Australian Standards. RD is then adjusted to in situ moisture basis using the Preston & Sanders equation at an estimated in situ moisture of 6%.

Sampling and Sample Preparation

The entire cored section of each coal ply sampled is placed in the sample bag. No splitting, subsampling or sawing of coal samples takes place outside of the laboratory. Coal quality analysis is completed by NATA approved laboratories which comply with Australian Standards for coal sample preparation.

Bureau Veritas and SGS Australia (for the latest samples) analysed the core samples from the MC, MCOL and some WMLB series holes. CCI Australia analysed earlier samples from WMLB holes. All laboratories followed similar treatment procedures. Coal samples undergo Proximate analysis, relative density, total sulphur and specific energy; and selected plies (DTP and DWS) were tested for hardgrove grindability (HGI). The remaining sample undergoes float/sink testing and each density fraction is analysed for ash. Clean coal analysis has been undertaken for each ply at 1.50 g/cc or 1.60 g/cc density, including Proximate Analysis, sulphur, calorific value, HGI, phosphorous and ash analysis.

Based on ply thickness and HQ core size the amount of sample available for testing is reasonable for the tests completed.

Core Recovery

Chip sample recoveries are not relevant as these samples are only used to define limit of oxidation not to assign quality parameters to the coal seam.

Core recovery is recorded by the drill rig geologist while logging the bore core and checked using geophysical logs and measured core lengths recorded in the lithology logs.

Core recovery for the coal seams is very good and core loss is infrequent in this deposit. Samples with core loss greater than 5% were excluded from the geological model and resource estimation.

Quality Assurance Quality Control

Borehole data is entered into Geobank and then depth corrected to downhole geophysical logs. Once the data is corrected it is flagged as completed and then requires special permissions to edit. Digital drill data is loaded into Minex for modelling and reporting. Seam thickness and ply correlations for each seam are checked in the Minex model via cross sectional analysis and contour plots.

Prior to modelling, statistical reports are generated to check anomalies have not been introduced to the dataset. Any anomaly is reviewed against original logs and reports.

Sample Security

All samples are sealed and marked appropriately with a tag inside and outside the plastic bag. Information is recorded on a third tag which is kept on site and on borehole sampling schedule forms. Copies of the sampling schedule are despatched with the samples. Coal samples are sent by secured courier to the laboratory

Data Verification Statement

RPM considers that the data which supports the resource estimation has been acquired and managed by following good to best practices and has no material errors.

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6.3 Ashton

Bore Hole Data

The tenement area includes 297 holes of which 12 were drilled by YAL (10 non-core holes and 2 core holes). Of the 285 historical boreholes drilled prior to YAL ownership, 142 were cored for coal quality, geotechnical and gas studies and 143 were non-core structure holes.

There are an additional 4 drill holes located outside of the Ashton resource area that are included in the drill hole database to assist in modelling of the deposit with the Project boundaries.

Digital Data Base

Drill hole data is stored in a Geovia Minex drill hole database. Geovia Minex is a geological modelling and mine design software. The geological data including collar, lithological, seam pick, downhole geophysics, sampling and coal quality data is stored in a series of data files.

Geovia is not a true database, however RPM is aware that YAL is transforming all data to follow internal YAL Standards which is best practice.

Drilling Types and Core Recoveries

Both wireline coring (HQTT – 61mm diameter and NMLC – 51.8mm diameter) and non-core slim hole drilling have been conducted across the deposit. Historically, Ashton primarily used rotary air blast with percussion hammer bits to drill the non-core holes and the pre-collar sections of core holes, with some mud rotary drilling near areas containing shallow alluvial cover.

All surface and intra-mine IS series exploration holes have been drilled and cored vertically with no HQTT or NMLC core oriented. However, deviation data has been acquired by geophysical logging but is only available for surface exploration holes. Maximum horizontal deviation in the YAO series holes was up to 8.6m over 250m depth (in YAO-009). On this basis it was decided that the drill dataset did not require correction for verticality and all holes have been modelled vertically, because the correction for seam reduced level is not material, and there were no critical operational reasons that required more precise location of drill holes.

Topography and Collar Locations

All surveyed borehole collar data provided by Ashton Coal was supplied in GDA 1994 co-ordinates, MGA Zone 56. Collar data for some historical holes were excluded from the data due to lack of confidence in their collar locations.

The current topography DTM surface was supplied to Ashton Coal in September 2013 based on an aerial survey flown in January 2013. It appears satisfactory for resource modelling and estimation.

The current underground surveyed face positions of the Upper Liddell (ULD) and Upper Lower Liddell (ULLD) seams at 30th June 2018 and the LOM plans were used to excise mined coal from the geological resource model. The LOM plans have been used to determine the coal resources within and outside the current LOM.

A check of collar heights against the topography model grid derived from the DTM (TOPO_50 - 50m mesh) showed several anomalies up to +/-30m between collars and the surface topography. These large anomalies were identified as being the result of spoil emplacement above original topography, with the borehole collar located on the original surface R.L. A check of a regional original topography grid, which included the Ashton deposit, against collar showed differences of up to 4m in the areas with spoil dumps, this is reasonable as the original topography was most likely based on historic 1:25,000 Lands Department topographic maps. Elsewhere differences between collars and the DTM were modest, generally <+/-1.5m.

Down Hole Survey

All drill holes have been drilled vertically. There are only a very limited number of drill holes which have verticality logs however these are not incorporated into the geological model. Based on the limited number of verticality logs and the regional experience, RPM considers that not using drill hole verticality will not be a material issue operationally and for Resource and Reserve estimation.

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Geophysical Logging

A standard suite of downhole geophysical logs including calliper, natural gamma and density, were acquired in all holes used in the model. Some holes were also logged with resistivity, sonic, neutron, borehole televiewer and verticality.

Geophysical logs were acquired to supplement the geological description of the cores and to ensure that the core recoveries were satisfactory (>/= 95%) and to assist with correlation of the various seams present. All surface core holes and open holes used in the model have been geophysically logged. Historically, (prior to 2007) geophysical logs were acquired either by Wootmac or Rutherford. Since 2008, most boreholes have been geophysically logged by Groundsearch Australia. Regular calibration of geophysical logging tools is standard practice for logging companies.

All intra-mine (IS series) core holes were not geophysically logged however core recovery is recorded in logging and core photos taken.

Geological, Geotechnical and Geomechanical Logging

All drill cuttings and core from the Ashton historical boreholes were qualitatively lithologically described on hand written geological record sheets and then later encoded into the computer using Prolog software initially by Ashton's geologists, then later by Earthdata personnel. The computer files were uploaded into computer geological databases for modelling. YAL have adopted a similar methodology.

Logging of chip and core samples is detailed and includes a record of the recovery of the total length and the drilled core length, lithology type, lithology descriptions to describe the sample in terms of colour, grainsize, bedding and bedding spacing, bedding dip, mechanical state, weathering, bedding relationship, structure, dip of structures, mineral forms and there associations, primary bedding forms, sedimentary contacts, defects and spacing, all of which is entirely sufficient to describe the various lithologies and coal samples to support the coal resource estimation from a geological, geotechnical and coal quality consideration. All YAL core was photographed. Geos Mining determined that 40 historical WML and WMLC core holes contain core photos and 30 do not. All of the WMLC300-series holes contain core photography. The lack of core photos for the earlier WMLC holes is not considered to have a material impact upon the resource estimation.

Assessment of the geological and geotechnical logs indicate they have been logged to a level of detail to support appropriate Mineral Resource estimation and mining studies.

Bulk Density Determination

Relative Density (RD) which measures the coal density without the void space and ash measurements have been conducted systematically on many coal and stone core samples. The Moisture Holding Capacity (MHC) has also been tested on selected samples across the Ashton deposit which has enabled an assessment by Geos Mining using ACARP 10041C to determine the in situ moisture. An estimate of 6.5% for the coal was determined. In situ densities were calculated by use of the Preston & Sanders formula.

In situ density grids were generated from adjusted density values derived using in situ moisture of 6.5%.

Sampling and Sample Preparation

The entire core thickness was used in sampling (sawing, quarter or half sampling of core is not a standard sampling technique in coal exploration). No non-core samples were used in the database/model/resource estimate.

The core sampling protocol followed by Ashton was to sample the "cleanest" coal intervals based on visual examination and sample stone partings separately using a 0.30m minimum parting thickness limit. Roof and floor sub-samples were also taken. The nature, quality and appropriateness of these core sampling procedures was not documented but are expected to have been to an industry standard sampling the entire core section/ply/sub ply into plastic bags with some form of identification. No sample preparation takes place outside the laboratory.

No coal core duplicates are taken as the analysis methods for coal require the whole cylindrical seam section for analysis. Sub-sampling of the sampled core is part of the treatment procedure at the laboratory where a

portion of the sample is reserved for the purpose of sample analysis checks and or additional testing. The laboratories (SGS Australia, Carbon Consulting International Pty Ltd and currently Bureau Veritas) follow Australian Standards methods and are all NATA accredited.

The core size of 61mm for surface holes and 51.8mm for intra-mine (IS series) provide sufficient sample to conduct the typical proposed testing program. Significantly the coal industry standard for core diameters suitable for the analysis of coal core has increased to typically 83mm (PQTT) and 4" core (100mm) where possible which tends to improve the recovery of the coal and the quality of the core recovered. Limitations exist for the underground drilling operations and the core size although not typically ideal is satisfactory where good core recoveries are achieved.

Core Recovery

The documentation and reporting does not describe the methods of recording and assessing core recoveries, nor does it describe the measures taken to ensure sample respresentivity. Best practice in the coal industry requires that the coal core is matched to the geophysical logs and depth corrected prior to sampling ensuring that there are no depth misalignments and to establish core losses prior to sampling to determine if the core recovery is satisfactory (preferably >95% recovery) to sample and conduct coal quality testing.

In selecting boreholes suitable for use in developing the 2014 geological model, Geos Mining conducted a review of the historical core data on a seam by seam basis and some seam quality data was excluded where the sample did not meet minimum acceptable core recovery criteria of 80% volumetric or 95% linear recovery where sample mass information data was not available.

For the IS series holes (which have no geophysics) spot checks of core photographs to determine whether the mass recovery determined by the laboratory are acceptable were conducted by the geological consultant Geos Mining. Geos Mining commented that the mass recovery may have generally overstated the core loss sample intervals and that these values become unacceptable in cases where the laboratory reported values of less than 80% volumetric recovery. RPM recommends that comparison of the seam section graphic section with surrounding geophysical logged holes is completed to assess likely recovery of core relative to the stone partings to determine whether the present core recovery calculation is valid.

It is not expected that there is a sample bias due to preferential loss/gain of material. Coal seams range from bright banded to dull so preferential loss of bright coal could occur although drilling methods would try to minimise losses in these zones.

Quality Assurance Quality Control

Previous consultants including both Palaris and Geos Mining have conducted extensive validation exercises prior to completing their resource estimations in 2012, 2013 and 2014.

Geos Mining consolidated the data supplied by Ashton with the Palaris Minex resource estimation model 2013 database exports. Data was compiled into custom-designed tables within a Microsoft SQL Server 2008 database and served as the primary data source. Lithological logs, wireline geophysical logs, coal quality results (checked against NATA laboratory reports where available) and coal intersection depths were reconciled by Geos Mining before modelling and resource estimation in 2014.

In 2017, McElroy, Brian Geological Services (MBGS) directly used the collar survey and the coal quality databases provided by Geos Mining and incorporated updated geological and geophysical data provided by Ashton Mine.

RPM completed a selective audit of borehole data. Issues were identified with respect to where sample intervals and seam intervals were mismatched, and where relevant were updated.

The quality control procedures are inherent with NATA approved laboratories which undertake the testing of core samples to Australian Standard testing procedures and are subjected to regular round robin testing to ensure consistency of methods and results. The testing program procedures have sufficient reserve sampling in-built in the program to allow for checks of the analytical testing to be undertaken as required if the result is anomalous. External testing will be undertaken when required.

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Sample Security

Measures to ensure sample security were not documented and reported historically. It was not possible to validate sample security.

The sample number, seam and ply number, depth interval and lithology type, were recorded in the digital sampling sheets. No documentation was available summarizing the "chain of custody" of the sample and the security systems established to ensure coal seam sample anonymity at the laboratory.

Data Verification Statement

RPM considers that the data which supports the resource estimation has no material errors.

6.4 Yarrabee

Bore Hole Data

Geological data acquisition has been ongoing at Yarrabee since the mid-1960s, when exploration was commenced by Minad and Bellambi coal.

The Yarrabee Mine area contains some 10,388 boreholes, of which 1,118 are cored holes of various diameters, ***Figure 6-4*** and forms the basis of the Yarrabee deposit knowledge. Open hole drilling was used for structural control, while core drilling was used for coal quality and gas desorption sampling and testing. ***Figure 6-4*** also shows the anticlinal area delineated by the Minad field mapping and exploration drilling completed during the mid-1960s. The yellow areas which represent the anticline area that contains the Burngrove Formation are relatively similar in both the Minad and the Company figures. The Minad plan has been rotated, because the plan was based on a local grid system.

A total of 4,575 boreholes are located in the mined out areas at Yarrabee. DOM 6 and DOM2S (The term DOM refers to Domain) contain a high percentage of historic data, however it appears to match the post 2008 data closely and has been retained. The Yarrabee East South (YES) area contains approximately 200 historic boreholes that also match the post 2008 data closely and has been retained.

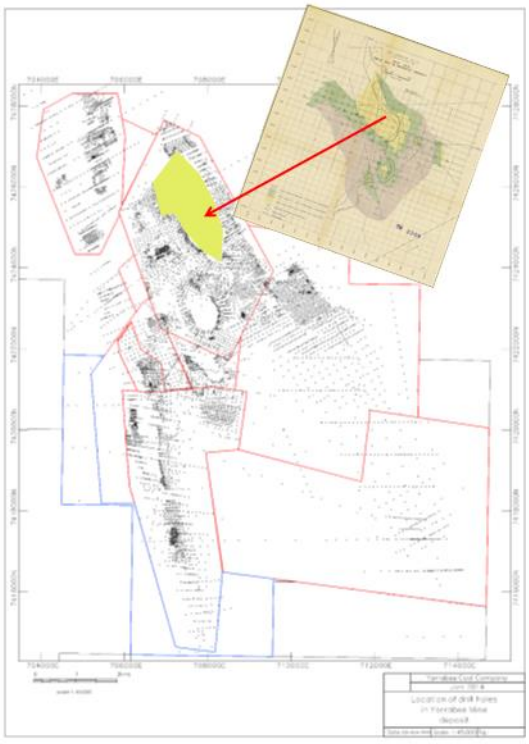
The distribution of boreholes in the Yarrabee area is concentrated in the northern and western areas of the resource areas because these areas are geologically the most complex. The southern part of the YEN and the YES resource areas have the least number of boreholes in the Yarrabee resource because these two areas are less structurally disrupted than the other areas.

The previous Competent Person opines that approximately 90% of the cored holes in the database meet the requirements of the Standard YAL core logging procedures. The majority of boreholes in the Resource area at Yarrabee is modern data that was acquired post 2008.

Geological data generated since 2008 has followed the Company data acquisition standards, documentation, systems and protocols for drilling, logging and sampling of bore core and chip samples, in pit mapping of rock exposures and geophysical data acquisition, interpretation and database management. All geological data acquisition since 2008 has been managed by Mr Stuart Whyte, the previous Competent Person.

Data acquired prior to 2008 has been subject to review by the previous Competent Person, according to the protocols he developed and made standard practice at the Company and is now implementing throughout the Yancoal organisation.

Figure 6-4 Location of Exploration at Yarrabee



Digital Data Base

Since 2008, all field geological data logging was entered directly into GeoBank which is an electronic geological data management system. The coal quality laboratories provide the results of coal quality testing to Yarrabee in a template which is directly uploaded into Geobank which eliminates transcription and key in errors arising from data transfer. The Geobank database contains the following data types:

- collar survey;
- lithology;
- geophysics; and
- coal quality data.

Core and chip sample photographs are stored separately on a server.

GeoBank software is used by the geologists to encode lithology data at the drill site using tablet computers. Geobank contains validation and other business rules to ensure only acceptable codes that describe the rock types intersected can be entered by the geologists and that depth intervals and the like meet the business rule requirements of the database.

Drilling Types and Core Recoveries

Industry standard drilling techniques are used, with conventional rotary table drill rigs using air and water circulation. All drilling has been completed drilled vertical drill with no core orientation performed. RPM notes the following comments relating to drilling methods at the site:

- Blade/Hammer/PCD bits were used to drill open (chip) holes.
- Partially cored 4C (100 mm) core holes were drilled to obtain coal quality information. It is estimated by Yarrabee that 90% of core holes are 4C type holes.
- Due to the extreme geological complexity at Yarrabee, 4C (100 mm) core barrels were used to maximise core recovery. Minimum core recovery for core holes used in the model was 90%. It is observed that the brightest, lowest ash, friable/brittle coal is more susceptible to core loss, especially in faulted areas. Core loss usually occurs between core runs and thus the maximum 4C core barrel length of 4.5m was used to minimise the number of core runs and maximise core recovery
- In addition to minimising the number of core runs, the seam coring procedure used at Yarrabee for coring the Pollux seam is to stop the first core run in the middle of the Pollux Bypass Upper ply, (approximately 1m into the Pollux seam). The second core run is used to core the remainder of the Pollux seam. If any core loss occurs between the two core runs, it is entirely confined within the Pollux Bypass Upper ply which has the most consistent raw coal quality with less than 9% ash, less than 0.6% sulphur and less than 0.06% phosphorous
- Gas desorption testing was performed on HQ-3 core samples.
- All drilling has been completed using vertical drill orientation.
- No core orientation has been performed.

The Company coring instruction procedure, which is based on standard industry methods for obtaining bore core samples is followed by all the rig geologists.

Topography and Collar Locations

The topographic surface at Yarrabee is essentially flat lying. The topographic surface for the YES area has been developed from the borehole collars.

The initial borehole coordinates are obtained using handheld Garmin GPS by the site geologist using Aus Geoid 84 Zone 55. Final borehole collar survey is completed by the Yarrabee Coal Company personnel trained in surveying, using the Yarrabee Mine base station calibrated to AMG84_55.

Geological models are developed from topographic data from AAM Hatch airborne LiDAR, using control points to correct to the local grid. LiDAR data is acquired annually and is therefore up to date.

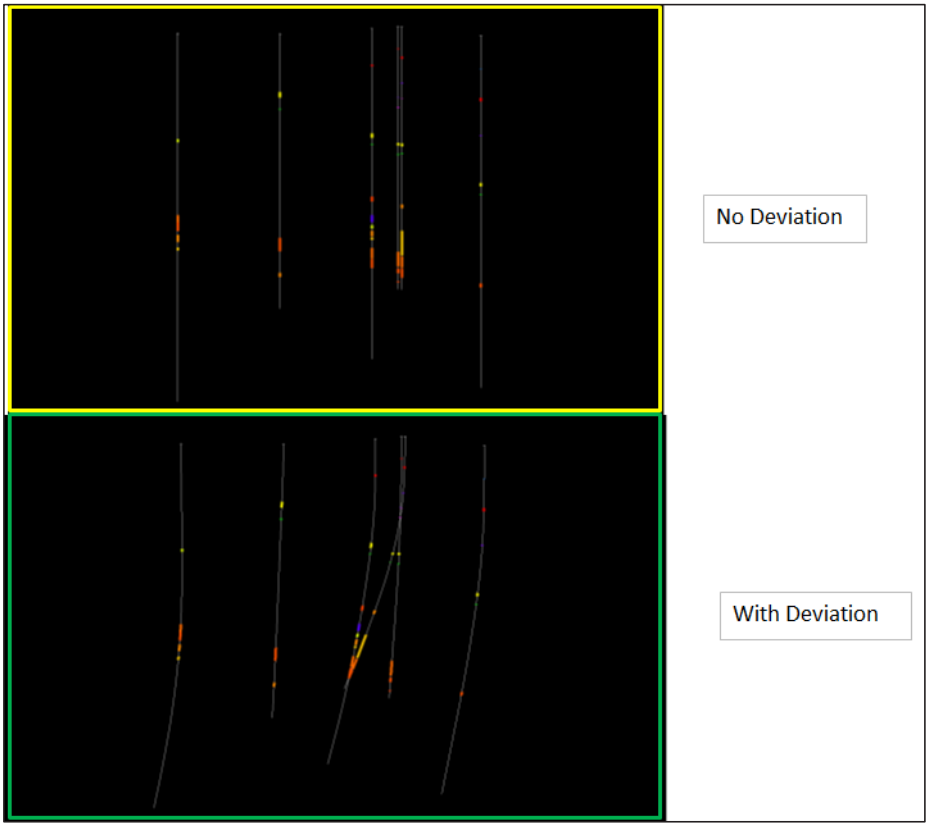
Down the Hole Survey

Boreholes were oriented and drilled vertically. Steep seam dips and the regional horizontal stress magnitude and direction cause boreholes drilled at Yarrabee to deviate significantly (updip) at greater than 60m depth, ***Figure 6.5,*** which shows the location of the seams intersected in six boreholes with no downhole deviation and the same boreholes with downhole deviation. The difference in the location of the coal seams in un-deviated and the deviated boreholes is 20 to 30m which is significant, when a geologist is interpreting the geology in areas of complex faulting.

Verticality data was acquired during geophysical logging and has been used for unambiguous location of the coal seams for 90% of boreholes used for development of geological models.

Core orientation has not been measured, because it is not a common industry method used for coal exploration and in general is less reliable and reproducible than use of deviation tools with dip meter.

Figure 6-5 Seam Location in Vertical Holes Compared with Deviated Holes



Geophysical Logging

An estimated 90% of the Resource uses holes with digital geophysical logs. Some older holes only have paper copy geophysics. The holes without geophysics appear to have been corrected to geophysics and reliability has been verified from newer drilling and mining. Holes confirmed to be unreliable have been flagged in the Geobank database to avoid accidental use during modelling. In some areas these holes have been redrilled. The geophysical tools used were: short and long spaced density, natural gamma, calliper and verticality. A sonic sonde is run on cored holes.

RPM notes that down hole geophysical data is acquired by the geophysical service provider according to the Company Standards and protocols. The Company routinely acquires the following down hole geophysical data;

- Density,
- Gamma,
- Calliper,
- Downhole deviation and
- Acoustic Scanner.

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Geological, Geotechnical and Geomechanical Logging

The Yarrabee coal mine is a mature mining operation with the local and regional geology and geotechnical characteristics being well understood from open cut mining operations that have occurred over the past forty years.

Standardised Yancoal logging systems and protocols are utilised for all drilling logging and sampling. Core is geologically logged and open hole chip samples are taken every 1m and logged for lithology changes. Geological logging and sampling is performed by qualified geologists at the drill rigs in accordance with the Company Standards and procedures.

All holes have been lithologically logged, with cored coal sections brightness logged. The logging of the chip and core samples is detailed and includes a record of the recovery of the total length and the cored length, rock type, stratigraphic unit and numerous adjectives to describe the sample in terms of colour, grainsize, bedding etc. all of which is sufficient to describe the various lithologies and coal samples to support the coal Resource estimation from a geological and coal quality consideration.

Limited geotechnical drilling has been completed at Yarrabee, due to the structural complexity of the area. RPM considers that interpretation of the faults on a 3D basis will enable most geotechnical hazards that may be present due to faulting to be interpreted. In general geotechnical assessment is not performed based on bore core data because the structural deformation at Yarrabee can be classified between complex and severe for some of the mining areas. Geotechnical drilling has been completed in the Yarrabee East South (YES) and Wilpeena areas. Geotechnical boreholes have been drilled vertically and as a result, do not intersect a significant number of defect structures, because joints and other structural features typically have subvertical orientation.

Open hole chip samples are taken every 1m and logged for lithology. Chip samples are photographed as they are sampled and laid out in 1m intervals. Quantitative logging for lithology, stratigraphy, texture and hardness is conducted using standard dictionary definitions, while colour and any additional qualitative descriptions are also recorded.

RPM considers that the recorded information is sufficient to define a reliable geological Resource model and geotechnical models for development of reliable and safe LOM plans.

Bulk Density Determination

The Yarrabee Mine has been in operation since 1982 with the density of the coal and its distribution within the seams well known. Most borehole samples have only true relative density (RD) analysis as such the relationships used to populate the ply by ply data with missing air dried relative density ("ARDs") or RDs are estimated by an ash RD regression.

The in situ density is estimated using laboratory ARD and adjusted to in situ density using the Preston Sanders method using the assumed in situ moisture of 5.5%. RPM considers that the insitu moisture estimate is suitable for coal of anthracite rank.

Sampling and Sample Preparation

Core sampling is completed at the drill site and is based on a set of standard criteria (determined by lithology and structure) that follows the Yarrabee sampling procedure which includes:

- All samples were photographed, double bagged and provided with a unique sample identifier prior to sending to the laboratory.
- Whole samples were used for quality analysis.
- All samples within the seam extents were analysed.
- Carbonaceous material and all stone bands were sampled to ensure that full coverage of each seam was obtained.

Seam extents were corrected to geophysics prior to coal quality analysis and then corrected to quality after the analysis was completed (if necessary).

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Core Recovery

Core recovery is recorded by the rig geologist at the time of logging the bore hole based on measurements taken of stick up at the start and finish of core runs and the cored interval and the core recovered and visual inspection of the core. Actual recovered core lengths are measured with a tape measure and any core loss is recorded in geological logs, coal quality sample intervals and in the run by run drilling record field sheets.

Core loss is confirmed by the rig geologist after comparing the recovered core to the geophysical logs to determine which parts if any of the seam are missing due to core loss. Core loss is recorded and core samples are taken either side of the core loss interval in accordance with the Yarrabee Core Logging procedure. The Company estimates that 90% of the core holes in the database are compliant with the Standard procedure.

Historic boreholes (those boreholes completed prior to 2008) do not comply with the Yarrabee core logging procedure, however they have been reviewed by the Company geology team according to the Yarrabee procedures to select or exclude the borehole(s) from model development.

The database contains 1,316 parent seams with sample and coal quality data. Ninety two seams intercepts (7%) have less than 90% core recovery and that coal quality data is excluded from the coal quality model. Seventy three seams (5%) have between 90% and 95% core recovery and have been used in the model. 1,151 seams (87%) have greater than 95% core recovery.

If core recovery for a coal ply is less than 95%, then that section of the hole is redrilled to ensure a representative sample is taken, provided that the cored hole is not located in an area of high structural complexity, in which case lower core recovery is accepted.

Open hole chip recovery is assessed qualitatively by the rig geologist. The Company uses the accepted typical industry procedures for data acquisition.

Quality Assurance Quality Control

RPM is aware that non-formalised quality assurance/quality control (QA/QC) checks involving duplicate samples are regularly completed according standard coal industry practices. In addition, RPM understands that check laboratory round robin and basic reproducibility tests are followed by the NATA certified laboratories. All coal quality results were assessed by the Company geologist using a range of validation methods that includes but is not limited to the following examples of checks:

- The sum of all percentages reported for proximate analysis, ultimate analysis and petrographic analysis should total 100%. The exception is ash analysis, for which the sum of the oxides has an allowable range between 98% and 102%,
- Ash Fusion Temperatures: Check deformation flow temperatures to ensure they are always increasing for the one sample.
- Review of classical statistics for the significant seams of each raw analytical element and produce relevant histograms from the quality samples used in model development,
- Review cross-plots of related parameters such as relative density and ash, energy and ash,
- Check that yields add up to 100%,
- Check sizing and relative density fractions to ensure they are reported in the correct order.

Data transfer between the Company and the laboratories (as requests for analysis) and the laboratories and the Company is covered by an agreed Company protocol.

Since 2008, data has been stored in Geobank software. All required modifications are made in Geobank prior to being uploaded via ODBC to Minex for modelling. Some of the business rules contained in Geobank for validation of data include:

- planned borehole coordinates are within 20m of the actual as drilled collar coordinates;
- the borehole total depth matches the lithology depth and the drilled depth;
- the lithology data uses the correct codes;

- there are no negative thicknesses; and
- plies are constrained by the parent seam roof and floor constraints.

Sample Security

Core samples are bagged by the geologist and sent through the Yarrabee Mine Stores for dispatch. Samples are transported to the laboratory by dedicated courier service. Sample instructions are provided to the laboratory and Yancoal advise that no samples have gone missing to date.

In light of the bulk commodity nature of coal and the long mining history at Yarrabee, no higher level security measures are deemed necessary since it is very unlikely to be subject to material impact from sample tampering theft or loss. RPM considers these procedures to be industry standard and regards the sample security and the custody chain to be adequate, however notes that no details were provided for sample security prior to 2008.

Data Verification Statement

The review undertaken by RPM of the drilling and sampling procedures indicates that in general, good practices were followed by the Company and no material issues noted.

RPM also notes the majority of the data used for the resource estimation were acquired from drilling post 2008 that has followed the Company procedures and protocols. Data acquired prior to 2008 has been subject to The Company procedures and protocols to ensure the reliability of that data so that it could be used to develop the geological models.

RPM considers that the data which supports the resource estimation has no material errors.

6.5 Stratford and Duralie

There are approximately 2,500 boreholes contained within the databases for each of the deposit areas. Approximately 10% of the boreholes contain coal quality data used in the geological models. All holes used in the resource model and resources estimation were geophysically logged with downhole geophysical tools.

Digital Data Base

Borehole data is stored in Minex databases for each of the deposits for the Project. Data stored includes borehole survey, seam data, coal quality and, where loaded, downhole geophysics. Lease, fault, trend line and resource limit polygons are stored in Minex geometry files. Borehole seam structural, thickness and raw coal quality data are modelled in Minex grids

Drilling Types and Core Recoveries

Duralie

Non-core structural and core drilling initially targeted the Weismantel Seam with subsequent exploration targeting the more recently identified Cheerup and Clareval seams. Partially cored HMLC holes for Weismantel Seam were drilled during a 1995 drilling program. Large diameter boreholes (8" core) were drilled in 2002 to obtain a bulk sample from the Weismantel Seam. Approximately 20 LOX holes were drilled to define the seam sub-crop prior to mining. From 2005 onwards HQ and PQ partially cored holes were drilled to Weismantel, Cheerup and Clareval seams.

Exploration holes were drilled vertically. In the Early-mid 2010's several holes were drilled inclined to provide pit/geotechnical wall information ahead of mining. In 2017, 12 blast holes were geophysically logged to assist with structural interpretation in the Clareval bowl pit.

Stratford and Grant & Chainey

Non-core structural boreholes have been drilled to depths generally ranging from 50-250 m. Shallow limit of oxidation drilling (LOX) was completed to define pit low walls on now completed pit areas. Core hole drilling encompassed a number of diameter sizes: pre 2001 were 100 mm and 150 mm partially cored HMLC holes,

post 2001 were HQ and PQ core size. Larger core sizes achieved better core recovery. In recent years (post 2009) core drilling has focused on PQ core size.

Holes were largely drilled vertically, however the exception to this is drilling in 2014-2015 in the northeast of Stratford where exploration drilling in steeply dipping areas was inclined, targeting multiple intersections of seams.

The Co-disposal resource is being mined and reprocessed. This resource is not supported by drill hole data. A surveyed volume is known and yields and product quality are estimated from CHPP actual performance.

Topography and Collar Locations

The original data was in the ISG coordinate system (Zone 56/1) and was converted to GDA94 (Zone 56) in early 2004. Since then models were created in GDA94.

Duralie

Good topographic control from digital terrain models (DTM), obtained pre 2000 and 2006. Borehole collars were surveyed and are generally within 1m of the DTMs (of approximately 900 holes approximately 100 holes are 1-2m from the DTM, 20 are 2-5m from the DTM and boreholes 1017R and 1165R are 23m and 35m respectively from the DTM). These two holes are located towards the centre of the syncline where Inferred Resources are estimated; the collar has not been altered as resurvey should be undertaken. Approximately 20 holes were drilled in 2015-2016 and 12 blast holes in 2017 in the mined Clareval Bowl area. These holes will show a discrepancy to the original topography and are acceptable.

Mine seam pick up data (up to April 2014) and pit survey (up to September 2017) is supplied by site surveyors and is of a good standard.

Stratford and Grant & Chainey

Although mining has occurred at Stratford, the 'original' topographic surface supplied by Gloucester Coal was used as the topographic surface for the models at Stratford and Grant & Chainey. This surface provides good original topographic control.

For Resource and Reserve studies the current mined surface was utilised. In Stratford West the mined surface for all pits (Roseville and Roseville Extension/West pits, Bowens Road West, Stratford Main pit and BRN pit) to the end of June 2014 was provided by mine site surveyors which RPM considers good quality data. This mined out pit data was blended with the base of weathering grid and the resultant surface was used to limit seam resources at Stratford.

No mining has occurred at Avon North, Stratford East or Grant & Chainey. For Stratford East the original topographic surface was merged with the 2014 DTM where the original topographic surface did not extend far enough east.. Original topographic surface is a combination of DTMs produced from aerial photography flown pre-2001, 2004, 2006 and 2014 (the majority of the area is covered by the 2006 DTM).

Borehole collars were surveyed and generally agree with the DTM. Borehole survey data are generally within 1-2m of the original DTM.

In some cases collar elevations differed by 2-5m and in rare cases 20m from the DTM (two holes were adjusted to comply with the DTM as this better fitted the surrounding structure). There are discrepancies between old borehole collars and the original surface in the Co-disposal area where reject material was emplaced and in the north of Grant & Chainey due to mine rehabilitation. There are also discrepancies where holes were drilled in partly mined out areas (including some 8000 series boreholes drilled in BRN Pit). These differences are acceptable.

Co-disposal area

The original topographic DTM is of good quality. The end of June 2012 surface was created from end June 2012 aerial photography with historical pits and voids to end September 2012 cut in (the end September survey of pits did not cover Cells 1-3). I.e. the upper surface for the Co-disposal area is dated end June 2012.

Down the Hole Survey

Borehole verticality has been collected for some however not all boreholes. Where available, borehole verticality has been used in the geological model. Some variation in seam thickness- is observed in the structural models as seam "kinking" due to the presence of or lack of down hole deviation. YAL consider that incorporation of verticality data produces more reliable models.

Geophysical Logging

As a standard procedure all holes were geophysically logged with downhole geophysical tools. Holes not successfully logged with downhole geophysics generally had poor hole wall stability. Poor ground conditions can occur in this highly structured syncline/basin with steeply dipping coal seams. Holes without geophysical logs could were not be used in the model as the drill hole data could not be validated.

Holes have at least density/gamma/calliper logs run, a number of holes have sonic, verticality and/or acoustic scanner. The quality of some logs was poor, often related to the age or the company used. Weatherford, Ground Search and Coal Seam Wireline Services have provided the geophysical logging services. Presentation of the data varied between these logging companies and was at times poor, which has made it difficult to consistently pick thin plies. During recent drilling at Duralie in 2015-2016, Weatherford undertook geophysical logging of approximately 20 boreholes (logging suite included density/gamma/calliper, vertically, sonic, neutron, dipmeter, acoustic scanner).

Geological, Geotechnical and Geomechanical Logging

Core holes were lithologically logged, coal core brightness logged and some post 2001 holes were also logged geotechnically. Generally logging was undertaken in sufficient detail (measurement and description); however there were a number of holes drilled during approximately 2009-2010, of which some were very basically/poorly logged. These holes heavily relied on geophysical logs to confirm thickness and depth of geological intervals.

Core and non-core holes were depth corrected and correlated using downhole geophysical logs and are considered reliable points of observation.

Generally logging is qualitative (core logging to centimetre accuracy and non-core logging chip samples to metre accuracy). All core sections of boreholes were lithological logged. Most if not all non-core sections were also lithologically logged. Core photography is generally available for cored sections (largely for new holes not always available for pre 2001 holes). There are a number of holes drilled during approximately 2009-2010 some of which were very basically/poorly logged with coal core sections that were logged on a broad lithological basis rather than in detail.

No boreholes relate to the Co-disposal area this material is a waste emplacement area.

Bulk Density Determination

A mixture of Relative density and Apparent Relative density data was available from laboratory analyses. Only Relative density data was used in the database/gridding/resource estimate. Relative density data was converted to an in situ moisture basis (estimated at 6% moisture) to account for loss of void spaces during testing (Preston Sanders equation). An ash versus density regression was determined to enable estimation of in situ density for all plies with raw ash data.

Where sufficient data was available in situ density grids were generated. Default in situ density values were determined for each ply from the available data to use where gridded data was not available. Default density values range from 1.35-1.60 g/cc. For stone parting plies of the Weismantel Seam default density values used (when gridded data was not available) ranged from 1.80-2.1 g/cc.

For the Co-disposal area a default density of 1.10 g/cc was used as a reasonable density estimate for emplaced wash plant reject material.

Sampling and Sample Preparation

No splitting or sawing of coal core took place (quarter or half sampling core is not standard in sampling of coal).

Non-core coal samples were analysed from a small number of early chip holes intersecting the Clareval Seam to gain an initial understanding of basic coal quality parameters before a core rig was available to obtain standard core samples. No non-core samples were used in the database/model/resource estimate.

For holes completed prior to 2001, specific sampling techniques are unknown but were sampled generally to plies, however some were on a sub-ply or combined ply basis. For post 2001 holes core of coal seams were generally sampled on a correlatable ply basis but with some combined ply samples taken on thin plies and sub-plies on very thick plies (e.g. W2, CLM). A small number of core holes were correlated at the time of sampling and some holes were re-correlated post sampling. The entire cored section of each sample was placed in the sample bag with identification tags for subsequent quality analysis. Some samples include stone partings and this would affect raw quality results. Parting plies of the Weismantel Seam (P1, P2 and P3) were sampled and analysed.

No sample preparation took place outside the laboratory. Coal quality testing was undertaken at laboratories which comply with Australian Standards for sample preparation (including the ALS laboratory at Maitland).

HQ, PQ and 100 mm core sizes are appropriate for raw coal quality testing and float/sink testing. Large diameter holes drilled prior to mining commencing at Duralie were suitable for the drop shatter/float/sink testing undertaken. The ply thickness of samples at Duralie provided adequate sample mass for testing. At Stratford and Grant & Chainey there can be thin coal intersections and there is a potential that detailed float/sink analyses was undertaken in 2009-2010 holes on samples that were too thin.

RPM is unsure how sampling was undertaken at the Co-disposal area. Bulk samples from ongoing operations would provide an appropriate sample size for the material being sampled.

Core Recovery

Core recovery was recorded by the field geologist at the drill rig (drilled length and core recovered) and drill depths were subsequently corrected using down hole geophysical logs to accurately determine the location and magnitude of core loss. Varying core diameters have been used (largely HQ, PQ and 100 mm). Pre 2001 holes appear to have better core recoveries due to >100 mm core diameters used. Post 2001 - HQ holes often suffered poor recoveries. PQ holes were used post 2009 and generally achieved 90-95% core recoveries.

Coal seams in the Gloucester Basin have been subjected to considerable tectonic compression which can result in poor ground conditions when drilling. Some holes with high core loss were sampled. Only those holes with coal core recovery of greater than 80% were used in reporting and gridding qualities. 80% recovery was used to maximise the data due to the large number of plies in the deposit. Core loss intervals were inserted into the quality database to ensure correct selection of data in Minex software for reporting, gridding and tonnage estimation/reporting.

The effect of core loss at Gloucester is that analyses may underestimate the better qualities of the coal due to loss of the brighter parts of the sample (e.g. core losses generally result in higher ash, higher density, lower CSN), which results in underestimation of the quality of the insitu resource. However, a material bias in the quality values related to core recovery has not been identified.

Quality Assurance Quality Control

Significant intersections and/or anomalous geological or coal quality values are checked as part of the data compilation process (e.g. thick or thin intersections checked to geophysical logs/logged core sections, high or low quality values checked to original reports).

Raw coal quality data were compiled from original laboratory reports into a single spread sheet. Relevant data was standardised to a constant moisture basis of 2.5% (Stratford West, Avon North, Grant & Chainey) or 1.5% (Duralie and Stratford East). An ash versus density regression was developed (using RD at an estimated 6% in situ moisture) to enable generation of in situ density from raw ash data. An ash versus energy regression was also developed to generate energy data from all samples with raw ash data.

For Stratford and Grant & Chainey it was difficult to obtain original reports for pre-2001 holes and only a few are used in the data set. Sampling strategies pre-2001 often combined plies and inclusion of this data was difficult. For Weismantel Seam core holes prior to 2001, raw coal and float/sink data were compiled and validated by Quality Coal Consulting (QCC).

There are coal quality data for the co-disposal material available in laboratory reports. No adjustments have been made to the quality results of the co-disposal material.

Sample Security

Security measures of samples prior to 1999 are unknown, however are expected to reasonably follow standard industry practices.

Core trays are generally taken to the core shed as soon as possible (usually at the end of the day) after measurement and lithological logging of the core at the drill rig. The core shed is a secure location at the mine site. Core is sampled (after geophysical logging/correction/ correlation/core photography), bagged and tagged. Usually a site geologist transports the samples to the laboratory.

There have been occasions when the time frame between coring and sampling was over a few months and the core was not refrigerated. The coal seams at Duralie, Grant & Chainey and Stratford appear to hold fluidity very well and may not be adversely affected by a lag in time between coring and sampling of a few months.

Security measures for the Co-disposal area samples are not known.

Data Verification Statement

Borehole data reviewed by RPM were contained within Minex borehole databases and structural and coal quality grids. A number of downhole geophysical logs were loaded into the Stratford West and Avon North databases and checked against seam picks and coal quality intersections.

Given the steep seam intersections in Avon North and Stratford West, coal seam picks generally correlated well with downhole geophysical logs. Coal quality samples generally correlated well with geophysical logs and seam/ply picks. Some discrepancies occur in a few instances, possible due, in part, to differences between geophysical log picks and core intercept picks of steeply dipping seams.

RPM considers that the data which supports the resource estimation has no material errors.

6.6 Austar

The Austar resource is supported by a large range of data types in addition to borehole data. This additional support data includes;

- 103km 2D seismic that has been reprocessed a number of times as data processing capabilities have increased,
- 30.5km of ground magnetic surveys, and
- Mapping data from surrounding abandoned mine workings.

Bore Hole Data

Thera are approximately 180 drill holes in the Austar Project area. Almost all drill holes were cored using HQ Triple Tube core systems, (HQTT- 61.3 mm diameter core) to recover core samples from the seam plus roof and floor strata. In addition some boreholes were drilled for structural investigation of faults that were interpreted from 2D seismic data and were fully cored (HQTT) from surface to acquire geological and geotechnical information for the full stratigraphic sequence.

All boreholes were spudded with vertical orientation. The Greta coal seam has almost horizontal (4° dip) to the southeast as a result all boreholes intersect the Greta seam almost orthogonally (85°). Borehole spacing varies throughout the Austar leases and is summarised by three spacing categories;

- The northern portion of CML2, core hole spacing ranges from approximately 250m to 600m while in the southern portion of CML2 core hole spacing ranges from 600m - 1,200m;
- CCL728 core hole spacing is approximately 1,000m, and

- EL6598 core hole spacing ranges from 1.0 km to 3.6 km. In addition to borehole data, an extensive array of seismic survey lines (>100 km) over CML2 and CCL728.provides support for seam continuity.

Digital Data Base

Austar has not described a true geological database. Data is stored in the Geovia Minex software, which does not have a true database. The Austar area contains a large volume of data which consists of approximately 180 boreholes most of which are geophysically logged, 103km of 2D seismic data, 30.5km of ground magnetic survey data and underground mapping data from the surrounding abandoned underground mine workings that are located predominantly to the north of Austar resource area.

Drilling Types and Core Recoveries

Due to the depth of the Greta Seam almost all holes were cored (HQTT- 61.3mm diameter core) to recover Greta Seam plus roof and floor strata. Some non-core holes were drilled for structural investigation of faults interpreted from seismic data. Some holes were fully cored (HQTT) from surface to gather geological and geotechnical information on the full stratigraphic package.

Topography and Collar Locations

Borehole collars over the last 17 years were surveyed by a registered surveyor using GPS equipment. Previously borehole collar surveys were carried out by registered surveyor using theodolite survey instruments. All collar data is considered by RPM to be adequate. Topography is from Department of Lands (supplied 2007) and is considered by RPM to be adequate.

Down the Hole Survey

All boreholes were vertical and the coal seam is almost horizontal (40^{o} dip). All sampling from vertical boreholes is almost orthogonal (85^{o}) to the target Greta Seam. No sampling bias has taken place.

Borehole verticality surveys have been incorporated into the structural model where available.

Geophysical Logging

Wireline logging companies that ran down hole geophysical tools for past and present exploration have, as standard operating procedures a calibration process which takes place on a regular (monthly) basis.

Surface seismic survey data acquired in the past at Austar is of high quality and has proved reliable in identifying faults in advance of mining and defining seam continuity between boreholes. The extensive network of seismic coverage has significantly improved confidence in the overall structural interpretation and continuity of the Greta Seam. Seismic survey data was all reprocessed by geophysicist J Saunders who specialises in seismic interpretation. The favourable nature of overburden strata above the Greta Seam allows for capture of very high quality seismic data. More recently geophysicist Mr. Gary Fallon has also reprocessed seismic data.

Geological, Geotechnical and Geomechanical Logging

Lithological logs are available for almost all boreholes. Some early NER prefixed non-core structure holes did not have lithological logs but down hole geophysical logs were available.

Coal seam depths are corrected to geophysical logs for both open and cored boreholes by the Austar geologist.

Logging of Maitland Group overburden strata may be of lesser detail as it is mostly non-core drilled. Core logging of roof and floor strata as well as the Greta seam has been detailed. Geotechnical logs are available from 1999. Core photography from pre 1999 holes is not available however since that time core photography has been standard procedure.

Bulk Density Determination

Relative Density (RD) and Apparent Relative Density (ARD) values have been reported on coal core samples in past and present drilling programs. Differing eras of exploration reported either RD or ARD on each ply sample.

For this resource estimate, coal quality data was separated into those reporting RD or ARD as per information from original coal quality reports. RD and raw ash data were then converted to an in situ moisture basis of 5% (using the Preston/Sanders change of base equation) and a regression was developed to allow estimation of in situ density (ID) for all data, from raw ash values. This included coal quality data which reported ARD only.

Sampling and Sample Preparation

Coal samples were taken from cored borehole intersections. Core sample size is generally HQTT (61 mm). HQTT coring is a coal industry standard technique to maximise core recovery and ensure sample is representative.

The Greta seam has been sampled on a ply by ply basis using the density geophysical log responses to determine sample intervals.

Coal core of Greta Seam is divided into plies using down hole geophysics and then sampled. The entire cored section of each ply is placed in sample bags. No splitting or sawing of coal core takes place. No sample preparation takes places outside the laboratory. Coal quality analytical laboratories used to analyse Greta Seam coal comply with Australian Standards for sample preparation.

Sample sizes are considered appropriate for the material being sampled and the coal testing regime.

Sampling of the Greta seam may not be consistent due to a number of differing eras of drilling plus gradational changes within the Greta seam that occur from west to east, with the seam splitting into an upper and basal section in the eastern part of the resource area. The correlation of individual plies may not be fully consistent across the Austar leases.

Austar has developed a number of composite intervals based on the ply samples to accommodate the variability of the older sample intervals.

Austar has merged all previous borehole ply correlations into one standard system comprising three basal plies each 1m thick each and up to eight consecutive 0.5m thick plies to the seam roof, which gives them the capability to assess standard longwall operations and longwall top coal caving (LTCC) options. However, given the cessation of TLCC in the Bellbird area due to high sulphur product coal and thinner seam section, it is likely that this methodology cannot be used successfully to predict product quality.

The more recent exploration data have been sampled with three basal plies each 1m thick each and up to eight consecutive 0.5m thick plies to the seam roof.

Core Recovery

Core recovery for the Greta Seam in most holes has been greater than 95%. Core recovery is measured at the drill rig when comparing drill run length to core recovered. This calculation is audited and confirmed by down hole geophysics (density log). Where core recovery has been less than 90% the hole has been redrilled. Using HQTT as the standard method of drilling is considered optimal to maximise coal seam recovery with minimal disturbance.

No bias in coal quality due to recovery has been identified and due to the high core recovery, any bias is considered unlikely or immaterial.

Quality Assurance Quality Control

Laboratories used to analyse Greta Seam cores have complied with Australian Standards for coal quality testing and are certified by the National Association of Testing Authorities Australia (NATA). Repeat sampling on a regular basis to validate results is standard procedure for proximate analysis testing.

Digital geological data for Austar resides in a Minex borehole database. This includes borehole survey data, seam picks, raw coal quality data and verticality data for more recent holes. Data in the database includes boreholes up to AQD1123. Recent holes drilled in 2017 will be loaded into the next geological model.

Sample Security

Coal core sample bags are sent to the laboratory via courier. In the past they have also been delivered to the laboratory by the field geologist or picked up from site by laboratory personnel. RPM considers this is appropriate for coal core samples.

Data Verification Statement

The borehole information was reviewed as part of the process of developing the geological and coal quality models used for this Resources estimate. No external audits or reviews are known to have been completed, however the data and model is considered by RPM to be suitable for inclusion in a Coal Resource estimate.

6.7 Donaldson

Bore Hole Data

In total there are 793 drill holes in the database for the Donaldson Project. Of the 793 drill holes:

- 361 have graphic logs and geophysical logs.
- 402 have graphic logs only.
- 30 have no graphic or geophysical logs.

Drill hole data at Donaldson has been acquired by many different parties, commencing in 1951 as outlined in **Section 4.1**.

Digital Data Base

In 2015, a third party collated and reviewed all the available drill hole data for Donaldson and re correlated all coal seams within the entire deposit. Subsequently, a third party obtained all available laboratory reports from site and upgraded the coal quality database. Drill hole information is stored on the Donaldson mine geology drive. The compiled information used in the geological model is stored in a Maptek Vulcan Isis Database.

Drilling Types and Core Recoveries

Seventeen different phases of exploration have occurred at the Donaldson Project since the early 1950s. Hence, a variety of drilling techniques have been followed. All boreholes are vertical and are fully cored, partially cored or non-cored open holes. The majority of the holes are either non-core or partially cored HQ3 diameter holes.

Contractual arrangements requiring greater than 95% recovery on a seam basis have been in place for drill holes that have recently been drilled. The recovery is recorded in the geological database for a large portion of holes and it is generally at an acceptable level (>80%). Where the recovery is recorded and it is less than 80% then the sample is rejected from the geological modelling process. Where sample recovery has not been recorded it has been accepted as adequate if the results are considered consistent with surrounding data values.

Topography and Collar Locations

A topographic surface was created in the geological model built in July 2015 using LiDAR data acquired by Donaldson Coal in 2014/2015. The quality and adequacy of the topographic surface is considered good.

Boreholes recently completed have been surveyed by a registered surveyor using an RTK GPS system with a base station control. These collars have been captured and stored in the Map Grid of Australia (MGA) 1994 Zone 56 system. Locations of historical holes are recorded in either the old Integrated Survey Grid (ISG) or in Chains from referenced cadastral locations. Historical borehole surveys have been converted to the MGA 94 Zone 56 system; however, the accuracy of the conversion is not known by the Competent Person.

Down the Hole Survey

All drill holes at the Donaldson Project have been drilled vertical and are generally perpendicular to the coal seams. More recent drill holes have downhole verticality data recorded and show little deviation of the drill holes through the strata.

Geophysical Logging

Where downhole wireline geophysical data has been obtained it generally includes natural gamma, calliper and dual density. On occasions other tools have been acquired, including resistivity and sonic. Wireline logging tools are calibrated by the geophysical logging contractors in accordance with their company standards.

Geological, Geotechnical and Geomechanical Logging

Lithological and geotechnical logging has been undertaken on core and chip samples for the majority of boreholes. For a small collection of older boreholes these data have been lost and these holes are not used in the geological model. In most cases the logging is of a detailed enough nature to provide an accurate reflection of the geology. In most cases lithological logging encompasses the full length of the borehole.

Bulk Density Determination

In situ density was calculated for all samples using two regression equations developed by coal quality specialist Bob Leach. Bob Leach provided one regression equation for samples under 50% ash (adb) and another for samples over 50% ash (adb). In situ density was calculated at an in situ moisture of 4% using the Preston Sanders equation.

Sampling and Sample Preparation

Samples taken at Donaldson are generally only sub-sampled by the laboratory as a part of their coal quality analysis procedures. Sub-sampling by the laboratory involves either riffle or rotary splitting in order to receive a representative sub-sample to undertake each step of the analysis procedure.

Historically coal quality samples taken from boreholes have not undergone any pre-treatment, rather they have been crushed to pass 11.2 mm and then analysis performed. It is understood that coal quality samples received through channel sampling are subject to a pre-treatment process that involves drop shatter, sizing, wet tumbling and hand knapping.

The more modern coal quality analysis has involved analysing ply samples on an individual basis and the re-combining into working/seam sections on an RD x length basis.

Core Recovery

Contractual arrangements requiring greater than 95% recovery on a seam basis have been in place for boreholes that have recently been drilled. The recovery is recorded in the geological database for a large portion of holes and it is generally at an acceptable level (>80%). Where the recovery is recorded and it is less than 80% then the sample is rejected from the geological modelling process. Where sample recovery has not been recorded it has been accepted as adequate. No relationship between sample recovery and a quality bias has been identified.

Quality Assurance Quality Control

The Competent Person does not know of any audits or reviews of the sampling techniques.

In 2015 a third party undertook a large review of the seam and ply correlation as well as a comparison of the coal quality data against the original lab results. This extensive exercise resulted in a completely new geological model, which removed numerous small and several large errors.

Sample Security

Any sample security measures applied to historical samples is unknown by the Competent Person. Holes recently drilled (those holes completed in 2014) were double bagged with sample tickets included between the bags. A copy of the sample ticket was retained on site at Donaldson Coal.

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Data Verification Statement

RPM considers that the data which supports the resource estimation has no material errors.

6.8 Middlemount

Bore Hole Data

Exploration data collection for Middlemount Coal has been managed by Peabody Energy Australia since 2008; all borehole data is completed using industry standard practices outlined in the CoalLog Manual for Geology & Geotechnical Data Collection ("CoalLog"). Data acquired prior to the release of the CoalLog industry standard in 2012, including holes obtained in tenement acquisitions and in open file Government reports, have been assessed by Peabody geologists and deemed to provide an adequate representation of the deposit.

The Middlemount Mine area contains some 1076 boreholes which forms the basis of its orebody knowledge; 732 of which were used in the 2018 geological model. Data is managed through multiple systems due to limitations on data capture abilities; however, paper copies are kept on site and network locations are used for data repositories. Three separate databases are used to perform different functions on the data: Task Manager, GeoCore and Isis. Their uses are explained in the following data flow process, as confirmed by Peabody's Geology Team:

1. The Field Geologist logs lithology data on paper. The paper log is kept in a borehole file on site and also scanned to network.
2. The Field Geologist data enters lithology into Task Manager and files are saved as <Hole>_FIELD for raw data.
3. Contract Geophysical logger logs the hole and provides hard copy and digital files to Geologist. Geophysics printouts for boreholes are kept at the Middlemount Mine Site and Peabody Field Exploration Office. LAS and PDF files are acquired from the geophysical contractor and saved to Task Manager. All digital LAS is uploaded to the GeoCore database.
4. Mine surveyor surveys the hole and provides coordinates to the Exploration Manager for upload to the GeoCore Database. CSV files are kept on network.
5. Core photos are stored on the network and can be viewed with the lithological data via Task Manager
6. Task Manager is setup to validate data and flag data entry errors which do not conform with CoalLog 1.2.
7. Field Geologist validates all primary data and completed geophysical adjustments, based on gamma, calliper and density traces.
8. Once the hole correction is complete, it is saved as <Hole>_CRX on the network. The CRX file is then checked and edited as required by the Exploration Manager resaved as Hole.xls and uploaded to the Peabody GeoCore Database via Task Manager.
9. GeoCore does not store all fields, therefore, Excel records are kept on the network.
10. Sample advice summaries are exported from Task Manager to provide coal quality instructions to the laboratory.
11. All coal quality results are saved on the network and uploaded directly to GeoCore by the Coal Quality Department at Peabody.
12. When a model update is required, the headers, lithology, geophysics and raw quality data is exported from GeoCore and provided to the Resource Geologist as a CSV file.
13. The Resource Geologist creates an Isis database from the exported CSV files for Vulcan modelling.
14. The Resource Geologist models structure and raw coal quality from the created Isis database.
15. Any changes made during resource modelling are provide back to Peabody as CSV files. The relevant data is amended directly in GeoCore, however, this could take longer than 6 months for the data to be updated.
16. The updated model and Isis database are provided to site personnel at Middlemount Mine. There is no Mine Geologist at Middlemount and the responsibility falls on the Technical Service Manager.

17. In-house coal quality experts simulate washability and product coal quality upon the reporting of results by the lab.
18. Washability and product quality data is not accounted for in the resource model, however provided to mining engineers for reserving.

RPM is concerned that the data management practices could lead to divergence of data sets due to loss of version control, and data misuse. There are risks associated with data entry from field notes; using multiple versions of CSV files through importing and exporting into different systems which have different data storage abilities; and personnel accessing different systems for geological data. The lack of integration of the coal quality and structural data, and use of that data by the resource geologists is also of concern because it does not appear that product coal quality data has been considered in the Resource estimation process.

Drilling Types and Core Recoveries

RPM Global understand that industry-standard drilling techniques are used at Middlemount, with conventional rotary table drill rigs using air and water circulation.

Both open hole and coring techniques have been applied to the Middlemount deposit (Core drilling is typically by both HQ (nominal 60mm diameter) and 100mm diameter tungsten carbide drill bits and triple tube barrels (**Table 6-6**). Open hole drilling is used for structural control and to confirm seam continuity and the occurrence of coal is confirmed through downhole geophysical techniques. Blade/Hammer/PCD bits were used to drill open (chip) holes. Core holes have been drilled to understand the seam quality. Core drilling is typically by both HQ (nominal 60mm diameter) and 100mm diameter tungsten carbide drill bits and triple tube barrels.

Table 6-6 Modelled hole types for 2018 Middlemount resource estimations

Total Model Holes	Open Holes	4-inch Core Holes	HQ Core Holes	Large Diameter Core Holes
732	429	69	231	3

Contractually, a redrill is required if less than 95% core recovery is obtained. Recovery less than 95% is occasionally accepted if the drilling environment is difficult, or when the loss is deemed acceptable by comparing against geophysics density logs and the position of the loss in the seam.

Topography and Collar Locations

Geological models are developed from topographic data from Middlemount Coal supplied Digital Terrain Model (DTM) data for the Middlemount area, as at the end of June, 2018. The topography of the Middlemount project area is gently undulating, with surface elevations generally ranging from 160-170m (AHD). Roper Creek flows west to east in the south of the project area.

Drill sites are located using handheld GPS by the Site Geologist and final borehole collar survey is completed by the Middlemount Coal personnel trained in surveying, using the Middlemount Mine base station calibrated to Aus Geoid heights and GDA94 Zone 55 datum and projection system.

RPM considers that the topographic surface and borehole collar locations at Middlemount have been developed with sufficient rigor to enable reliable Resource model development and Coal Resource estimation.

Down the Hole Survey

All drilling has been completed using vertical drill orientation. Downhole deviation data has only been collected on selected holes drilled in 2017, which accounts for only 7% of modelled holes. Deviations <5% was observed at depths greater than 100m and no adjustment for drill hole verticality has been applied to drill hole data used to develop the geological structural model.

RPM has reviewed a selection of verticality analyses and suggests that the Resource model would provide a more reliable estimate of coal seam depth and thickness with deviation data applied and could assist with identifying unmapped geological structures.

Geophysical Logging

RPM notes that down hole geophysical data is acquired by the geophysical service provider according to Company Standards and protocols.

An estimated 75% of the resource uses holes with digital geophysical logs. Some older holes only have paper copy geophysics. The holes without geophysics appear to have been corrected to geophysics and reliability has been verified from newer drilling and mining. Holes confirmed to be unreliable have been flagged in the Isis database to avoid accidental use during modelling. In some areas these holes have been redrilled.

The standard geophysical tools used were: density, gamma and calliper. Selected historic holes have verticality, sonic, resistivity, temperature and spontaneous

Geophysical logs are used to confirm the reliability of the Geologist's observation, provide a more accurate assessment of coal seam depth and discriminate coal seams and plies across the Middlemount deposit.

Geological, Geotechnical and Geomechanical Logging

Geological logging and sampling is performed by qualified Geologists at the drill rigs in accordance with the CoalLog Manual for Geology & Geotechnical Data Collection; however, only basic geotechnical characteristics are recorded such as defect type and surface roughness, with rare recording of defect infill type. Quantitative logging for lithology, stratigraphy, texture and hardness is conducted using standard dictionary definitions, while colour and any additional qualitative descriptions are also recorded. Geological interpretation occurs by the following series of steps:

- Preliminary seam correlations are carried out with reference to geophysical signatures and known marker intervals:
  - The medial stone band present in the Middlemount Seam (which is the same as the medial stone band in the Pollux Seam at Yarrabee Mine in the central Bowen Basin);
  - The ~0.30m deteriorated material of the Tralee Upper ply at the base of the Middlemount Seam;
  - A thick interburden (~60m) between the Middlemount Seam and the Pisces Seam, both of which contain approximately 4-5m accumulated coal thickness;
  - The Yarrabee Tuff marker band at the base of the Pisces Upper ply.
  - Interbanded coal and tuffaceous material of the Girrah seam (Fort Cooper Coal Measures)
- Insertion of horizons such as Base of Weathering and recognition of Tertiary material interpreted from visual data from the original exploration boreholes
- A structural geology model is developed from which borehole postings, sections and contours are created to validate seam correlations
- Anomalous or incorrect seam correlations are corrected and the checking process repeated until the geological practitioner is satisfied with the integrity of the correlations.
- Faults locations and displacement are determined from surveyed seam roof or floor data, in pit mapping, from direct evidence in bore core and interpretation of missing or repeated sequences in boreholes. 2D seismic data has also contributed to the positioning of the Jellinbah Fault.
- Fault displacements are calibrated by review of supporting seam roof or floor survey data in addition to ensuring that borehole seam data is honoured.

With only basic geotechnical parameters noted in exploration drilling, it is the opinion of RPM that the level of geotechnical investigation at Middlemount is not sufficient for understanding highwall and low wall stability, pit and dump slope designs and failure mechanisms encountered by the interaction of water, Tertiary material, regional faulting, upthrown strata on the east of the Jellinbah Fault and the Yarrabee Tuff as pit floor material. Further geotechnical investigation should also be carried out to understand roof and floor characteristics and vertical and horizontal stress regimes to assess the viability and suitability of underground mining methods.

Bulk Density Determination

The density of the coal and its distribution within the seams has been well established as the Middlemount Mine has been in operation since 2011. Most borehole samples have true relative density (RD) analysis.

The insitu density is estimated using laboratory air dried Relative Density (RD) and adjusted to insitu density using the Preston Sanders equation using the assumed insitu moisture of 5%.

Sampling and Sample Preparation

Core sampling is completed at the drill site and is based on a set of standard criteria (determined by lithology and structure) that follows the Middlemount sampling procedure. Both HQ and 4-inch core have been used across Middlemount's exploration campaigns for coal quality analysis.

Coal quality samples are based on the coal brightness in an attempt to maximise coking potential (typically associated with brighter coals). Carbonaceous material and all stone bands are sampled to ensure that full coverage of each seam intersection is obtained. Roof and floor strata (approximately 20-30cm of material) is also sampled and tested so that dilution qualities can be applied in the conversion of insitu quality to ROM quality. All samples are photographed and provided with a unique sample number before being placed into double plastic bags and sealed.

Samples are air dried and weighed prior to analysis. Raw analysis samples were crushed to -12.5mm and split into portions using a rotary splitter prior to coal quality analysis. One quarter of the sample is analysed for raw coal parameters (***Table 6-7***), which the remaining three-quarters of the sample make up the reserve mass and washability samples (***Table 6-8***).

RPM opine that coal quality testing at 12.5mm top size does not enable the evaluation of plus and minus 16mm fractions for optimisation of the metallurgical coal products and thermal products.

Table 6-7 Analytical Tests for Raw Coal and Stone Ply Samples

Raw Samples	Raw Coal Analysis	
	COAL	STONE
Relative Density (ad)	✓	✓
Moisture (ad)	✓	✓
Ash (ad)	✓	✓
Volatile Matter (ad)	✓	
Fixed Carbon (ad)	✓	
CSN	✓	
Total Sulphur (ad)		✓

Table 6-8 Analytical Tests for Float Sink Testing

Sample Type	Fractional Separation Density	Ash (ad)	Cumulative CSN
COAL	F1.3	✓	✓
	F1.4	✓	✓
	F1.5	✓	✓
	F1.6	✓	✓
	F1.7	✓	✓
	F1.8	✓	✓
	F2.0	✓	✓

Although washability and product analysis are reported to be conducted across the resource area (following Middlemount's washability and product coal procedures), this data is not used for resource modelling. Raw coal ash and CSN are used to determine the coal mining sections for washed coal products.

Core Recovery

Core recovery is recorded by the rig geologist at the time during logging the bore hole, based on measurements taken of the cored interval and the core recovered and visual inspection of the core. Actual recovered core lengths are measured with a tape measure and any core loss is recorded in geological logs and core reconciliation sheets. Core run recovery differences are also noted on the core board and photographed.

A full assessment of core loss is confirmed by the rig geologist after comparing the recovered core to the geophysical logs to determine which parts if any of the seam are missing due to core loss.

Quality Assurance Quality Control

Sample instructions are issued by Middlemount Coal personnel, who are currently using ALS Global Coal Quality laboratory at Richlands, QLD for coal testing. RPM understands that the lab conducts round robin validation checks to ensure a high standard of reporting is maintained and follow appropriate Australian Standards for analysis.

Laboratory Project Managers collate and validate the data, looking for abnormalities in the results. The primary means of validation include looking for known trends in the data, by creating cross plots of the results on a seam by seam basis. Typical industry practices include the comparison of the following (for example):

- Ash vs. Relative Density
- Volatile Matter vs. Ash
- Specific Energy vs. Volatile Matter
- Ash vs. Total Sulphur

Validation is conducted before and after data is loaded into Task Manager. The coal quality department at Peabody are responsible for the management and integrity of coal quality results.

RPM were provided with clean coal (product) quality composites by Peabody. In the absence of coking indices, the basicity index has been calculated (which can be used as an indicator of coking potential). A basicity index below 0.10 indicates reasonable coking potential. Of the 431 product coal composites, only 25% (108 samples) have coking potential based on the basicity index of the complete sample. The seams with the highest coking potential on a complete seam basis (where >50% of samples have basicity index <0.10) are the MU and TL2B seams).

Sample Security

All geology and exploration activities at Middlemount are managed by Peabody's Geology department. Core samples are bagged by the geologist and kept in refrigerated storage until they are dispatched to the laboratory by dedicated courier service. In light of the bulk commodity nature of coal, no higher level security measures are deemed necessary since it is very unlikely to be subject to material impact from sample tampering theft or loss. RPM considers these procedures to be industry standard.

Data Verification Statement

RPM completed review of the geological and digital data supplied by the Client to ensure that no material data issues could be identified and that there was no cause to consider the data inaccurate and not representative of the underlying samples. RPM visited the Middlemount Mine in April 2018 and reviewed the Asset's operation. RPM concluded that the data was adequately acquired and validated following industry best practices as outlined

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7. JORC Coal Resources

Coal Resources have been independently developed in line with the Australian Guidelines for the Estimation and Classification of Coal Resources (2014) and reported in line with the requirements of the JORC Code 2012.

7.1 Coal Resource Classification System under the JORC Code

A "Mineral Resource" is defined in the JORC Code as 'a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories (JORC Code – Clause 20).'

Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results.

For a Mineral Resource to be reported, it must be considered by the Competent Person to meet the following criteria under the recommended guidelines of the JORC Code:

- There are reasonable prospects for eventual economic extraction.
- Data collection methodology and record keeping for geology, assay, bulk density and other sampling information is relevant to the style of Mineral and quality checks have been carried out to ensure confidence in the data.
- Geological interpretation of the resource and its continuity has been well defined.
- Estimation methodology that is appropriate to the deposit and reflects internal grade variability, sample spacing and selective mining units.
- Classification of the Mineral Resource has taken into account varying confidence levels and assessment and whether appropriate account has been taken for all relevant factors i.e. relative confidence in tonnage/grade, computations, confidence in continuity of geology and grade, quantity and distribution of the data and the results reflect the view of the Competent Person.

The terms 'Mineral Resource(s)' and the subdivisions of these as defined above, apply also to coal reporting, however if preferred by the reporting company, the terms 'Coal Resource(s)'' and the appropriate subdivisions may be substituted. (JORC Code - Clause 43). As such in this report RPM will refer to Mineral Resource, as Coal Resources.

7.2 Area of the Resource Estimation

The Assets consists of several exploration and mining rights under the NSW and QLD mining codes. RPM notes that the reported Coal Resources include the following areas:

- **HVO Open Cut** – The resource area is contained within HVON and HVOS areas. The Resource in the HVON area is located in the Vane Subgroup and the Resource in the HVOS area consists of all seam groups within the Jerrys Plains and Vane Subgroups.
- **HVOS Underground** – The resource area is contained within the Arties and Barrett seams of the Vane Subgroup.
- **Mt Thorley Open Cut** - The resource area is contained within MTW (south of the Putty Road) and consists of a number coal seams within the Whittingham Coal Measures which occur within 320m of surface and exploitable by Open Cut methods.
- **Warkworth Open Cut** – The resource area is contained within MTW (south of the Golden Highway and north of Putty Road) and consists of a number of coal seams within the Whittingham Coal Measures and which occur within 320m of surface and exploitable by Open Cut methods.

- **Mt Thorley Underground** - The resource area is contained within MTW (south of Putty Road) and consists of the coal seams which are potentially exploitable via Longwall Underground methods.
- **Warkworth Underground** - The resource area is contained within MTW (South of the Golden Highway and north of Putty Road) and consists of the coal seam which is potentially exploitable via Longwall Underground methods.
- **Moolarben Open Cut** – The combined Resource area at Moolarben covers an area stretching 20km north to south and up to 8km east to west. The open cut resource targets the shallow coal of the Ulan Seam and some minor quantities of the Moolarben and Glen Davis Seams to the south of Ulan Road and Ulan-Wollar Road.
- **Moolarben Underground** – The underground Resource area includes the deeper areas of the resource, generally located beneath natural ridgelines that are unfavourable to mine via open cut methods and is restricted to the Ulan Seam (excluding the top A1 ply), of which the lower portion (DWS) is currently being mined via Longwall mining methods.
- **Ashton Open Cut** – The resource is typically covers a large portion of the licence holding, including the Bayswater and Lemington Seams above the current underground in the western portion of the Project and the Hebden through to Arties Seam in eastern portion of the Project including the South East Open Cut area.
- **Ashton Underground** – The Resource area covers ML1533, ML1623, EL4918 and EL5860 which includes the current underground operations and includes the Pikes Gully Seam, Upper Liddell Seam, Upper Lower Liddell Seam, Upper Barrett Seam and Lower Barrett Seam.
- **Yarrabee Open Cut** – The Resources are contained within the Yarrabee licence holding (approximately 12km by 8km) and are limited by drilling and an overall strip ratio of 25:1 (bcm:t).
- **Stratford and Duralie Open Cut** – The Resources are contained within three areas including the Stratford area in the north, the Grant and Chainey area in the central region and Duralie in the South. The Resources are limited in the Stratford west to a depth of 150m, in Stratford Avon North and Stratford East to 200m. At Duralie the Resource boundary is limited to the north by drilling and to the east by the Mammy Johnson River.
- **Stratford and Duralie Underground** – The Resource is contained predominately in the Duralie area below the open pit resource, to a depth of 500m for the Weismantel Seam.
- **Austar Underground** – Resources are estimated to a depth of 800m (mining is planned up to 720m) for the Greta Seam.
- **Donaldson Open Cut/Underground** – Coal Resources north of John Renshaw Drive and east of the closed Donaldson open cut mine are considered open cut Resources due to their shallow depth. All other resources at Donaldson are considered underground Resources either due to depth, or surface constraints that prohibit open cut mining.
- **Middlemount Open Cut** – The Middlemount deposit is approximately 7km in strike length (north-northwest) and 2km wide (east-west). Coal resources commences at the subcrop line in the west of the deposit and extends towards the Jellinbah fault, which bounds the east of the deposit. The Resource area includes ML70379, ML70417 and MDL282.

7.3 JORC Statement of Coal Resources

Results of the independent Coal Resources estimate for the Assets are tabulated in the Statement of Coal Resources in ***Table 7-1*** and shown graphically in ***Figure 7-1*** below, which are reported in line with both the requirements of the 2012 JORC Code and the reporting standards of Chapter 18 of the HKEx Listing Rules. The Statement of Coal Resources is therefore suitable for public reporting. The Statement of Coal Resources are inclusive of the Coal Reserves reported in ***Section 8***.

RPMGLOBAL

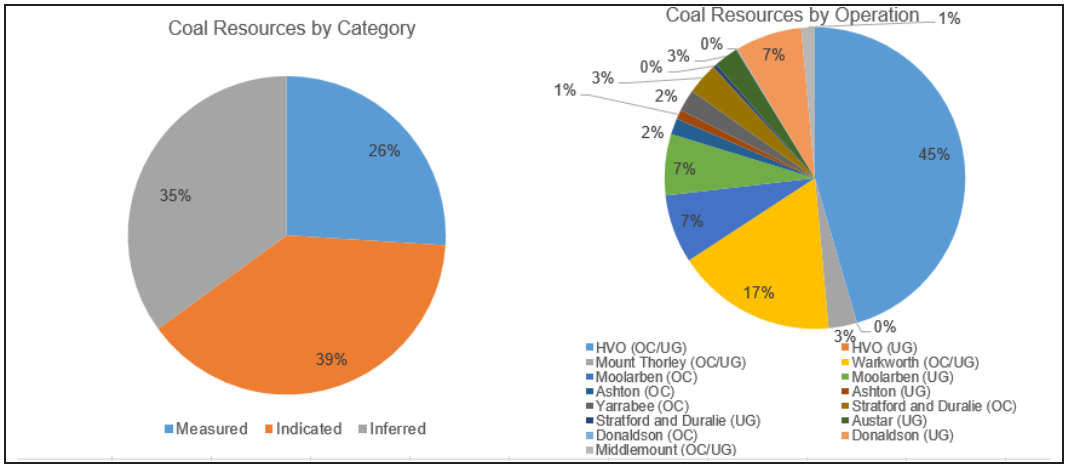
Table 7-1 Statement of Coal Resources by Operation as at 30th June, 2018.

Operation	Classification				
	Measured (Mt)	Indicated (Mt)	M + I (Mt)	Inferred (Mt)	Total (Mt)
HVO (OC/UG)	704	1,430	2,134	1,654	3,788
Mount Thorley (OC/UG)	27	75	102	153	255
Warkworth (OC/UG)	197	713	910	527	1,437
Moolarben (OC)	438	105	543	69	612
Moolarben (UG)	287	131	418	129	547
Ashton (OC)	25	49	74	70	144
Ashton (UG)	52	18	70	15	85
Yarrabee (OC)	94	80	174	20	194
Stratford and Duralie (OC)	11	196	207	76	283
Stratford and Duralie (UG)	-	1	1	35	36
Austar (UG)	70	80	150	69	219
Donaldson (OC)	10	-	10	-	10
Donaldson (UG)	178	326	503	95	598
Middlemount (OC/UG)	73	47	120	1	121
Total (100% Basis)	**2,165**	**3249**	**5,414**	**2,913**	**8,327**
Yancoal Attributable Share[6]	**1,610**	**2,355**	**3,964**	**1,952**	**5,916**

Note:

1. *The Statement of JORC Coal Resources for HVO and MTW have been compiled under the supervision of Mr. Peter Ellis who is a full-time employee of RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Ellis has sufficient experience that is relevant to the style of Coal and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
2. *The Statement of JORC Coal Resources for Yarrabee and Middlemount have been compiled under the supervision of Mr. Michael Johnson who is a a sub-consultant of RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Johnson has sufficient experience that is relevant to the style of Coal and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
3. *The Statement of JORC Coal Resources for all others deposits have been compiled under the supervision of Mr. Brendan Stats who is a full-time employee of RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Stats has sufficient experience that is relevant to the style of Coal and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
4. *All Coal Resources figures reported in the table above represent estimates at 30th June, 2018. Coal Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.*
5. *Coal Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Coal Reserves Committee Code – JORC 2012 Edition).*
6. *Based on owner at the latest applicable date.*

Figure 7-1 Graphical Representation Coal Resources (100% basis)



In addition to the Coal Resources for the operating assets, a total of 16.8Mt of Indicated and 80Mt of Inferred for a total of 96.8Mt is contained with the Monash Deposit located 25km south of Singleton.

7.4 Classification

While Table 1 as required by the JORC Code 2012 edition is presented in ***Appendix C*** for reference, a summary of the resource estimate classification approach is provided below. The RPM Resource classification system is based on industry best practices and generally included the following process:

- Review the regional geology to understand seam continuity and other characteristics beyond the Company's mining tenure boundaries that may impact the geology within the Client's tenure.
- Review or develop a geological model to represent the geological data and understanding of the deposit.
- Define the Points of Observation (PoO's) for quantity and quality.
- Define supportive data types – is the stage at which a determination is made as which data will be in the classification of the resources.
- Determine Resource and Reserve entities – is the stage at which seam groups and which ply will be separated and PoO determined for each seam.
- Determine PoO spacing.
- Stage 1 is a mechanical stage that produces two maps for the Resource entity, one for quantity and the second for quality, which shows the polygons of influence surrounding the PoO's. Stage 1 assigns areas of high, moderate and low levels of confidence.
- Stage 2 is the stage at which the judgement of the Competent Person is applied. The two Stage 1 maps are reviewed and modified by the Competent Person to:
  - Reflect the importance of supporting PoO's for structure and quality as distinct from primary data.
  - Take into account regional and other geological knowledge and the like, which cannot be distilled down into PoO's
  - Remove outliers, fill in between inliers where appropriate, reduce excessive extrapolation and smooth polygon boundaries
- Stage 3 is the final stage in which the categories are assigned based upon both physical continuity/existence and coal quality. To achieve this position the minimum area of each category for each map is taken as being the final area for that category. For example, if an area of 100 ha is considered to be Measured based on physical existence/continuity, however only 65 ha of this is considered to be

Measured based on knowledge of coal quality, then the final area of Measured coal is the 65 ha intersection of the two polygons.

Below is a brief description of each of the steps and the parameters assumed.

Review of Regional Geology

HVO / MTW

RPM has performed a high level review of the geology surrounding the Assets and concludes that the Whittingham Coal Measures are continuously developed within and surrounding the MTW and HVO areas. However, there are differences in how the stratigraphic sequence of the Whittingham Coal Measures has been interpreted between the Assets sites and with the surrounding sites as outlined in ***Section 5***.

Moolarben

The Moolarben coal deposit is located on the western margin of the Sydney Basin's Western Coalfield where sedimentary strata of Permian, Triassic and Jurassic age dip towards the northeast at 1° - 3° and overlie Carboniferous granite and folded metamorphic basement. The Permian strata comprise the coal-bearing Illawarra Coal Measures and the underlying Shoalhaven Group, which in turn unconformably overlies the Lachlan Fold Belt basement rocks. Surface Quaternary alluvial deposits and remnant Tertiary basalt flows are common in the area.

The regional geology is well defined and understood from a long history of exploration and mining in the area and a relatively simple geological setting.

Ashton

Ashton is located in the Hunter Coalfield in the North East of the Sydney Basin. The basal seams of the Burnamwood Formation in the Jerrys Plains Subgroup and all seams of the Foybrook Formation in the underlying Vane Subgroup exist within the Project. These subgroups exist within the Late Permian age Wittingham Coal Measures. The strata and coal seams outcropping in the Ashton area are from the Late Permian Wittingham Coal Measures. The Wittingham Coal Measures maximum thickness of about 250m occurs at its deepest development at the boundary with Ravensworth Underground Mine to the west. Towards the east seams subcrop on the western limb of the Camberwell Anticline with progressive erosion of overlying seams from west to east resulting in subcrop of the Bayswater Seam to Hebden Seam sequence

The regional geology of Ashton is well defined by the extensive exploration and mining from not only Ashton but also the surrounding operations in the Hunter Coalfield.

Yarrabee

RPM has performed a high level review of the geology of surrounding the Yarrabee area and concludes that the Rangal Coal Measures are present within thrust slices and that coal seams have been established to be continuous within each of the structural domains.

The Yarrabee resource is contained in a thrust slice bounded by the Yarrabee Fault that is located contiguously with the western boundary of the Dawson Tectonic Zone and another thrust fault located immediately to the west of the coal zone that has been defined between DOM 6 and DOM 2S.

Stratford and Duralie

The resource areas within the Stratford and Duralie deposits are located in the Permian aged Gloucester Basin of New South Wales, Australia. The Duralie deposit is contained within the southern extent of the basin where that portion of the syncline plunges to the north. There are two main seams at Duralie; the Weismantel and Clareval and two minor seams; Duralie and Cheerup. The interburden between the topmost Weismantel and bottom-most Clareval seam is approximately 200m. The Clareval seam is located near the base of the basin stratigraphy.

The Stratford area is comprised of three regions referred to as Stratford West, Avon North and Stratford East, where:

- Coal seams in Stratford West are from the Gloucester Coal Measures and include a ten coal seam packages from the Marker 7 to the Bowens Road seam groups. Strata at Stratford West dip to the west at 10-50 degrees and can be steeper when associated with faulting.
- Avon North is a small area (0.6 x 1.25 km) approximately 100m northeast of Stratford Main Pit. Strata at Avon North are from the Avon Sub-group, which forms the lower part of the Gloucester Coal Measures. The Avon North area is north of a major east-west trending fault which was intersected at the northern end of the Stratford main pit. The Avon North area steeply dipping to the west at 25 to 50 degrees, which is intersected by five reverse faults.
- At Stratford East the strata dip steeply to the west. Drill holes at Stratford East intersect Weismantel, Cheerup and Clareval Seams contained within the Weismantel and Duralie Road Formations of the Dewrang group.

The geology while complex, is well understood. Further information is provided in ***Section 5***.

Austar

The Greta Seam occurs within the Greta Coal Measures in the South Maitland Coalfield, on the western side of the Newcastle Coalfield. The Greta Coal Measures are of Early Permian age (approximately 270 Ma) and in the Cessnock area comprise the following Formations:

- Paxton Formation (youngest)
- Kitchener Formation – Greta Seam
- Kurri Kurri Conglomerate – Homeville Seam
- Neath Sandstone (oldest)

In the western portion of CCL728 and CML2, past mining (Ellalong Colliery) extracted Greta Seam where it was typically 3m-3.5m thick. In the central and eastern portions of CML2 where longwall top coal cave mining has been taking place, Greta Seam increases to 6m-7m thick and comprises dull and bright to bright banded coal. The basal 4m of coal is generally devoid of claystone bands while the upper 2m-2.5m contains several thin claystone bands. Towards the east in CML2 additional thin claystone bands gradually emerge in the basal half of the seam.

Close to the eastern boundary of CML2, the Greta Seam splits into an upper 4m thick section and lower 1.5m thick section, along a broadly north south trending split line. The Upper Greta Seam has been intersected in old drill holes further to the east, in the eastern portion of EL6598 where it gradually thins over several kilometres distance to a minimal thickness of 2m. The Lower Greta Seam thins and deteriorates to the east and east of the split line is not considered a resource.

The Lochinvar Anticline is a major regional feature which has a significant impact on Greta Seam dip and strike, as well as the style of faulting in the South Maitland Coalfield. Austar mining and exploration leases are located on the eastern flank of the south plunging Lochinvar Anticline, with gentle seam dip of approximately 4° and seam strike rotating between east to north-east. The presence of extensive old workings (and mapping data) within the Greta Seam to the north of Austar leases has been beneficial in interpreting regional fault structures extending south from old workings into CML2 and EL6598. This, along with an extensive array of seismic and drill hole data has defined a number of significant faults that will impact on, or limit mining:

- The Quorrobolong Fault Zone (Stage 3 area)
- The Abernethy Fault Zone (Stage 3 area)
- The Swamp Fault Zone (Bellbird area)
- The Barraba Fault Zone (Bellbird area)

To the north of Austar, extensive past workings (last 100 years) have extracted Greta Seam from surface down to a depth of approximately 350m. Austar leases CCL728, CML2 and EL6598 are located further down dip, south of past workings and so depth to Greta Seam ranges from 400m to in excess of 700m.

Igneous dykes are present in the South Maitland Coalfield and although infrequent, were intersected at Ellalong and in old workings to the north. When dykes have been intersected they usually occur as a pair of dykes rather than a single dyke. The south trending Central Dyke (1-2 dykes) defined the eastern limit to longwall mining in the Stage 2 mining area. Recent exploration drilling, a review of mapping from past workings to the north (at Kitchener) and two ground magnetometer surveys has confirmed another southeast trending narrow zone of intrusive activity comprising two dykes (Kitchener Dyke) extending south into the Stage 3 mine area. From historical mapping and Austar's experience when intersecting dykes, there has been no evidence of intrusive sill bodies migrating horizontally from the dyke into the seam. Igneous activity within the Greta Seam, to date presents as dykes.

The geological understanding of the Project is considered by RPM to be consistent with the regional geology.

Donaldson

Donaldson Coal and its associated mining/exploration titles are located in the northern-central portion of the Newcastle Coalfield, which forms the northern portion of the Permian/Triassic Sydney Basin. Stratigraphy comprises Late Permian Tomago Coal Measures overlain by Newcastle Coal Measures. The non-coal bearing Triassic Narrabeen Group overlies the Newcastle Coal Measures and form steep topographic relief which includes Mt Sugarloaf and Mt Vincent.

The regional geology is well defined from extensive exploration and mining activities in the Newcastle Coalfield and more specifically from the Abel, Tasman and Stockrington No 2 underground mine workings and Donaldson open cut. The geological model and Resources estimate is consistent with the Regional geological understanding.

Middlemount

Stratigraphically, the first seam intersected in the Rangal Coal Measures in the Middlemount area is the thin Roper seam; which is rarely present, because it subcrops closer to the Jellinbah Fault than the other coal seams as outlined in ***Section 5***.

The Middlemount seam is typically a single seam, however in places splits into a high ash upper split, (MU) and the upper (MLT) and lower (MLB) seam section. The MLT and MLB are contiguous. The split into MLT and MLB sections is for coal quality reasons, with the upper section being a low ash dull coal that has PCI / thermal coal properties and the lower section being a low ash bright coal section with metallurgical coal properties.

The Middlemount seam thickens from 3m in the south to up to 5m in the north. Seam thickness generally follows sedimentary trends, however it is obvious that some of the seam thickness variability in the north is due to structural rather than sedimentary reasons. RPM considers that there is likely to be at least three north east striking fault structures located north of the current northern end wall that have not been interpreted.

RPM considers that the Tralee seams are in fact the lower plies of the Middlemount seams based on our knowledge of the Elphinstone and Leichhardt seams elsewhere in the Bowen Basin. Furthermore RPM considers that the non-sedimentary thickness variations observable in the Middlemount and Pisces seams will not have a material impact on the Resource estimate.

RPM has interpreted a number of subsidiary thrust faults which are upthrown to the east. The structural changes noted down dip of the current highwall have been interpreted to be due to a subsidiary thrust fault to the Jellinbah Fault because there is no sign of north-easterly structures in the current highwall. In RPM's opinion if the faults causing the structural disruption east of the current highwall have an easterly orientation the faults should be visible in the highwall. As a result, it is RPM's opinion that the structure requires more careful consideration in future mine design and resource classification work, because the remainder of the Middlemount resource potentially has greater structural disturbance than the area that has been mined to date. These structures could impact on plans to employ highwall mining and underground mining methods at Middlemount.

For a review of the deposit's coal quality and verification of the deposit's potential to continue to product coking coal, RPM have been provided with a subset of laboratory data from selected exploration campaigns and a full dataset of clean coal quality composites. In the absence of coking indices, the basicity index has been calculated (which can be used as an indicator of coking coal). A basicity index below 0.10 is sought for coking potential. Of the 431 product coal composites, 25% (108 samples) have coking potential based on the basicity

index on the sample mass as a whole. Plies with the highest coking potential on a whole ply basis (where >50% samples with basicity index <0.10) are MU and TL2B.

Ash analysis was also reviewed for anomalies in calcium (CaO) and iron (Fe2O3), which are known to affect the coking potential of the Rangal Coal Measures in Queensland. The spatial distribution of high values of CaO (>8%) and Fe2O3 (>10%) were examined and it was identified that these correlated with a decrease in vitrinite content, suggesting a change in coal type, potentially caused by changes in water level in the peat swamp at the time of deposition. In addition, phosphorus levels at these locations were also high (>0.07%). While only a subset of this data was provided for core holes drilled in 2015, there is enough information to cast doubt on the coking potential, as is currently assumed in the north, particularly in the Middlemount Seam. As such RPM recommends further studies be completed to confirm the assumptions made based on historical production and current knowledge.

Geological Models

All geology models were created by third parties and review by RPM to ensue no material issues were noted. Below is a summary of the outcomes of these reviews.

MTW

The MTW_1208_LOM model was developed and validated by Measured Resources, utilising the standard ABB FEM interpolator for structural modelling and the standard ABB model settings used. The inverse distance squared interpolator was used for coal quality model development on grids with 20m by 20m node spacing.

The model consists of the coal seams only with waste modelled by default and not assigned any grade. Resource estimates are therefore of the coal seams only.

RPM considers that the coal quality model is developed to an acceptable standard however notes the following:

- The database and the model do not contain clean coal composite values when raw coal ash of a coal ply is greater than 50%. In these cases the coal quality model will underestimate ash and overestimate yield.
- Coal quality data has not been acquired when coal seams are less than 0.1m thick. Due the seam characteristics there are a large number of thin seams modelled that do not have coal quality data. The coal quality grids will interpolate missing coal quality values between boreholes and extrapolate values beyond boreholes. The interpolations and extrapolations could either under or overestimate values. There is no definitive conclusion to be made about the impacts of coal quality data being missing for thin seams less than 10cm thick.
- The coal quality model was developed by using all borehole data with a number of coal quality data points that do not have supporting structural data. It appears that the final quality models were developed prior to the final structural models which have excluded some of the coal quality boreholes from those that were used in the coal quality model.

Having noted the above, RPM is of the opinion that the misalignment of the raw coal and clean coal quality models with the structural model is unlikely to make a material difference to the Resources and Reserves estimate.

HVO

The HVO_1508_LOM model was developed and validated by HVO personnel using Minescape Version 5.9. software and subsequently externally reviewed by Encompass Mining. The ABB FEM interpolator was used for structural modelling with Standard ABB settings used.

The inverse distance squared interpolator was used for coal quality model development. Subsequent to structural modelling the inverse distance squared interpolator was used for surface and both the structural and coal quality model development on grids are based on a 50m by 50 me node spacing. A single structural model and single coal quality model cover the entire HVO area. The model consists of the coal seams only with waste modelled by default and not assigned any grade. Resource estimates are therefore of the coal seams only.

RPM considers that the coal quality model is developed to an acceptable standard however notes the following:

- RPM consider that the coal quality models contain many inconsistent data input values, with numerous coal seams being modelled with ash values between 50% and 90%. A large percentage of the boreholes with anomalously high ash values are located in areas of low coal quality data density. These boreholes will be over represented in the coal quality model by having a disproportionate area of influence and as a result coal tonnage will be excluded from the Reserves estimate.
- The coal quality model was developed by using all borehole data. There are number of coal quality data points that do not have supporting structural data. It appears that the final quality models were developed prior to the final structural models which have excluded a larger number of boreholes that were used in the final coal quality model

Having noted the above issues, RPM considers that the above are unlikely to make a material difference to the global Coal Resources estimate, however will potentially impact short term models and schedules. RPM further comments that these high raw ash anomalies are likely to be ignored during mining, given the long history of mining these seams in the region.

Moolarben

The geological computer model 'Moolarben_0217' was built using Minex software (version 6.5.2) in 2017. The geological model is based primarily on the borehole database and incorporates exploration data completed up to mid-January 2017. The model was generated using Minex proprietary growth algorithms. Structural and quality grids were generated using 20m mesh size mesh size.

The geological model includes structure grids for all relevant geological surfaces, including the major stratigraphic boundaries, base of weathering and all coal seams identified in the Illawarra Coal Measures on a ply basis.

The geological model includes a raw ply coal quality model which provides grid surfaces for density, ash, volatile matter, fixed carbon, energy and sulphur on a ply basis as well as raw coal quality, washability and clean coal quality data.

Ashton

The geological model was developed in 2014 using Micromine software. This model was subsequently updated in 2015 and 2017 using Minex software. The 2017 Minex geological model supplied included structure and raw coal quality grids on a ply basis (for Open Cut Resources) and on a working section basis (for Underground Resources). RPM completed a model update for the Open Cut Resources for the South East Open Cut area. The updated RPM model is named 'Ashton_1805'.

Yarrabee

The geological (structural and coal quality) models for Yarrabee were developed using the Geovia Minex software version 6.3. Five geological models were developed by Company personnel. The model names are shown in ***Table 7-2***. The model for Domain 6 was finalised after the LOM plan was completed and as a result the Domain 6 Resource did not transfer to Reserve.

Table 7-2 Graphical Representation Coal Resources

Mine Area	Structural Model Name	Quality Model Name	Date of Release
Yarrabee East (YEN Pit)	EAST_PLY_CUT_DEC15	EAST_PLY_QUAL _FEB17	23/12/2015
Yarrabee East (YES Pit)	EAST_PLY_CUT_DEC15	QUALITY _FEB17	18/12/2015
Domain 2 North	EAST_PLY_CUT_DEC15	QUALITY _FEB17	18/12/2015
Domain 2 South	DOM 2STH_CUT_2017	QUALITY _FEB17	23/03/2017
Domain 6			After LOM finalised

Coal seams are initially correlated in GeoBank using geophysical logs and cross sections, to ensure consistency of the seams.

Borehole data is transferred to Minex and where the data is visually inspected to detect any seam pick anomalies by using the borehole display and from solid triangulation. Errors are edited in GeoBank.

Exclude core holes and create structure models. Fault thickened core hole seams are not edited so that seam thickness matches the average surrounding seam thickness, because the cored seam intervals cannot be changes otherwise they will not match the coal quality data.

Missing seams are interpolated in boreholes by Minex for those seams that are;

- Interpreted to exist at a reduced level above the borehole collar,
- Are interpreted to exist below the total depth of a borehole when that borehole has been terminated before the full seam sequence had bene intersected,
- Missing between named seams due to faulting or sedimentary reasons.

Missing seams that are present between named seams are set to zero which ensures that coal tonnage is not overestimated.

Missing seam interpolation is a modelling process that takes place in most geological modelling software packages such and Stratmodel and Vulcan.

Check seam thickness and set over thickened seams in structure holes (open holes) to the average surrounding seam thickness.

Fault thickened cored hole seam thicknesses have not been trimmed to the average seam thickness to ensure that the entire seam quality result can be composited and used in the coal quality model. Fault thickened cored hole seam are excluded from generating structure and thickness grids. YAL estimates that less than 5% of cored hole seam intersections are fault affected.

Geological models are developed such that grids are not extrapolated infinitely beyond the last borehole intersection for a seam or surface. The extrapolation distances are shown in ***Table 7-8***. The maximum extrapolation distance is 1,000m which is the extrapolation distance used for Inferred resource classification.

Structure models were created at 10x10 mesh size and coal quality models were created with a 50x50 mesh size. The mesh sizes were selected to achieve the most representative grid node spacing for both the quantity (structure) and coal quality models.

Faults were modelled as vertical structures. The Company considers that vertical faults are acceptable due to high coal losses occurring during the mining process in the vicinity of faults and any repeat seams have relatively low coal recovery. Seam repeats have been modelled for large displacement faults where the repeated seam is continuous between multiple holes.

RPM considers that The Company has identified the fault slices in the Yarrabee area with sufficient accuracy and detail that angled thrust structures could be modelled by ABB Stratmodel software using standard modelling techniques, or by use of wireframes using the Geovia Minex software. The angled faults would provide a greater degree of certainty to the models and also provide a better understanding of the geotechnical hazards that may be expected in the vicinity of the faults.

Trend strings were used to control the model in complex areas of tight folding, vertical seam dip and fault displacement. Trend lines are used to manipulate the grid where necessary. This technique is used to maintain seam trends beyond the limits of the borehole data, in areas of steep seam dip such as the north-eastern part of the YEN pit and to maintain seam dip past the coal subcrop limits.

Limit masks have been applied to coal quality and seam thickness grids to limit the minimum and maximum modelled thickness and coal quality attribute ranges to the maximum and minimum values within the data set. RPM expects that a different interpolator setting would achieve a similar result.

RPMGLOBAL

Stratford and Duralie

Duralie

The geological model for Duralie (DUR_0614) was produced in 2014, using Minex software. The model was created using borehole intersections, seismic data reprocessed in 2004 and pit survey data for the Weismantel Seam (to April 2014). Largely reverse faults were not specifically modelled but reasonably closely spaced borehole data allowed control of gridding. This model was used for most of the Duralie resource area. In 2016 an updated model was produced over the LOM area to incorporate new drilling and update the structural interpretation. This model (DURmicro16) was used for Resources for areas within the LOM.

Seam thickness grids were gridded on a 5m (DURmicro16) or 10m mesh (DUR_0614) using Minex growth technique. Raw quality grids were gridded on a 50m mesh using inverse distance squared gridding methods.

Stratford

The computer models for Stratford West (WCR0811), Avon North (STRAT0315) and Stratford East (SE0512) were generated using Minex software. The computer models were created using borehole intersections, fault interpretations (not all if minimal throw or extent) and trend lines to correct the synclinal structure. Not all faults in resource areas were modelled but the borehole data controlled the seam elevations. Faults in WCR0811 model were modelled as vertical faults. STRAT0315 (Avon North) reverse faults were modelled using Minex 3D faulting software and modelled as steeply inclined reverse faults or vertical normal faults. For Stratford East, no faulting was incorporated into the model, however faults are expected (probably minor in extent and offset and/or insufficient data to interpret laterally).

Seam thickness grids were gridded on mesh sizes of 10m (WCR0811) or 15m (STRA0315 and SE0512) depending on average borehole spacing or structure, using Minex growth techniques. Raw coal quality grids were modelled on 50m (SE0512) or 100m (WCR0811) mesh sizes, extrapolated 250m from borehole data. No raw coal quality grids have been developed for the STRAT0315 model at this time (default values are used for the Avon North resource estimate).

Grant & Chainey

The Minex computer model generated in August 2012 (GC_0812), incorporating all current borehole data in the resource area, was used for resource estimation. No mining has occurred in the area (in the northern limit of the area there is a portion covered by mine rehabilitation) and the original topographic surface has been used. The base of weathering was developed from visual base of weathering in boreholes.

The model was produced using borehole seam intersections, the current fault interpretation and trend lines to assist modelling the syncline structure. Not all faults were specifically modelled but the borehole data allowed to control the seam elevations. Any faults modelled were modelled as vertical faults. Confidence is highest in the Bowens Road and Avon Seams due to the number of borehole intersections. Structural grids were gridded on a 20m mesh and quality on a 100m mesh.

Austar

The Resource Estimate for Austar is based on the Austar Minex Geological Model called 'Austar_1015', released on the 9th of April 2018. The geological model was developed by a third party in early 2018 using Minex software. The geological model contains structural and coal quality grids of the working section of the Greta Seam which represent the geological model The Structural and coal quality grids use a 50m grid mesh and cover the extents of the Project. The drill hole database is also provided in the geological model.

The Austar deposit contains the Greta Seam (GR). This seam splits towards the east into upper (UG) and lower (LG) plies. The working section of the Greta Seam (WGR) was generated from the full GR Seam where the seam is coalesced or the UG ply where the seam splits. The split line is defined where the interburden between UG and LG is <0.2m.

Several normal faults were interpreted and incorporated into the model.

RPMGLOBAL

Donaldson

The Resource estimate is based on the geological model 'DON_0815' developed in 2015 by a third party. The geological model was generated in version 9.1 of Maptek's Vulcan software. This model, DON_0615, was built after a major re-correlation exercise that incorporated all boreholes within the existing Donaldson mining/exploration tenure.

The geological model contains structure grids and raw quality grids using a grid spacing of 25m. The Raw quality values modelled on a ply basis where ash, fixed carbon, volatile matter, specific energy, total sulphur and density. All quality grids where generated at a standardised air dried moisture basis of 2.5%.

Middlemount

The geological model for Middlemount was constructed using Maptek Pty Ltd geological modelling software, Vulcan, version 10.1.4. One all-encompassing model (mar18) was completed in March 2018.

The structural model was created at 20x20 mesh size, using inverse distance modelling interpolation, to the power of two (2) with no trending. It combines information from 732 boreholes, interpreted seam roof data from selected locations along 2D seismic lines and in-pit survey of coal seam roof, floor and fault strings.

Stratigraphic files in Vulcan were used to interpolate horizons in every hole to control the development of the structure and thickness grids. Where holes were not drilled deep enough to intersect seams lower in the sequence (e.g. in LOX holes), the interpolation of the seams into these holes was ignored and only true intersections were recognised so that the structural integrity of the model was kept intact.

Seams were split into their plies and modelled as contiguous elements. Coal thickness and seam midburden thickness was modelled over the area. The seam roof and floor models were "stacked" up from the Pisces Upper (PUB) floor and Middlemount Lower (MLB) floor surfaces, which were generated with a 1st order linear interpolator to obtain initial floor grids. A base of weathering grid was developed from borehole intersections and all final structure grids used for resource estimations were clipped to the base of weathering to ensure oxidized coal was excluded from the calculations

Thrust faults at Middlemount are modelled with a dip of 25-30^{o} and normal faults are modelled with an average dip of 60^{o}. To constrain the seams against the Jellinbah Fault, the location where the fault plane intersects the roof and floor of each seam has been estimated. In the case of the Jellinbah Fault, a 50m buffer to the west of this point has been applied as the fault line, due to uncertainty of the faults' location and its characteristics.

Raw coal quality modelling created with a 100x100 mesh size, using inverse distance modelling interpolation, to the power of two (2) with no trending. Washability and product coal results were not modelled for Middlemount. 3312 raw quality samples were composited across all seams to generate the coal quality model. The seam intervals were determined from the structural model and samples required a minimum of 90% linear recovery for each respective interval to be modelled.

Company/RPM Validation of Geological Models

RPM is aware that the Company undertook validation of the geological models to support their use in Coal Resource reporting. For reference and transparency RPM presents the following summary and outcomes which are sourced from the YAL Competent Person statements.

MTW

The following reviews were undertaken by the previous owners Competent Persons prior to acquisition and confirm by RPM:

- Comparison of modelled seam reduced levels with input borehole seam reduced level was performed by comparison of structure contours and data postings. No material issues are reported. RPM agrees with this finding.
- Visual inspection of sampled and modelled intervals for raw coal ash to determine if the sampled intervals match the seam picks. No material issues are reported. RPM considers that there is mismatch between coal quality data due to the high raw ash issue previously discussed.

- Comparison of input ash and relative density values with modelled ash and relative density values. No material issues reported. RPM considers that the comparison is not particularly valid because it compares un-composited ply by ply input data with composited seam data.

HVO

Prior to acquisitions the previous owners completed most of what RPM considers to be a normal suite of model validation procedures which has included:

- Comparison of modelled seam thickness with input seam thickness values. No material issues are reported.
- Comparison of modelled seam reduced levels with input seam reduced level. No material issues are reported.
- A comparison of waste volumes and tonnage for the previous HVO_1408_ model with the HVO_1508_LOM model showed increased waste volume and coal tonnage of 1%, which RPM considers is not material.
- Review of coal quality cross plots of ash and relative density, ash and energy, specific energy and relative density and volatile matter and energy was completed for all seams. In general the cross plots showed that coal quality data was reliable, although coal quality data outliers are present in the database.
- The Company has not completed a comparison of input coal quality values compared to the output gridded coal quality values.
- The HVO_1508_LOM model was reviewed by a third party which identified issues which were partially corrected by the Company before release of the final model (which formed the basis for RPM's review). A number of these issues were not corrected for the final model release and currently remain uncorrected, these include the two main issues identified and discussed by RPM:
  - There are a total of 701 composited raw coal samples with a raw coal ash value greater than 50%.
  - A total of 141 composited raw coal density sample outliers are present in the database (as discussed in ***Section 6***)

RPM considers that the above issues are not material however recommends further analysis and reviews be undertaken as part of the next update to the geological models.

Moolarben

RPM reviewed the 'Moolarben_0217' geological model by comparing the borehole data with the geological grids and ensuring the grids honoured the data. RPM also interrogated the geological model using cross sections and contour plots to ensure the geological model was consistent with the geological understanding. Unusual values identified in the geological model grids were reviewed to ensure that the features were supported by borehole data. The geological model 'Moolarben_0217' is considered robust and well developed based on the review and suitable to support Resources estimation and detailed mine planning.

Ashton

The geological grids were cross referenced against the borehole data and geological understanding of the project to ensure the grids honour the underlying data. RPM also developed a geological model in 2018 using Minescape software and made comparisons in order to validate the geological model supplied.

Yarrabee

RPM is aware that the Company completed significant validation of the geological models to support their use in Coal Resource estimation and reporting. The general model validation process followed by the Company is predominantly by visual inspection of input borehole data and output model data and is summarised below:

- Check for structural anomalies visual inspection of the model grid surface values compared to the input borehole data values. Determine validity of data and edit data as required,
- Check for coal quality anomalies, particularly for raw coal ash and phosphorus. Determine validity of model grid quality surfaces compared to the input borehole data values and edit data as required,

- Check the correlation of seams using cross sections through adjacent boreholes throughout the resource area,
- Create and check the topography and base of weathering grids,
- Create model grid and check structure and thickness compared to input borehole data,
- Reconcile new model against prior model (structural and tonnage).
- Create Strip ratio grid using all seams to the Pisces seam, regardless of their resource status (It is assumed that all upper seams will be mined during pit progression to the basal seam).
- Create strip ratio grids for each seam increment

A review completed by RPM of the geological models indicates that the interpretations appear to honour input borehole and seam thickness and reduced level values and are considered appropriate for reporting of Coal Resources.

RPM considers that the Company followed good practices for development of their database and geological models. The Company model validation process is a basic process, however appears to have been completed to a high standard. The Company has identified five similar structural domains of borehole data and has modelled that data as five model areas. RPM considers that good practice has been followed using this methodology.

RPM considers that use of basic statistical methods for comparison of gridded model data and input data could also have been used for model validation by the Company, as such in future model should be considered as an alternative method.

Stratford and Duralie

Data supplied included a Minex borehole database and associated seam/ply structural, thickness and raw coal quality grids, except in Avon North where coal quality grids were not computed and resources were estimated using default quality values (see below).

The borehole database comprised seam pick data and raw coal quality data, excepting Avon North, which was supplied on request. The structure grids contained faults. The Avon North model grids contained detailed 3D faults showing good detail of reverse faulting and seam repeats. Borehole data checked for resources, coal quality variation, seam thickness variation and number of borehole seam intersections appears consistent.

Validation of the models included checks of topography versus borehole collar, seam correlation, coal quality and where available geophysical data. Resources were re-estimated using the geological and were consistent with previously reported Resources.

At Avon North default coal quality values were used to estimate coal resources and raw coal quality. RPM modelled the coal quality and estimated resources for the Avon Seam (Indicated) with coal quality using Minex software. Grids were computed where four or more boreholes contained data for each seam/ply. For seams/plies with less than four data points, weight averaged coal quality values were used to estimate resources. Approximately 92% of the resource estimated for the Avon Seam contained borehole coal quality data. This data appears consistent for seam ash with In-situ data for Stratford Main Deposit Mine in the September 2001 quarter and previous 12 months data as detailed in the Runge Pty Ltd Reconciliation (Stratford Coal – Stratford Main Deposit Reconciliation January 2001 – September 2001 Runge Pty Ltd).

Austar

The Geological Model 'Austar_1015' was reviewed by RPM to assess if the geological model was suitable to support the Resources Estimate and detailed mine planning. RPM reviewed the modelling method, drill hole data and resultant geological model grids. Based on review, RPM considers that that the resultant geological model honours the drill hole data and is consistent with the geological understanding of the Project.

RPM completed a shadow estimate of Resources from the geological model and considers the Resource Estimate is consistent with the Geological Model.

RPMGLOBAL

Donaldson

RPM reviewed the geological model 'DON_0815' to asses if the modelling method was appropriate, geological model honours the borehole data, and the geological model is consistent with the geological understanding of the Project. RPM reviewed the modelling parameters and a number of reports and graphical outputs including contours and cross sections from the geological model. RPM completed a shadow estimate of Resources from the geological model. Based on the review RPM considers the geological model to be suitable for the Resource estimation and mine design.

Middlemount

A review completed by RPM of the geological models indicates that the interpretations appear to honour input borehole and seam thickness and reduced level values and are considered appropriate for reporting of Coal Resources. A brief outline if provided below:

- Comparison of modelled seam thickness with input seam thickness values. No material issues are reported.
- Comparison of modelled seam elevations with input seam elevation values. While there are no material issues associated with the seam intersections being honoured at the drilled elevation, there are significant implications for resource categorisation surrounding the lack of faults modelled in the deposit, which can be identified through the rapid changes in seam elevation presented in structural floor contours produced from the geological model. These faults are also likely to preclude the proposed underground and highwall mining methods and cast significant doubt over the classification of resources in these area.
- Review of coal quality cross plots of ash and relative density and coal quality spot checks between laboratory data and modelled qualities. In general these verified that raw coal quality data was reliable, although data outliers are present in the database.
- Holes composited in the coal quality model are also used in the structural model.
- However, the geological model does not include washability or product coal parameters.

While considered not material given the current information, RPM recommends further analysis and reviews be undertaken, particularly in regards to the structural interpretation, as part of the next update of the geological model.

Points of Observation Definition and Supportive Data

RPM defined the following for reference:

- **Quantity Point of Observation**: A Quantity or Structure Point of Observation ("PoO") requires a reliable collar location and downhole geophysical log data acquired for the full seam interval that is to be classified.
- **Quality Point of Observation**: A Quality PoO requires a reliable collar location and raw ash data. Down hole geophysical log data acquired for the seam interval in a cored hole is optional, because the cored holes are predominantly fully cored.

HVO / MTW

As part of the above definitions, RPM considers that all bore core has been acquired and logged to a high standard so that the amount and location of any core loss has been managed by the geologist logging the core. RPM review of cored hole data suggests that the requirement for greater than 95% core recovery for a Quality PoO has been met because significant core loss was not found in bore core log descriptions.

In addition, RPM considers that downhole geophysical logs will have a depth accuracy of+/- 20 to 30cm, depending on the source to detector spacing of the sonde and that it is unlikely that bore core would be logged with error of greater than 20 to 30cm. RPM consider that potential depth error of 20 to 30cm is not material due to the depth of the large scale mining methods employed at the Assets being greater than 100m.

As part of its initial review RPM utilised a PoO definition that used clean coal product ash which identified to correspond well with the number of raw coal ash PoO's at HVO. However, at MTW it was noted that samples

with raw ash content of greater than 50% were not submitted for washability and determination of clean product quality parameters. As a result within MTW Raw coal ash was used by RPM for the PoO definition.

RPM considers that raw coal ash can be used as proxy for relative density and specific energy and considers that reliable relationships have been established that relate raw ash to washed product yield and ash given the long production historical data and product generation.

The RPM PoO definitions are shown in ***Table 7-3***.

Supportive Data

The following data has been used as supportive data for the PoO:

- Surveyed in pit seam observations and inspection of open pit highwalls as supportive data to assist with determining PoO spacing.
- Borehole data not used for model development was reviewed to provide additional data to support seam continuity.

Table 7-3 Points of Observation Definitions

PoO Attribute	PoO Type			
	Quality		Quantity (Structure)	Support Data
	Type 1	Type 2	Type 3	
Non Cored Borehole				
Reliable Collar Location	✓	✓	✓	
Geophysical log for seam interval (Requires density and gamma)	✓	✓	✓	
No Geophysical Log				✓
Cored Borehole				
Reliable Collar Location	✓	✓		
Geophysical log for seam interval (Requires density and gamma)	✓			
No Geophysical Log		✓		
Greater then 95% linear core recovery	✓	✓		
Raw Ash (MTW)	✓	✓		
Clean coal product Ash (HVO)	✓	✓		
Other				
Surveyed in pit seam observation				✓

Moolarben

PoO's are based on the borehole intersection of coal seams which includes lithological and downhole geophysical log. For quality PoO, a sample is required to have raw proximate analysis from a coal seam/ply where the sample has a linear core recovery greater than 95%.

The PoO from borehole data are supported be an airborne magnetic survey was carried out over the planned underground longwalls (UG1 and UG2) to identify magnetic features. This survey identified a number of potential igneous bodies which may affect underground mining. RIM borehole to borehole survey has been undertaken to define the size and shape of the igneous diatremes at seam levels.

The consistency and continuity of the Ulan seam is supported by surrounding mining operations (Ulan and Wilpinjong) where the Ulan Seam is also mined and geology is defined by extensive exploration and mining.

Ashton

PoO's are based on the borehole intersection of coal seams. For quality PoO, a sample is required to have raw proximate analysis from a coal seam/ply where the sample has a:

- minimum core recovery 80% volumetric or 95% linear (where volumetric data unavailable), and
- minimum 80% overlap between sample and ply interval.

Borehole data is supported by proximal underground workings and surrounding coal mine information adjacent to Ashton. High frequency RIM surveys are also completed routinely in advance of mining areas to identify geological variations. The continuity and properties of the coal seams is also supported by the extensive exploration and mining experience in the surrounding tenements.

Yarrabee

The RPM Points of Observation definitions are shown in ***Table 7-4***.

Table 7-4 Points of Observation Definitions

PoO Attribute	PoO Type			
	Quality		Quantity (Structure)	Blastholes
	Type 1	Type 2		
Non Cored Borehole				
Reliable collar location			✓	✓
Down hole deviation survey			✓	
Geophysical log for seam interval			✓	✓
Cored Borehole				
Down hole deviation survey	✓	✓		
Geophysical log for seam interval	✓			
No geophysical log		✓		
Greater than 90% linear core recovery	✓	✓		
Raw coal ash	✓	✓		
Raw coal phosphorus	✓	✓		

Stratford and Duralie

Core and non-core boreholes with downhole geophysical logs were considered PoO for confidence in the deposit in conjunction with information from mined areas and supporting information from seismic data. Classification of the Coal Resources into Measured, Indicated, and Inferred was based on the Competent Persons confidence in the estimate.

The Resource classification is based on the confidence to identify coal plies between holes, understanding the changes/variability of the coal seams, the interpreted structure and how the computer model manages to 'model' the structure. In some structurally complex areas the model has not defined the faulted structure specifically (such as the Clareval Bowl or structurally complex area in Stratford West or Rombo/Parkers Road seams in the north of Grant & Chainey, where borehole seam intersections were allowed to control seam elevation/thickness); however the borehole spacing was sufficient to show coal seam continuity and reasonable confidence in tonnages to support the classification category. An example of this is the Clareval Bowl area at Duralie. This is an extremely complex small synclinal structured area with numerous reverse faults and folds. In the early years of mining none of the faults had been modelled specifically; allowing the closely spaced boreholes to control the geology. Mining found on a day to day basis there were differences between the model and the actual structure encountered, however overall mined tonnes reconciled with modelled tonnes. From discussions with the Duralie site geologist at the time, the model underestimated the tonnage slightly as a result of repetition of coal seams because of thrust faulting. This area is covered by approximately 100m spaced drill lines with holes averaging 50m along these lines (supported by coal quality data). The confidence in this estimate is Measured.

Often the availability of coal quality data on a ply basis is variable per seam due to core recovery or the ply not existing in the hole (minor upper and lower plies have rare quality data due to fewer borehole intersections due to variability of these plies). In the absence of borehole coal quality data, a history of nearby mining or

geophysical log trends were used to support the classification. Sometimes the estimate of particular plies depended on default quality values. This was more common for Inferred Resources, however also used for Measured and Indicated Resources. Core holes often do not provide data on all plies in an intersected/sampled seam, due to either core recovery or variability in a seam.

Austar

Core holes with geophysics and non-core holes with geophysics have both been used as PoO. To support drill hole data, there exists an extensive array of seismic survey lines (>100km) over CML2 and CCL728. There is also extensive historical workings within the Project area that are used to support the geological understanding and Resource classification. The PoO for quantity and quality and support information used for resource classification are shown in ***Table 7-5***. It is noted that quality PoO's can be used for quantity, however quantity PoO's cannot be used for quality classification.

Table 7-5 Austar PoO

PoO Attribute	PoO Type			
	Quality		Quantity (Structure)	Other Data
	Type 1	Type 2		
Non Cored Borehole				
Reliable collar location			✓	
Down hole deviation survey				
Geophysical log for seam interval			✓	
Cored Borehole				
Down hole deviation survey				
Geophysical log for seam interval	✓			
No geophysical log		✓		
Greater than 90% linear core recovery	✓	✓		
Raw coal ash	✓	✓		
Raw coal total sulphur	✓	✓		
Support Information				
2D Seismic Data				
Faults				✓
Magnetic Data				
Dykes				✓
Existing Underground Workings				
Faults				✓
Dykes				✓
Seam Levels and Continuity				✓

Donaldson

Core holes with geophysics and non-core holes with geophysics have both been used as PoO.

Historical workings in the Fassifern seam (Tasman mine) and the West Borehole Seam (Stockrington No 2 mine, Buchanan Mine) and current Abel workings in the Upper Donaldson Seam have been used as PoO in the classification of surrounding coal resources.

Coal quality data has not be used as a criteria to define a PoO however the distribution and spatial variation in coal quality has been assessed and taken into account in determining Resource categorisation. Borehole core recovery (volumetric) for coal seams at Donaldson typically ranged between 85%-100% and so an 80% cut-off was applied to the coal quality data used in the geological model.

RPMGLOBAL

Middlemount

The classification of the Mineral Resources into varying confidence categories is based on a standardised process of utilising PoO according to their reliability. The PoO are used to categorise quantity and quality continuity (or both) or support continuity.

The resource classification at Middlemount has been completed by JB Mining and is based on the Competent Person's confidence of the seam continuity and coal quality variability within boreholes.

A **Quantity** PoO has the following attributes:

- Open or cored hole;
- Seam interval geophysically logged, or where geophysical data is missing for a seam(s), it is up to the Competent Persons discretion to determine if the seam level and thickness is consistent with nearest neighbour boreholes; and
- Reliable collar survey.

Quality PoO has the following attributes:

- Cored hole;
- Linear core recovery greater than 90%;
- Reliable collar survey;
- Cored hole in which 100% of the seam interval has been cored;
- Seam interval geophysically logged, or if no geophysics log data is available it is up to the Competent Persons discretion to determine if the seam level and thickness is consistent with nearest neighbour boreholes; and,
- Raw coal ash.

Support Data for PoO include:

- In pit mapping data for faults;
- Seam floor or roof survey data; and,
- Elevations from interpreted 2D seismic surveys.

Resource and Reserve Entities

HVO / MTW

The Company's Resource and Reserve entities are interpreted to be the seam groups mined, which at MTW number 15 and number 17 at HVO. As part of the classification of the Coal Resource, RPM applied further analysis to seam groups and separated individual ply's to 34 entities at MTW and 25 entities at HVO.

RPM reviewed the borehole intersections on a seam basis and identified that in many cases the number of seam intersections and coal quality data were not the same for each seam element in a seam group. As outlined in Table 7-3, the Vaux seam at MTW which includes the VAA, VAB, VAC, VAD, VAE, VAF, VAG, VAH, VAJ elemental intervals and the various compound seams, the VAA and VAB elements have 230 borehole intersections. The VAC to VAH elements have 300 to 350 borehole intersections and the VAJ element has 125 borehole intersections. As a result RPM created 3 Resource entities, VAAB, VACH and VAJ for the Vaux seam at MTW. The Resource entities used by RPM are shown in ***Table 7-6.***

RPM applied a similar approach to that described for the Vaux seam, to all of the seams at MTW and HVO based on the number of structural and coal quality borehole intersections. As a result, RPM applied entities varies from that of the Company which impacts the classification applied to the seam groups as outlined below.

RPMGLOBAL

Limits

RPM notes that the below limits have been applied as part of the entities applied to the resource estimate:

- No minimum seam thickness limit has been applied to the RPM Resource; and
- No upper ash limit has been applied to the RPM Resource estimate.

RPM considers the above appropriate for resources considering the further applied entities and aggregation applied to the mining planning to form the recoverable ROM working sections.

Table 7-6 Vaux Seam Number of Borehole Intersections by Seam Element and Compound

Compound Intervals	Element	Number of Intersections
	VAA	231
VAAB		
	VAB	234
VA		
	VAC	326
VACD		259
	VAD	341
VACE		249
	VAE	340
VACH		
	VAF	357
VAFG		360
	VAG	360
VAFH		
	VAH	305
VACJ		
	VAJ	125

Moolarben

Moolarben leases cover a length of approximately 20 km (north-south) and up to 8 km wide (east-west). The Ulan seam is present over most of the area covered by the leases with exception towards the west boundary where the seam subcrops at the edge of the basin. The full Ulan Seam (except A2 ply) is included in the Resource estimate.

No coal quality cut-offs were used as the Ulan Seam is currently mined in its entirety in the open cut pits with the exception that the A2 ply is treated as a waste unit on account of high ash and is therefore excluded.

Where the Moolarben and Glen Davis seams are coalesced to a thickness of approximately 3m and are located above Open Cut Resources of the Ulan Seam, they are considered a Resources. This is a very small percentage of the overall Resource.

Ashton

Resources have been estimated for open cut and underground domains with a number of resource polygons.

Open cut resources extend from below the base of weathering (nominally 14m below surface) to a maximum depth of approximately 200m. The open cut resource estimate included all individual or coalesced plies available in the sequence with a 50% maximum raw ash content (adb).

Open Cut Resources sequences in the west include Bayswater to Lemington 19 located in EL5860 West, ML1533, ML1623 and EL4918N with Lemington 9 the uppermost resource interval in ML1623 and Lemington

14 uppermost resource interval within ML1533 North. Open Cut Resources are excluded in EL4918 West due to surface constraints associated with the Hunter River alluvium.

The open cut resource sequence in the east include Upper Liddell to Hebden which progressively subcrop across EL4918 East and EL5680 East and are life of mine open cut targets for the proposed South East Open Cut. Resources are excluded from Glennies Creek and Hunter River alluvium areas.

Underground resource extend to a maximum depth of less than 350m.

Underground resources occur in ML1533, ML1623, the northern and southern portions of EL4918 as well as EL5860 west of ML1533 adjacent to Ravensworth Underground Mine. Underground Resources are restricted to the Pikes Gully (remnant resources following completion of longwall operations), Upper Liddell, Upper Lower Liddell, Upper Barrett and Lower Barrett seams. Of these Upper Liddell, Upper Lower Liddell and Barrett are life of mine underground targets.

The Pikes Gully Seam, Upper Liddell Seam and Upper Lower Liddell Seam Underground Resources exclude all coal mined up to 30th June, 2018.

Yarrabee

The Resource entities at Yarrabee are the seven seams present at Yarrabee, namely, Cancer, Aries, Caster Upper, Caster Lower, Pollux, Orion and Pisces.

Resources have been limited to a 45% raw ash cut-off (determined through washability analysis), for seam extents in core holes. The equivalent geophysical signature was adopted and applied as an estimate to equivalent seams in the chip holes for interpretation of the 45% raw ash extents.

Resources are limited to the 25:1 strip ratio which was the economic limit during the 2010 resource boom. The limit is determined by doubling the economic strip ratio, which is approximately 12.5:1. The assumption by The Company is that metallurgical coal prices could once again increase to high levels based on decreasing volumes of economic metallurgical coal.

Minimum seam thicknesses are determined by the structural complexity of each resource domain and in conjunction with practical mining limitations, as well as consultation with mine planning engineers. In areas of low structural complexity, seam thickness limit are as thin as 40cm. No seam thickness limit is applied where seams coalesce other seams (ie are contiguous).

Open cut is considered as the only suitable method of operation. The structural complexity of the deposit currently excludes underground extraction methods. Truck and excavator with dozer push assist methodology is considered the most appropriate method of open cut mining at Yarrabee.

Stratford and Duralie

Duralie

Resources were estimated using thickness grids and in situ density grids (or default density values where gridded data was not available) from the uncut model (DUR_0614 or DURmicro16). Coal seams were limited to below base of weathering grid combined with the end of September 2017 mined surface within vertical sided polygons. To update resources to December 2017, forecast tonnes from October 2017 to December 2017 were subtracted from the resource estimate.

Clareval Seam resources were limited to a maximum depth of 300m (<300m west limb and <200m east limb, largely controlled by borehole data). Weismantel Seam resources were limited to 500m depth of cover. Resources are not extrapolated beyond borehole data. No minimum seam thickness was applied to the Weismantel Seam as the seam is generally 10-12m across the deposit. A minimum seam thickness was applied to the Cheerup and Clareval Seams of 0.1m (this would only exclude minimal tonnes). No quality limits were applied to the resource as current mine practices wash all coal from Duralie and blend if required at the Stratford CHPP.

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Stratford

Resources were estimated using thickness grids and in situ density grids (or default density values where gridded data was not available) from the current models (WCR0811, STRAT0315 and SE0512). Coal seams were limited to below the base of weathering grid combined with the end of June 2014 mined surface, within vertical sided polygons. Essentially no mining has occurred in Roseville West and Bowens Road North pits since July 2014. Resources were limited to a maximum depth of 150m (Stratford West) or 200m (Avon North, Stratford East) (largely controlled by borehole data). Resources were not extrapolated beyond borehole data.

No minimum seam thickness was applied to the estimate to allow maximisation of the reserve estimate (due to the numerous plies in the deposit/splitting and coalescing, applying a minimum ply thickness in previous works limited reserve studies from accessing all potential coal). No quality limits were applied to the resource as current mining practices mine coal thick enough for the equipment being used and the coal is washed and potentially blended.

Grant & Chainey

Resources were estimated in Minex software using thickness grids from the uncut model (GC_0812) limited to below the base of weathering and in situ density grids or default density values where gridded data was not available. Resources were estimated within vertical sided polygons to a maximum depth of 200m below topography. Resources are not extrapolated beyond borehole data. No minimum seam thickness was applied to the estimate to allow for maximisation of the Reserve estimate (as requested by the Reserves Competent Person). No quality limits were applied to the resource as current mining practices mine coal thick enough for the equipment being used and all coal is washed and, if required, blended.

Austar

The following list details the limits used;

- Limit of Mining as at 30 June 2018,
- 50m barrier pillar exclusion zone around underground mined areas,
- 5m offset either side of dykes,

The following assumptions have been made regarding the Austar Resource estimate:

- The proposed extraction methods are LTCC and conventional longwall operation for the remaining Bellbird, Stage 3 and the Inferred resource stated in EL6598.
- Longwall mining in the Austar area has been at depths of 420 to 540m depth of cover. The current LOM plan shows extraction plans for the Greta seam to a depth of approximately 720m. The assumption is that mining at up to 800m depth of cover could be achieved.
- A minimum seam thickness has not been applied because the Greta seam and Greta upper seam maintain seam thickness greater than 3m throughout the Austar tenure.
- That the coal in the resource area will have similar washability characteristics to the coal that is currently being mined and processed.
- Ash and total sulphur cut off limits have not been applied. It is assumed that the coal can be washed to achieve a 5.5 to 6.5% ash product coal with total sulphur content in the range of 1 to 2.5% based on the results of coal quality testing of core.
- Bord and pillar and potentially longwall extraction of remnant coal blocks as a scavenging operation is proposed.
- That access can be gained to the remnant coal blocks surrounding the proposed longwall panels.

The resource entity is the Greta Seam working section which consists of the Greta Upper and Lower seams west of the split line and the Greta Upper seam east of the split line. Resources have been categorised on a resource block basis according to tenure as the first discriminator for simplicity, rather than spacing of PoO's.

The Measures resource in the Austar resource is well known from information seam elevation, thickness and quality and the location of faults and dykes from the mined out areas, in conjunction with borehole and 2D

seismic data. Indicated Resource is estimated in the majority of the Stage 3 area, southeast of the drift to the Stage 3 area and southwest of the Bellbird area. Boreholes are typically spaced at less than 1000m in these three areas of Indicated coal. Historical workings located to the north and borehole data confirm the presence of the Greta seam in the areas of Indicated resource.

Significant numbers of 2D seismic lines have been completed, processed and interpreted in the area of Indicated resource. The location of faults is well understood from drilling and 2D seismic data. The location of the Kitchener Dyke is also well known from magnetic survey data.

Consistent seam thickness that follows the expected gradual thickness changes associated with sedimentary trends, except for a number of thinned Greta seam occurrences that align with the Kitchener Dyke and the Quorrobolong Fault zone in the mined out area of Stage 3. The areas of seam thinning are also associated with increased raw ash content.

Inferred Resource is estimated in ML1661 and EL6598 for resource blocks ML1661F1 and EL6598IN. The Inferred resource is dependent upon the following information for classification;

- Historical workings located to the north and borehole data confirm the presence of the Greta seam in EL6598.
- Boreholes are spaced at 1 to 4km. Some of the boreholes do not have geophysics and have highly variable raw ash of less than 8% and 26% ash in adjacent boreholes. It is likely that there are differences in the sampling methodology and sample compositing philosophy of older and more recent data.
- The inferred resource reported for ML1661 (block ML1661F1) is located in the Abernathy Fault Zone. Raw coal ash in this area is anomalously high and seam thickness is highly variable in this area. It is suggested that the borehole data used in the model is not representative of the resource in this area due to faulting affecting the thickness and ash of the core samples.

Donaldson

Coal resources have been estimated for the Fassifern Seam, West Borehole Seam, Upper Donaldson Seam, Lower Donaldson Seam and Big Ben Seam

Coal resources north of John Renshaw Drive and east of the closed Donaldson open cut mine are considered open cut resources due to their shallow depth. All other resources at Donaldson are considered underground resources either due to depth, or surface constraints that prohibit open cut mining.

The limits and assumptions used to define resource areas are:

- Limited to lease boundaries
- Limited to seam subcrops
- Limit of mining as at 30 September 2016
- Abel mine ROM tonnes from 1 October 2015 to 31 December 2015 were 228,704t. ROM tonnes from 1 January 2016 to 30 September 2016 were 266,365t. Forecast tonnes from 1 October to December 31 2016 are 0 tonnes. These tonnage figures are included in the Abel Mine production figures in the Reconciliation Table.
- A 50m exclusion zone around historical workings
- A minimum seam thickness of 1.2m has been applied
- A maximum raw ash cut-off of 50% has been applied to most target seams (except Lower Donaldson Seam)
- For Lower Donaldson Seam a maximum ash cut-off of 55% has been used as mine planning and financial analysis studies completed by Donaldson mine and Yancoal Corporate indicate this mine plan has a positive NPV.
- Seams without reasonable prospects for eventual economic extraction excluded from estimate.
- No surface constraints have been applied

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Middlemount

The Company's Resource and Reserve entities are interpreted to be the seam groups mined; that is,

- Middlemount Seam plies of MU, MLT, MLB;
- Tralee Seam plies of TL1, TL2T, TL2B; and
- Pisces Upper Seam plies of PUT, PUM, PUB

The minimum seam thickness for resource estimation is 0.30m; a limit that has been applied due to practical mining limitations, as well as consultation with mine planning engineers. This effectively excludes the TL1 ply from resource estimations across most of the deposit. No seam thickness limit is applied where seams adjoin (coalesce) with other seams; however, there is a minimum separable interburden thickness is 0.30m also.

Based on the effects of dilution observed in coal quality data reviews by RPM, the limit of 37%ad raw ash applied to the resource categorisation by JB Mining appears reasonable. Other limits applied to the resource exclude all coal within a 50m buffer of the Jellinbah Fault and all coal to the east of the fault; all weathered coal; and all fault-repeated coal from resource estimations.

Points of Observation Spacing

RPM has completed a detailed review of the PoO spacing from a first principles to determine an independent view of classification applied to the resource.

HVO / MTW

RPM has reviewed the following attributes for 100 seam elements and 65 compound seam intervals for MTW and 104 seam elements and 55 compound seam intervals for HVO to assess the variability of the Resources to determine PoO spacing:

- Seam thickness,
- Interburden thickness,
- Seam splitting and coalescing patterns to determine whether they are sedimentary or due to seam correlation inconsistency between stages of exploration.
- Structural elevation,
- Coal quality,
- The relationship between raw coal quality and washed Product Coal quality,
- The relationship between overburden / interburden thickness variation and coal quality variability,
- Histograms, statistics and cross plots of coal quality attributes of seam groups.
- Review of the as mined seam roof or floor survey data in conjunction with modelled roof and floor contours and borehole intersections to assess reliability of input data and model output.

RPM acknowledges that some of the variability present in the MTW and HVO geological data is in part due to the inconsistency of the work that was performed by a large range of geologists over a time period in excess of 30 years. It is likely that the geology of the MTW and HVO areas may be less variable than that exhibited by the MTW and HVO databases, however, the Resource estimate must be made by making an assessment based on the variability of the data that is available.

The largest variability of the MTW and HVO data is caused by the seam correlations. In general the seam splits do not show any trend which is counter to geological processes. Groups of certain seam correlations appear to be clustered into groups that are aligned in strips parallel to the highwall suggesting that seam correlations are dependent upon the geologist completing the work rather than the geology. RPM has ignored this aspect of variation and has assessed seam thickness and coal quality variation within each of the different seam name domains and considers this not a material issue given the large scale mining practices.

RPM has determined the PoO spacing for both the MTW and HVO resource areas by review of variation between nearest neighbour boreholes for the attributes listed above. The PoO spacing was determined when

less than 10% and 20% variability of between adjacent boreholes was established. In general coal quality data showed low variability between adjacent boreholes, except in the following circumstances:

- Incorrect data has been loaded to the database, or data has been incorrectly composited. There are a large number of coal seams in HVO with coal seam ash ranging between 50 and 90%.
- Interburden thickness above a coal seam thickens. It is common for interburden thickness to increase from 0.2m to greater than 20m over a horizontal distance between 100 and 150m. In general the underlying coal seam shows increased raw ash and product ash in the zone where the interburden thickens.

The coal quality PoO spacing was assessed by RPM to usually be double the spacing of the quantity or structural PoO as shown in ***Table 7-7*** and ***Table 7-8***.

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Table 7-7 PoO Spacing MTW

Seam Group / Seams	PoO Radius Quantity			PoO Radius Quality		
	Measured	Indicated	Inferred	Measured	Indicated	Inferred
Whybrow						
WYAB	100	200	400	200	400	800
WYC	100	200	400	200	400	800
WYD	100	200	400	200	400	800
WYE	100	200	400	200	400	800
WYF	100	200	400	200	400	800
WYG	100	200	400	200	400	800
Redbank Creek						
RCA	125	250	500	250	500	1,000
RCB	125	250	500	250	500	1,000
RCC	125	250	500	250	500	1,000
RCD, RCE, RCF	125	250	500	250	500	1,000
Wambo						
WBAC	125	250	500	250	500	1,000
WBD	125	250	500	250	500	1,000
Whynot						
WNA	125	250	500	250	500	1,000
WNB, WND	125	250	500	250	500	1,000
WNC	125	250	500	250	500	1,000
Blakefield						
BLAB, BLC, BLE, BLF, BLG, BLH	160	320	900	250	500	1,000
BLD	125	250	500	250	500	1,000
BLJ	125	250	500	250	500	1,000
Glen Munro	125	250	500	250	500	1,000
Woodlands	125	250	500	250	500	1,000
Arrowfield						
AFA	125	250	500	250	500	1,000
AFB	125	250	500	200	400	600
Bowfield	170	300	1,000	250	500	1000
Warkworth	150	300	600	300	600	1,200
Mount Arthur	150	300	600	300	600	1,200
Piercefield						
PFAB	200	400	800	400	1,000	1,200
PFCE	200	400	800	400	1,000	1,200
Vaux						
VAAB	225	450	900	400	1,000	1,200
VACH	225	450	900	400	1,000	1,200
VAJ	225	450	900	400	1,000	1,200
Broonie						
BNAF	200	400	800	400	1,000	1,200
BNGH	200	400	800	400	1,000	1,200
BNJQ	200	400	800	400	1,000	1,200
Bayswater	250	500	1,000	400	1,000	1,200

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Table 7-8 PoO Spacing HVO

Seam Group	PoO Radius					
	PoO 1 to 3			PoO 1 and 2		
	Quantity			Quality		
	Measured	Indicated	Inferred	Measured	Indicated	Inferred
Wambo	75	150	400	150	300	800
Whynot	75	150	400	150	300	800
Blakefield	75	200	400	150	300	800
Glen Munro	75	200	400	150	300	800
Woodlands	75	150	400	150	300	800
Arrowfield	75	150	400	150	300	800
Bowfield	100	200	500	200	400	1,000
Warkworth, WK2, WK3, WK4, WK5, WK6, WK9, WK10	125	250	600	250	500	1,000
WK1	125	250	600	250	500	1,000
WK7, 8A, 8C	125	250	600	250	500	1,000
Mount Arthur	125	250	600	250	500	1,000
Piercefield	175	350	700	350	700	1,000
Vaux	200	400	800	300	600	1,200
Broonie	175	400	800	300	600	1,200
Bayswater	200	400	800	300	600	1,200
Lemington	100	200	400	200	400	1,000
Pikes Gully	125	250	600	300	600	1,200
Arties	125	250	600	250	500	1,000
Liddell	125	250	600	250	500	1,000
Barrett	125	250	600	250	500	1,000
BAR	150	300	600	300	600	1,000
BAR1	125	250	600	250	500	1,000
BAR2	125	250	600	250	500	1,000
LBA	125	250	600	250	500	1,000
LBA1	125	250	600	250	500	1,000
LBA2	125	250	600	250	500	1,000

Moolarben

Resource classification and estimates are limited and based entirely on borehole data and supported by exiting data outside Moolarben. Resources were mostly extended to lease boundaries as boreholes and existing mine operations intersected and target the Ulan Seam within and outside the Moolarben boundaries.

Measured Resources are supported by boreholes approximately 500m apart but up to 900m apart (south and north areas). The consistent nature and predictability of the Ulan Seam and utilizing public information and knowledge of neighbouring operations provides confidence in Measured status resources.

Indicated Resource are mainly towards the edge of the lease where there is supporting data outside the Moolarben tenements. Classification supported by boreholes up to 1.2 km.

Inferred Resources are supported by boreholes up to 2 km apart. Inferred Resources exist on the edges of the lease, classified using data outside the Moolarben tenements to extend resources to the lease boundaries.

Ashton

Coal resources were classified Measured Resources - where geological data points based on detailed and reliable close spaced borehole data where sampling and testing information supports a reasonable level of confidence in seam thickness, continuity and coal quality of the seam. Adjacent past workings both

underground and open cut provide additional supporting information confirming seam presence and continuity. Distance between boreholes can be up to 500m depending on the consistency of seam character.

Indicated status done last year has locally required borehole spacing in excess of 1,100m. Justification for this is based on regional lateral persistence extending through to adjoining tenements and mine operations. Coal resources were classified Indicated Resources - where geological data points contribute to a reasonable level of confidence in seam thickness and continuity and coal quality. Distance between boreholes can be up to 1100m depending on the consistency of seam character.

Coal resources were classified Inferred Resources - where there is a paucity of coal quality data and borehole spacing is only sufficient to delineate seam thickness to a low level of confidence. Distance between boreholes is generally greater than 1100m or in areas of extrapolation beyond PoO.

Yarrabee

The Yarrabee Resource is well understood based on exploration and open cut mining operations that have occurred over the past forty years or so, sale of predominantly raw coal up until 2009 and sale of washed coal from 2009. The major turning point in understanding of the geology at Yarrabee occurred over the past ten years or so under Yancoal ownership and the work by the previous Competent Person during that time.

The PoO used to classify the Yarrabee Resource are shown in ***Table 7-9***. The PoO spacing are intended as a guideline only for quantity and have been used as shown in ***Table 7-9*** for coal quality. The coal quality at Yarrabee has a greater level of certainty between PoO's than quantity due to the highly structured nature of the Yarrabee resource.

Seam thicknesses for the Resource entities follow sedimentary trends, which is expected in a coal deposit and means that the coal quantity estimate will predominantly have moderate to high confidence.

Coal seams can be correlated with a high level of confidence across the Yarrabee resource using geophysical logs. However, RPM highlights that the structure is critical and structural domains DOM6, DOM3, DOM2, DOM2S, YEN and YES is based on the nature of the geology, such as seam dip direction and magnitude, faulting and the likely modifying factors that impact conversion of Resource to Reserve.

Borehole spacing in parts of DOM6, DOM3, DOM2, and DOM2S may be as close as 20 to 50m in order for the structure to be understood. Therefore, the spacing for the quantity PoO's is really a guideline only. The ability to interpret, describe and model the geology is the key driver to assigning a Resource status to a coal resource in a structurally complex area such as Yarrabee.

Table 7-9 Points of Observation Spacing

General Resource Classification Parameters				
Category	Quantity PoO		Quality PoO	
	Spacing	Radius	Spacing	Radius
Measured	200	150	400	250
Indicated	400	250	800	500
Inferred	800	500	1000	1000

Stratford and Duralie

Duralie

Measured Resources – typical drilling density involved 100m spaced east-west drill lines (range from 50-150 m) with boreholes along these drill lines averaging 50m spacing. Some fault delineation drilling down to 15m spacing may be present. Cored holes are spaced approximately 200-500m apart. Indicated Resources – 200-500m spaced east-west drill lines, with boreholes along the drill lines up to 300 m. Core holes are located generally 400-1,000m apart. Inferred Resources – for Weismantel Seam borehole data is generally located at the edges of Inferred areas, rare data within these areas (up to 1.5 km apart). Core holes are rare in Inferred Resource areas however are generally adjacent/nearby to areas with core data.

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Stratford

Measured Resources: there is a small Measured Resource at Stratford in the Bowens Road Seam (this is a consistent seam, which was mined extensively immediately north of the measured area). Holes are located on approximately 100m spaced drill lines with holes along these lines 75-100m apart and with coal quality data available from holes or previous mining within 500 m. Indicated Resources: holes were located on 200-300m spaced east-west drill lines with holes along the lines 20-200m apart. For Avon North the holes were spaced on 100m drill lines but were classified Indicated due to seam complexity and quality data limitations. Core holes were 150m to approximately 1,000m apart or near mined areas of those seams. Inferred Resources: boreholes up to 800m apart with rare coal quality data. Some areas had far more closely spaced holes but quality data rare/absent.

Co-disposal area

These resources were classified as Indicated Resources due to the good quality of survey and mapping data, continuous emplacement of wash plant reject material into these cells from 1995-1999, a history and continued use of this material as feed to the Stratford Mine wash plant and coal quality results indicating usable products.

Grant & Chainey

Measured Resources: Boreholes are located on 100-150m spaced east west drill lines. Holes along drill lines are spaced 20-150 m. Core holes are located up to 400m apart along strike due to the steeply dipping nature of seams. Indicated Resources: Boreholes are located generally on 200m spaced east west drill lines. Holes along these drill lines are 40-150m apart. Core holes are located generally 400-800m apart, however can be up to 1.5 km apart (often along strike due to the steeply dipping seams). At the nose of the seam sub-crops in the south, there is no coal quality data, however the spacing and grid of boreholes, coal quality data available in nearby areas on certain seams (including Bowens Road and Avon seams) and consistency of coal seam character determined from downhole geophysical logs, has enabled these resources to be classified as Indicated Resources. Inferred Resources: For some minor seams, boreholes are located as close as 200m spaced east-west drill lines, however there may be little up-dip/down-dip data on the seam or inconsistency of the plies. For major seams, holes are spaced on drill lines up to 2 km apart. Core data is 500m apart to rare on some minor seams and sparse to rare for major seams (including Bowens Road and Avon Seams).

Austar

In the northern portion of CML2, core hole spacing ranges from approximately 250m-600m while in the southern portion of CML2 core hole spacing ranges from 600m-1200m. In CCL728 core hole spacing is approximately 1000m. In EL6598 core hole spacing ranges from 1km -3.6km.

As part of the resource estimation process, the total resource area was divided based on various geological, structural, PoO, past mining or lease boundary considerations, into discrete polygons. Once resource polygons were defined, the status of coal resources within each polygon was classified either as:

• Measured Resources - where geological data points based on detailed and reliable exploration, sampling and testing information support a reasonable level of confidence in Greta Seam thickness, continuity, coal quality and structure of the Greta Seam. Supporting geological information in the form of reprocessed seismic data was also used to interpret continuity of Greta Seam along seismic lines. Adjacent past workings provide additional supporting information confirming presence and continuity of Greta Seam.

Indicated Resources - where geological data points contributed to a reasonable level of confidence in seam thickness and continuity and some coal quality. Supporting geological information in the form of reprocessed seismic data was also used to interpret continuity of Greta Seam along seismic lines.

Inferred Resources - where there was a paucity of coal quality data and drill hole spacing was only sufficient to delineate Greta Seam thickness to a low level of confidence. Past mining to the north provides supporting information confirming the presence and continuity of Greta Seam.

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Donaldson

Measured Resources were categorised where geological data points based on detailed and reliable borehole data, sampling and testing information support a reasonable level of confidence in seam thickness, continuity and coal quality of the seam. Adjacent past workings (if present) provide additional supporting information confirming seam presence and continuity. Distance between boreholes can be up to 700m depending on the consistency of seam character.

Indicated Resources were categorised where geological data points contribute to a reasonable level of confidence in seam thickness and continuity and coal quality. Distance between boreholes can be up to 1300m depending on the consistency of seam character.

Inferred Resources were categorised where there is a paucity of coal quality data and borehole spacing is only sufficient to delineate seam thickness to a low level of confidence. Distance between boreholes is generally greater than 1500m.

Middlemount

The radii of influence for PoO were determined by consideration of the following for all coal plies:

- Seam continuity;
- Variability of seam thickness;
- Variability of interburden thickness;
- Structural variability;
- Variability of coal quality (particularly raw ash); and
- Review of the variability of the geology between boreholes and the reliability of borehole data.

Rudimentary geostatistical analysis was completed by previous authors on modelled seam thickness and raw ash across the deposit, based on previous studies by Noppe & de Klerk (2013). This study noted that the "range" on the variogram – which is the zone where mineralisation is correlatable, i.e. the values which fall between the nugget and the sill – is the maximum radii for PoO. On average, the range for modelled coal thickness was 2100-2500m and for raw ash (%ad), it was 1000-1500m.

Noppe & de Klerk (2013) noted that the range provided a guide to estimating the maximum extrapolation distance for the Inferred resource category, with two-thirds of the range being the maximum radii for Indicated resources and one-third of the range being the maximum radii for Measured resources.

Raw ash was selected as the basis for confidence categories for all seams resulting in the following:

- 1000m was confirmed as the radius for Inferred resources;
- 500m was confirmed as the radius for Indicated resources; and,
- 250m was confirmed as the radius for Measured resources.

7.5 Exploration Potential

HVO / MTW

Exploration has been undertaken over numerous generations over the last decades with the main focus on the two operation main pits for which Coal Resources have been estimated. Although the area has a long history of exploration, RPM considers there to be good potential to define further coal seams bodies within the Project area both near planned mining infrastructure and within the broader exploration concession. RPM considers the large concession holding of the Company contains a number of key targets which present opportunities to increase the resource base and add feed sources to the plant thereby in turn increasing the mine life, these include:

- **Inferred material**: Within the current final pit designs for the Projects a combined total of approximately 46Mt of "inferred" material has been reported. Targeted drilling to improve the geological confidence is required in these areas.
- **Downdip Targets**: The Company has undertaken exploration in the areas surrounding the defined near surface resource, however in addition further down dip targets have been identified predominately to the west of the current Inferred material. RPM notes this target is limited by the license boundary is underground potential only.
- **Underground**: While resources are currently defined further drilling is required to fully define the extent on potential underground mining. As detailed in ***Section 16*** as conceptual study has been completed on the currently define resources which highlights the economic potential on this area.

Moolarben

There is very limited potential for additional Resources based on future exploration. This is due to the coal seams being very consistent and well defined by the current extensive exploration data over the extents of the Project area.

Any future exploration is expected to not have a material impact on the total Resources although would be expected to increase resource classification from Inferred and Indicated to Measured status.

Ashton

There is very limited potential to increase the total Resources for the Ashton Project through further Exploration. All recognised coal seams are defined as Resources throughout the Project area. Further exploration would be expected to upgrade the Resource Categorisation, therefore increasing the percentage of Measured Resources.

Yarrabee

RPM considers that there is limited resource upside located within the current Mining Lease areas, because exploration drilling has been completed on a regular pattern over the most prospective parts of the Mining Leases.

RPM considers that underground or highwall extraction in the deeper parts of the Yarrabee resource should not be ruled out without additional exploration such as 2D seismic data acquisition and targeted exploration drilling in the eastern part of the resource.

It is likely that additional resource tonnage from the Rangal Coal Measures and more certainly from the Burngrove Formation, could be located in the EPC tenure located to the north of Yarrabee in what is referred to as the Wilpeena area.

Stratford and Duralie

Duralie

For potential underground resources drilling is required to evaluate the Weismantel Seam in the deeper central portion of the Gloucester Syncline. Much of these resources are currently classified as Inferred.

Stratford

Potential works include update of the coal quality database/model over Stratford. Also further exploration to improve definition of resource/reserve (Avon North and Stratford East), including additional coal quality data, further definition of structure.

Grant & Chainey

Further work planned includes reviewing the geophysical data recently obtained. Other works could include defining the Weismantel and Clareval Seams through the Grant & Chainey area, on the eastern limb of the syncline

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Austar

Exploration potential exists for shallower underground coal in the eastern part of EL6598. The characteristics of the Greta seam from the east of EL6598 are:

- Depth of cover increases from 280m in the east to greater than 700m in the west,
- Seam thickness increases from 2 to 4m from east to west,
- Raw coal ash shows an overall trend of decreases from east to west, however data is sparse and variability in EL6598 is very high, with adjacent boreholes showing values of less than 8% raw ash and 26% ash.
- Raw coal total sulphur increases from less than 1% in the east to 3% in the west
- The Resource block EL6598I1 is located in EL6598 to the east of the Stage 3 area. The primary attributes of the Greta Seam in this area include the following;
  - Seam thickness; 2.7m
  - Average depth of cover; 513m
  - Raw coal ash; 17.9%
  - Raw coal total sulphur; 1.35%
  - The raw total sulphur in this area is the lowest of the Austar resource area.

Donaldson

The exploration potential of the Project is considered limited due to the extensive borehole database and mining history already defining any potential Resources.

Middlemount

RPM notes that sufficient work has been completed to establish seam continuity in the planned life of mine LOM area, however, further fault delineation drilling or 2D seismic surveys should be considered for the delineation of the Jellinbah Fault; the north east striking faults and the subsidiary thrust faults to the Jellinbah Fault; and the potential offsets of the Jellinbah Fault that RPM has interpreted.

Additional drilling is required to delineate the limits of oxidation of the Middlemount and Pisces seams in the future mining areas located north and south of the mined out area.

Additional core drilling and coal quality analysis will be required to increase confidence in the resource in the north and south of the deposit which is currently only at Indicated or Inferred status. Re-drilling sites where ply data is not available should also be considered to increase the understanding of coal quality trends.

To identify areas of the deposit where coking properties are likely to be impacted, ash analysis and maceral analysis should continue if no other coking tests are going to be conducted.

In 2017 Middlemount purchased a portion of an adjacent lease to the north-west of ML70370. This area has been explored by the previous owners and has been incorporated into the Resource estimate as at 30 June 2018.

7.6 Reasonable Economic Prospects

HVO / MTW

The Assets are mature open cut mining operations that have approvals and license to operate in place for an extended period of time. Coal products are semi soft coking and thermal coal products that have strong market acceptance. Given the active mining both Assets have sufficient infrastructure including rail and port capacity and a well-trained and competent work force that should enable the life of mine plans to be followed (See various sections for further commentary).

RPM has made the following general assumptions to define the reasonable prospects for economic extraction:

- The HVO open cut operations are economic to 17 to 1 for in situ prime strip ratio which is considered to approximate the break-even strip ratio and an approximate depth of cover between 300 and 350m (See Section 9 for further details).
- The MTW open cut operations are economic to the 16 to 1 for in situ prime strip ratio.
- Benchmarking with other open cut operations and future proposed operations in the Hunter Valley suggests that a 350m depth of cover cut off is appropriate,.
- RPM considers underground longwall operations below open cut excavation floor typically requires 80 to 120m of cover above the seam being mined by longwall methods. A minimum of 60m has been assumed for this Resource estimate based on RPM's assumptions used for other underground mining studies where the underground working sections are separated by 60m.
- Future demand for thermal and semi soft coking coal will remain strong and
- License to operate will not change to adversely affect the duration of the current LOM plan with mining consents are in place for HVO North to 2025, HVO South to 2030 and MTW to 2036. RPM assumes these will be updated in due course of standard applications in NSW.

In addition RPM has made the following assumptions specific to MTW:

- The Company has stated open cut Resources down to the Mt Arthur seam in the West Pit and Warkworth D seam in the North Pit.
- RPM considers that the Piercefield and Vaux seams are potentially economic open cut seams based on sufficient spoil room being available as such are included.
- That the slope and dump management plan will successfully manage the geotechnical aspects of mining below the current Mt Arthur and Warkworth seam floor to recover the Piercefield and Vaux seams.
- The Broonie and Bayswater seams are not potentially economic seams due to a lack of spoil room.
- The Company does not have title to the Bayswater seam by virtue of the title conditions and as such the Bayswater seam cannot form part of the current Coal Resource.
- MTO open cut Coal Resources are stated to the Woodlands Hill seam.
- The Bayswater seam has been reported as the Underground Resource in the WML area as it has been assumed that open cut mining will continue to the Vaux seam from the highwall location as of December 31 2016. The Company depicts plans for longwall panels in the Vaux seam in both WML and MTO. RPM has reviewed the separation thickness between the Mount Arthur seam floor and the Vaux seam and determined that the separation thickness is insufficient (less than 60m) to support a practical longwall in the Vaux seam, should open cut mining progress to the Mount Arthur seam.
- RPM reviewed the open cut potential in the MTO area and concluded that it was likely that only a single longwall operation was possible due to requirement of having at least 60m separation between mined intervals below the Woodlands Hill seam floor in the open cut. RPM selected the Vaux seam as a reasonable longwall target seam because it appeared to have consistent seam thickness and separation between the VAF, VAG and VAH plies. The Mt Arthur MAC to MAJ plies are also a possible longwall resource but were rejected on the grounds of closer proximity to the floor of the Mt Arthur seam open cut and inferior roof conditions due to the Mount Arthur MAA and MAB plies, Fairford Claystone and Warkworth WKE to WKK plies being present in the primary and secondary roof.

RPM has made the following assumptions specific to HVO:

- All seams within the Jerrys Plains and the Vane Subgroups in the HVON area have open cut economic potential because depth of cover is less than 320m and the prime strip ratio 5.8 as outlined in Section 8.
- The coal seams of the Vane Subgroup only have open cut economic potential to the proposed limit of the Auckland Pit highwall. All seams of the Vane Subgroup down dip of the proposed Auckland Pit highwall and located in the axial plane area of the Bayswater Syncline can only have underground potential due to having depth greater than 320m and in situ strip ratio greater than 9:1. The Wollombi Brook and its associated river flats is also considered to be the western limit of the Auckland open cut resource area.
- A 100m offset has been applied to the bord and pillar underground operations in the MA3, PF1 and PF2 seams. The area of underground working has been excluded from the Resource estimate.

- The HVO underground Resource is located in the HVO South area in the Arties and Barrett seams of the Vane Subgroup. The Resource area has been subject to a mining study by the Company in 2010.
- All Resource from the Jerrys Plains and Vane Subgroups in HVO North has been classified and reported as an open cut Resource and as such no underground Resources are reported.
- The HVO underground Resource is located in the HVO South area in the Arties and Barrett seams of the Vane Subgroup. The underground Resource area has been subject to an Order of Magnitude Study by the Company in 2010.
- RPM has assumed that tenure below the Vaux seam in CCL 755 and below the Bayswater seam in ML 1324 would be granted to the tenure holder of the HVO leases upon application. The Resource in these areas is estimated to be 453Mt to a depth of 350m.
- RPM has not reduced the Coal Resource footprint in areas of waterways and alluvial land. RPM considers that extraction of coal by methods other than open cut could be possible in such areas however notes that coal does not extend under the hunter river. Offsets from waterways and alluvial land are considered to be modifying factors when classifying Reserves.

Appendix D provides graphical representation of the classification applied to the Coal Resource for various seams.

Moolarben

Moolarben mine plan considers open cut potential mostly where depth of cover is less than 100 m. Coal resources for the uppermost ply of the Ulan seam (A1) is only reported at less than 100m depth because it is considered that this ply only has economic potential if mined by open cut methods. The rest of the Ulan Seam can be mined by either open cut or underground methods as it is currently mined at Moolarben and adjacent operations.

No coal quality or thickness cut-off parameters are applied as adopting reasonable cut-off parameters will not impact on the Resources.

Other seams above the Ulan Seam are present within the deposit but only Moolarben and Glen Davis seams are considered a resource in some areas of the open cut pit OC4 where these two seams coalesced to a thickness of approximately 3 m. This report considers these two seams as an Inferred Resource at this stage due to lack of quality data to better define economic mining potential.

Moolarben contains an active open cut operation mining the full Ulan Seam and an active underground longwall operation on the lower section of the Ulan Seam which provides the basis for the 'Reasonable Economic Prosects' test.

Ashton

Both Open Cut and Underground Resources are estimated for the Ashton Project based on what is considered the most likely method of extractions. The 'Reasonable Prospects Test' was applied based on the most likely mining method identified.

Relevant mining parameters depending on the mining method were considered to determine 'Reasonable Economic Prospects'.

For Underground Resources this included consideration of depth of cover, seam dip limit, working section thickness and interburden thickness between working sections.

For Open Cut Resources these included in situ cumulative strip ratio, depth of cover, minimum seam thickness and surfaces constraints including rivers and associated floodplain alluvial material.

Constraints associated with rivers and creeks, floodplain alluvial material and surface infrastructure were not applied to the Underground Resources. These were considered but as coal can technically be recovered from under these surface constraints no limits were applied. To determine if coal can be economical recovered requires detailed consideration during the development of mine plans associated with preparing Reserves.

In general, due to the nature of the deposit, the Resources are not sensitive to the consideration applied. Ashton has mined coal from both open cut and underground mining methods which supports the criteria used to determine the 'Reasonable Economic Prospects'.

Yarrabee

The Yarrabee Mine is a mature open cut mining operation that has an approved Environmental Authority and license to operate in place for an extended period of time (the current LOM is up to 2031). All Resources are located within current Mining Leases. Coal products are PCI and thermal coal products that have strong market acceptance. Given the active mining The Company has sufficient infrastructure including rail and port capacity and a well-trained and competent work force that should enable the life of mine plans to be followed.

RPM has made the following general assumptions to define the reasonable prospects for economic extraction:

- The Yarrabee open cut operations are economic to the 21 to 1 insitu prime strip ratio which is considered to approximate the break-even strip ratio.
- The Yarrabee Resource has been stated to the 25:1 in situ prime strip ratio, which is based on coal prices achieved during the previous boom in 2010, as such the maximum depth of mining.
- The Company has excluded the underground potential of the Yarrabee resource due to structural complexity. RPM is of the view that extraction methods other than open cut should be considered and has not ruled out underground extraction for the eastern part of the Yarrabee resource. RPM considers that Concept or Order of Magnitude Studies should be completed to assess the deeper resources at Yarrabee,
- Future demand for thermal and PCI coal will remain strong, with commensurate reasonable coal prices and
- License to operate will not change to adversely affect the duration of the current LOM plan.

Appendix D provides graphical representation of the classification applied to the Coal Resource for various seams.

Stratford and Duralie

Duralie

Currently open cut mining methods are used at Duralie in the Weismantel, Cheerup and Clareval seams. Current mining depths are 115m below original topography in the Weismantel Seam pit and 150m in the Clareval Bowl area. It is expected this method will continue for 'shallow' coal resources. The actual limit of open cut mining is a Reserve issue, depending on coal price and geotechnical issues. For resources in the deeper parts of Weismantel Seam, it is assumed mining will be by underground mining methods, including bord and pillar, hydraulic mining, etc. taking into account the relative steep dip of the seam.

Clareval Seam resources at Duralie are limited to depths of 200-300m below original topographic surface (largely controlled by borehole data). With in situ strip ratios in the order of 8:1, to depths of 200 m, it is possible that in the future (<50 years) these resources will be viable.

Stratford

Mining at Stratford has been by open cut mining methods. It is assumed remaining coal resources at Stratford will be extracted by open cut methods. Resources at Stratford are limited to depths of 150m (Stratford West) or 200m (Avon North and Stratford East) below original topographic surface (largely controlled by borehole data). Mining depths reached in the Stratford Main Pit and Bowens Road Pit were 125m and 120m from topography respectively. Approximate in situ strip ratios in the order of 6:1-10:1 indicate it may be possible that resources to depths of 200m may be economic in the future (<50 years).

In Roseville Extension and Roseville West pits, thin seam mining was used to extract the coal plies (coal bands down to 0.15m thick were mined). Small mining equipment was used to achieve this. In BRN Pit the Marker plies were mined at thicknesses down to 0.2-0.3 m. Due to the nature and coking quality of the coal a lot of

care was taken in recovering the coal. Mining in the Roseville West Pit ceased during the downturn in prices however with the recent upswing in coal prices this pit will be viable again.

Resources are estimated for in situ coal seams that occur beneath the co-disposal material. It is assumed the co-disposal material will be completely extracted before mining the underlying seams. The geological model for Stratford West used the base of weathering below the original topographic surface in this area for resource estimation.

Coal resources have been limited by the mined surface as at the end of June 2014. In areas around some of the completed pits (e.g. Roseville Pit, Bowens Road West Pit) resources have been estimated below/adjacent to the pits. No buffer zone was applied to allow mining studies to determine reserve limitations and future mining opportunities.

Mine infrastructure, such as the Stratford East Dam over some of Stratford East, was not used to limit resources to allow mining studies to determine viability. The exception to this was coal under the main Stratford mine infrastructure (the wash plant, stock piles, ROM pad and coal handling facilities). This exclusion zone has removed approximately 1.5Mt of potential Indicated and 0.8Mt of potential Inferred Resources from the Marker 3-Bowens Road seams.

Co-Disposal Area

The material in the Co-disposal area has been mined by open cut methods and incorporated into the plant feed at Stratford CHPP for more than 15 years. Due to the depths of the material (<20m from surface) it is expected this mining method will continue with the remaining resource.

Grant & Chainey

The same coal seams and similar geology occur at Grant & Chainey as Stratford Mine and it is assumed coal resources at Grant & Chainey will be extracted by open cut mining methods, as at Stratford Mine. Resources at Grant & Chainey are limited to depths of 200m below original topographic surface (largely controlled by borehole data). Approximate in situ strip ratios in the order of 10:1 indicate that resources to depths of 200m may be viable in the future (<50 years).

Austar

The Austar resource has reasonable prospects of eventual economic extraction for the following reasons:

- Austar was an operating mine with sufficient onsite infrastructure to extract proposed tonnages, existing markets for high sulphur metallurgical coal and sufficient offsite infrastructure to rail and ship the proposed products
- Approximately 80% of the Austar Measured and Indicated Resource is located at less than 500m depth of cover. Mining is planned to 720m depth. Modifying factors which may affect the conversion of Resource to Reserve have not been discussed.
- Other assumptions made by the Competent Person for assessing reasonable prospects include;
  - Demand for high sulphur metallurgical coal remains high,
  - The price achieved for high sulphur metallurgical coal remains high,
  - Geotechnical issues (such as depth of cover) do not constrain mining, or cause mining closure prior to completion of the LOM plan,
  - Regulatory controls enable mining to continue for the duration of the LOM plan,
  - License to operate is not challenged in the future, such that the LOM plan cannot be completed,
  - The washability characteristics of the resource coal do not change significantly from the current washability characteristics,
  - There are remnant coal around areas of historical coal extraction and outside of the current LOM which would be difficult to extract with the current mining method and equipment. It is assumed that these blocks could potentially be recovered during 'scavenging' operations using Bord and Pillar mining

method. This may be reasonable as would add flexibility to the operation and supplement tonnes coming from the longwall as required.

Donaldson

Both open cut and underground Resources are estimated for the Donaldson Project based on what is considered the most likely method of extractions. The 'Reasonable Prospects Test' was applied based on the most likely mining method identified.

The Reasonable Economic Prospects for the Resources was determined by applying a general mining criteria based on the most likely mining method.

For open cut Resources the depth and cumulative strip ratio were used to determined 'reasonable prospects'.

For underground Resources, a minimum working section thickness of 1.2m and maximum raw ash cut off of 50% (55% for Lower Donaldson) were used to determine 'reasonable prospects'. Also, underground Resources were assessed to determine if under assumed and justifiable technical, economic and development conditions, might, in whole or part, become economically extractable. On this basis, the Sandgate and Ashtonfield Seams were excluded from the Resources.

Middlemount

The Middlemount asset is a mature open cut mining operations that has approvals and license to operate in place for an extended period of time. Coal products are semi hard coking and PCI metallurgical coal products that have strong market acceptance. The asset has sufficient infrastructure including rail and port capacity and a well-trained and competent work force that should enable the life of mine plans to be followed.

RPM has made the following general assumptions to define the reasonable prospects for economic extraction:

- The break-even strip ratio is estimated to be 17 and an approximate depth of cover between 60 and 200 m,
- Benchmarking with other open cut operations and future proposed operations in the Bowen Basin suggests that a 350m depth of cover cut off is appropriate,
- 37% Ash content and 5% IS moisture cut off,
- 50m barrier pillar to the underground resource,
- Minimum seam thickness of 0.3m,
- Basement unit Yarrabee tuff unit,
- Future demand for metallurgical coal, in particular semi hard coking and PCI coal, will remain strong,
- License to operate will not change to adversely affect the duration of the current LOM plan,
- RPM notes that Middlemount Coal has negotiated and achieved successful outcomes to relocate the Bingegang pipeline and to mine through other easements. RPM assumes that the relevant approvals will be granted for any required diversions of Roper Creek, and
- All coal seams from the Roper to Pisces Upper have open cut economic potential because depth of cover is less than 200 m and the average life of mine insitu prime strip ratio is 12:1.

RPM makes the following specific assumptions about the open cut resources;

- RPM has identified that slope stability will potentially be an issue at Middlemount based on our observations made during the site visit. The issues of concern are the failures that are present in the current highwall in both the Tertiary and Permian strata.
- The Permian strata are faulted by the Jellinbah Fault and its subsidiary faults in the upper parts of the Permian highwall, however these faults will be located closer to the pit floor with future highwall advance to the east. RPM considers that there is high potential for strata on the upthrown side of the Jellinbah Fault to have westward dips (into the open cut excavation), thereby creating geotechnical, operational and safety hazards.

- RPM has interpreted northeast striking faults with significant displacement at both the planned northern and southern end walls in the current LOM. Both faults intersect offset the Jellinbah Fault. The location of the intersection of the northern and southern faults with the Jellinbah Fault is close to the proposed intersection of the endwalls and highwall, thereby creating potential geotechnical hazards.
- That the final southern highwall will not be required to be moved to the north to avoid the southernmost northeast striking fault interpreted by RPM. The fault is downthrown to the south by 50-100m. Should additional data acquisition result in no change to its current location the final southern highwall may be moved to the north of its current location, thereby reducing the open cut Resource and Reserve.
- The Tertiary strata appear to be highly reactive and contain significant volumes of ground water. Groundwater seepage is occurring at the Tertiary/Permian interface in the current highwall. RPM assumes that the relevant structural and geotechnical data will be acquired by Middlemount Coal to understand and manage geotechnical risk associated with their LOM plan.
- RPM assumes that the potential groundwater issues associated with the Tertiary will be studied and understood prior to mine advance into the deeper parts of the resource.
- RPM assumes that Middlemount Coal will follow a suitable slope and dump management safety standard to ensure that the LOM Plan can be achieved.

RPM makes the following specific assumptions about the underground Resources;

- The Middlemount underground Resource is located in the southern part of the Middlemount ML70417 and ML70379. The proposed mining method is bord and pillar. The underground Resource area has not been subject to a mining study by Middlemount and no conceptual underground layout plan has been provided to RPM for review.
- The results of a mining study will return a positive rate of return and NPV.
- Sufficient cognisance in the proposed underground layout will be given to minimum thickness of fresh Permian strata in the goaf to avoid connectivity with the Tertiary strata which are approximately 40m thick.
- The required approvals will be granted to Middlemount for underground mining to proceed below Roper Creek and the Dysart Middlemount Road.
- Suitable access can be made to the underground Resource from the open cut southern end wall across the 50-100m displacement southern-most fault.
- 50m boundary pillar from above open cut resources
- 50m Barrier pillar from Mining Lease to the south.
- 37% ash and 5% IS Moisture content cut off.

RPM makes the following specific assumptions about the highwall mining Resources;

- Further and more rigorous delineation of structure and increased knowledge of the highwall geotechnical issues/assessments need to be conducted in order to assume the results of a future mining study would return a positive rate of return and NPV. Thus no Coal Resources have been estimated for this area.

7.7 Variation from 2017 Company Reporting

All resources have been depleted to the 30th June, 2018 compared to the 31st December, 2017. The mined material for each operation is outlined in ***Table 4-1***.

HVO / MTW

None

Moolarben

None

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Ashton

Resources for Ashton have decreased by approximately 30Mt from previously reported Resources. This is principally due to the exclusion of Open Cut Resources from within the extents of the Hunter River and Glennies Creek and associated alluvium.

Yarrabee

Depletion to 30 June 2018.

Stratford and Duralie

None.

Austar

None.

Donaldson

Resources for Donaldson have decreased by approximately 93Mt due to the exclusion of the Sandgate and Ashtonfield Seams from the Resources Estimate. These seams were excluded based on RPM's opinion that they did not have 'Reasonable Prospects for Economic Extraction' based on the current information.

The Sandgate Seam consists of three major plies SGA, SGB and SGC that deteriorate and split into many sub plies towards the south and west. The uppermost ply and sub-plies (SGA) have a maximum cumulative thickness of 2m through portions of ML1618 and EL5497, however distinctive claystone markers exist within SGA which have a large impact on ash content of the seam and potential working sections. The SGB and SGC rarely combine and reside between 1m – 15m below the SGA ply. As only a relatively thin and high ash working sections can be determined from the Sandgate seam, it is considered by RPM unlikely to support the development of a mining operation in this seam and it is therefore excluded from the Resources estimate.

The Ashtonfield Seam occurs throughout the deposit but rarely forms a consistent minable seam package due to its splitting nature. A working section within the seam is only greater than 1.2m over a relatively small area which would be unlikely to support the development of a mining operation in this seam and therefore it is excluded from the Resource Estimate.

Middlemount

Highwall resource area excluded as further study required to confirm potential for economic extraction.

Monash

None.

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8. JORC Coal Reserves

The JORC Code defines a 'Coal Reserve' as the economically mineable part of a Measured and/or Indicated Coal Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Coal Reserves are sub-divided in order of increasing confidence into Probable Coal Reserves and Proved Coal Reserves. (JORC Code - Clause 28). Marketable Reserves allow for practical yields in a beneficiation plant, the result of processing commonly being known in the industry by the term "product coal".

The terms 'Mineral Resource(s)' and 'Ore Reserve(s)' and the subdivisions of these as defined above, apply also to coal reporting, however if preferred by the reporting company, the terms 'Coal Resource(s)' and 'Coal Reserve(s)' and the appropriate subdivisions may be substituted. (JORC Code - Clause 43). As such RPM will refer to Ore Reserves as Coal Reserves in this Report.

8.1 Areas of Coal Reserves

The estimation of Coal Reserves is based on the following areas which are planned to be exploited through open cut mining methods:

- **Hunter Valley Operations** – this mine is currently being exploited via open pit methods and contains total Coal Reserves of **796Mt** made up of 333Mt Proved and 463Mt Probable. The Reserve at HVO includes existing pits and additional pits that will be developed when required to maintain production. The total Marketable Reserves at HVO are **554Mt**.
- **Mount Thorley Warkworth** – this mine is currently being exploited via open pit methods and contains total Coal Reserves of **322Mt** made up of 125Mt Proved and 197Mt Probable. The Reserve at MTW is made up from pits that are currently operated at the site. The total Marketable Reserves at MTW are **225Mt**.
- **Moolarben Coal Mine** – this mine is currently being exploited via open pit and underground methods and contains total Coal Reserves of **256Mt** made up of 232Mt Proved and 25Mt Probable. The Coal Reserves can be further divided into 196Mt Open Cut Reserves and 71Mt Underground Reserves. The total Marketable Reserves at Moolarben are **215Mt**.
- **Ashton** - this mine is currently being exploited via underground methods. In addition to this there is a planned open cut project. The total Coal Reserves at Ashton is **47Mt** made up of 23Mt Proved and 24Mt Probable. The underground Reserve at Ashton mine includes layouts in the Upper Liddell, Upper Lower Liddell and Lower Barrett Seams and contains 33Mt of Coal Reserves. The total Marketable Reserves at Ashton are **26Mt**.
- **Yarrabee -** this mine is currently being exploited via open pit methods and contains total Coal Reserves of **55Mt** made up of 36Mt Proved and 19Mt Probable. The Reserve at Yarrabee includes existing pits and expansion pits that will be developed when required to maintain production. The total Marketable Reserves at Yarrabee are **42Mt**.
- **Stratford and Duralie -** this mine is currently being exploited via open pit methods and contains total Coal Reserves of **44Mt** which is all classified as Probable. The reserves at Stratford and Duralie include existing pits and expansion pits. The total Marketable Reserves at Stratford and Duralie are **26Mt**.
- **Austar**– this mine is currently being exploited via underground methods and contains total Coal Reserves of **41Mt** which is all classified as Probable. The Reserve at Austar is contained in the Bellbird South and Stage 3 areas. The total Marketable Reserves at Austar are **31Mt**.
- **Donaldson –** this project is currently on care and maintenance. It is proposed to be exploited via underground methods and contains total Coal Reserves of **62Mt** which is all classified as Probable. The reserves at Donaldson are based on proposed longwall mining operations in the Lower Donaldson Seam. The total Marketable Reserves at Donaldson are **32Mt**.
- **Middlemount -** this mine is currently being exploited via open pit methods and contains total Coal Reserves of **87Mt** made up of 50Mt Proved and 37Mt Probable. The Reserve at Middlemount includes the existing pit. The total Marketable Reserves at Middlemount are **67Mt**.

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8.2 JORC Statement of Coal Reserves

The Proved and Probable JORC Coal Reserves estimate for the Assets is summarised in ***Table 8-1*** and shown graphically in ***Figure 8-1***. The JORC Coal Reserves estimates reported below are included in the Measured and Indicated Coal Resources quantities reported in ***Section 7*** and are not additional to.

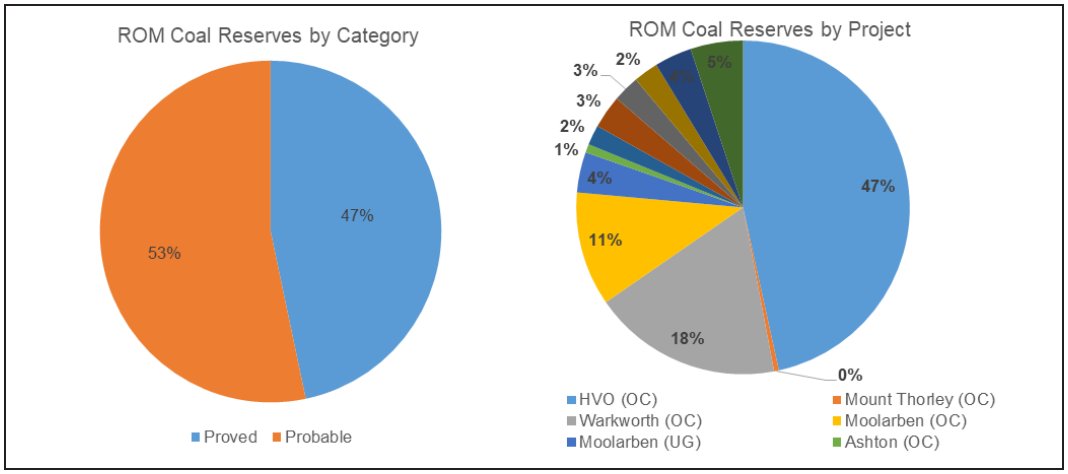
Table 8-1 Statement of JORC Coal Reserves Estimate as at 30th June, 2018

Operation	Coal Reserves			Marketable Reserves		
	Proved (Mt)	Probable (Mt)	Total (Mt)	Proved (Mt)	Probable (Mt)	Total (Mt)
HVO (OC)	333	463	796	229	325	554
Mount Thorley (OC)	-	8	8	-	5	5
Warkworth (OC)	125	189	314	87	133	220
Moolarben (OC)	178	12	189	136	12	148
Moolarben (UG)	54	13	67	54	13	67
Ashton (OC)	-	14	14	-	7.8	7.8
Ashton (UG)	23	10	33	13	6	18
Yarrabee (OC)	36	19	55	28	14	42
Stratford and Duralie (OC)	-	44	44	-	26	26
Austar (UG)	-	41	41	-	31	31
Donaldson (UG)	-	62	62	-	32	32
Middlemount (OC)	50	37	87	40	27	67
Total (100% basis)	**799**	**912**	**1,710**	**587**	**632**	**1,218**
Yancoal Attributable Share[5]	**547**	**631**	**1,178**	**406**	**432**	**837**

Notes:

1) *The Statement of JORC Open Cut Coal Reserves has been compiled under the supervision of Mr. Doug Sillar who is a full time Senior Mining Engineer employed by RPM and is a Member of the Australian Institute of Mining and Metallurgy. Mr. Sillar has sufficient experience which is relevant to the style of Coal and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.*
2) *The Statement of JORC Underground Coal Reserves has been compiled under the supervision of Mr. Graeme Rigg who is a full time Senior Mining Engineer employed by RPM and is a Member of the Australian Institute of Mining and Metallurgy. Mr. Rigg has sufficient experience which is relevant to the style of Coal and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.*
3) *Tonnages are metric tonnes*
4) *Figures reported are rounded which may result in small tabulation errors. Coal Reserves have been estimated under the 2012 Edition of the JORC Code.*
5) *Based on owner at the latest applicable date*

Figure 8-1 Graphical Representation JORC Coal Reserves Estimate within the Final Designs



8.3 Reserves Estimation Procedure

Open Cut Projects

Open Cut Coal Reserves were estimated using a suite of specialised geological and mine planning software. The approach typically includes a pit limit optimisation or margin ranking and supported by life of mine production scheduling which has been completed by the Company. The input parameters selected are based on the review of the mining studies completed by the Company, discussions with site personnel and site visit observations. To enable the estimation of JORC Coal Reserves, RPM has:

- Reviewed approach, assumptions and outcomes from the Company mine planning studies, including the operating and capital cost forecasts.
- Reviewed information on current mine performance including operating costs and processing recoveries.
- Reserves are based on the end of June 2018 surfaces. As a result, all Coal Reserves and production schedules presented in this report reflect the Reserves as at the 30th June, 2018.
- Reviewed the results of the pit limit optimisation or margin rank and independent break even strip ratio analysis and selection of appropriate pit shells.
- Reviewed the mining method and current life of mine pit designs.
- Reviewed methodology used to estimate coal recovery parameters in the model.
- Reviewed production schedules generated by the Client.
- The Coal Resource geological confidence limits of Measured, Indicated and Inferred polygons were overlaid on the mine plan and any Inferred or unclassified Resources excluded from the estimate.
- The Coal Reserve was then categorised as Proved or Probable based on the Coal Resource confidence, application of modifying factors and the level of detail in the mine planning.
- Generated a discounted cash flow model for the LOM schedule incorporating operating and capital costs and revenue as detailed in ***Section 14*** and outlined below. RPM reviewed the operating and capital cost estimates prior to applying them in the economic model.

Underground Projects

Coal Reserves were estimated using predominantly XPAC mine planning software, however also Minex software. The input parameters selected by RPM are based on the review of the mining studies completed by the Company, discussions with site personnel and site visit observations. To enable the estimation of JORC Coal Reserves, RPM has:

- Reviewed the approach, assumptions and outcomes from the Company's mine planning studies, including the operating and capital cost forecasts.
- As part of the initial studies prior to the development of the underground mine layouts, costs and revenue factors were used to determine one or more "target areas". Mine layouts were subsequently generated and have since been refined. The various factors, combined with other criteria such as location of faults and dykes, lease boundaries, etc were cross checked by RPM to confirm the current mine layouts. The Company mine layouts have subsequently been used for the estimation of Reserves.
- Reviewed information on current mine performance including operating costs and processing recoveries.
- RPM used the end of June 2018 face positions as the basis for production schedule forecasts at the various underground Assets. As a result, all Coal Reserves and production schedules presented in this report reflect the tonnes as at the 30th June, 2018.
- Independently estimated operating costs to confirm economic viability across the mine life.
- Reviewed the mining method and current life of mine designs.
- Reviewed methodology used to estimate coal recovery parameters in the model.
- The tonnes within the mine layout were then estimated through the application of modifying factors, the potential Reserves in the mine layout checked.
- Review of detailed production scheduling was carried out in XPAC software.
- Review of equipment and other resources were selected to enable delivery of the production schedule which allowed a capital cost schedule and an operating cost schedule to be derived for the production schedule.
- Review of the financial model outcomes confirmed the economic viability of the mine.
- The Coal Resource geological confidence limits of Measured, Indicated and Inferred polygons were overlaid on the mine plan and any Inferred or unclassified Resources excluded from the estimate.
- The Coal Reserve was then categorised as Proved or Probable based on the Coal Resource confidence, application of modifying factors an, the level of detail in the mine planning and the level of risk.

RPM generated a discounted cashflow model for the LOM schedule incorporating operating and capital costs and revenue as detailed in Section 14 and outlined below. RPM reviewed the operating and capital cost estimates prior to applying them in the economic model.

8.4 Coal Reserve Economic Viability

As part of RPM's process to justify the economic viability of the reported Coal Reserves separate revenue cash flow analyses were completed for each operation, based on the following:

- All variable unit costs for the mine life, including mining, coal processing and handling, transportation costs, overheads and royalty costs;
- The forecast production schedules as shown in ***Section 9*** and ***Section 10***;
- Capital expenditure ("CAPEX") costs including sustaining and closure costs as outlined in ***Section 14***;
- Applied the forecast prices as agreed with the Company. Both the metalliferous and thermal coal markets are susceptible to both up and downswings over the medium and long term with various market forces impacting demand and supply. Given the market forces and the increased complexities in forecasting prices, in the DCF model RPM considered the use of long term average price suitable; RPM has sourced these prices from the Company. RPM is not a price forecast expert and has relied on third party and expert opinions however considers them reasonable;
- Discount rate of 10%, which was selected based on the quantity, long history of mining and well established community relations;
- For the purposes of confirming project economics a simple 30% company tax rate was applied; and
- State levies and royalties.

Based on the above parameters the outcomes of all models showed positive cashflow when all costs, CAPEX and pricing assumptions were applied. Further to the construction of the DCF model, sensitivities were tested. The key elements found to be sensitive to the Assets economics are coal price as well as process operating costs. The Donaldson underground project and the SEOC at Ashton returned negative NPV's with reductions to revenue drivers or increased costs of 5%. This suggests these projects are marginal based on current inputs. Middlemount returns a negative NPV under a 15% reduction in Revenue and Stratford and Duralie returns negative NPV's for 15% decrease in revenue scenario and a 15% increase in operating cost scenario. For all other projects the Coal Reserves were found to be resilient to +/-15% variation in key parameters employed for sensitivity test over the life of the mine.

As such RPM considers that the quantities and grades reported are economically robust and suitable for reporting as Coal Reserves.

The averaged aggregated annualised costs which resulted from the cashflow model are presented in ***Section 14*** for each operation.

8.5 Reserves Comments

RPM notes the following in relation to the Coal Reserves:

HVO/MTW

- A number of years require peak waste movement to achieve the required throughput. The approach to modelling by RPM has been to assume that hire equipment is utilised to meet short term peaks in waste stripping requirements over and above the base annual capacity of the owner's fleet. This is consistent with operations.
- As part of the LOM plan the MTW operation requires the closure of the Wallaby Scrub road. RPM is aware the Company has an environmental permit as well as the required mining permits for mining in this area however required local council approval to close the road. RPM is aware of recent meetings with the Council and a visit was undertaken in February, 2017 which commenced the close out procedure and final approval is now with the NSW State Government. RPM highlights that this road closure is not required for 3-4 years, after which operations will be materially affected, as such considers this a low risk which can be managed as per normal community discussions of this type.
- Underground operations have not been considered for this statement of Coal Reserves. There are significant resources with underground potential at both MTW and HVO and preliminary studies have been completed. Further detailed study is required to confirm the feasibility of underground extensions prior to inclusion as a Reserve however RPM outlines the study shown in **Section 16**.

Moolarben

- Mining commenced at Moolarben in late 2010 when the open cut operation was opened up. Moolarben has subsequently operated exclusively as an open cut operation until 2016 when the underground workings were established and longwall operations commenced in the UG1 underground mine. Upon completion of mining in this area, operations will shift to the UG4 underground mine, followed by the UG2 underground mine.
- The target underground mining areas are the deeper areas of the resource, generally located beneath natural ridgelines that are unfavourable to mine via open cut methods. The underground mining strategy is to continue with a single longwall operation, sequentially working through the underground resource areas.
- As per the reporting requirements of the JORC Code, the Inferred material within the final open cut pits is considered waste and not included in the Reserve estimate. RPM notes that within the final open cut pits at Moolarben there is an additional 20Mt of Inferred Coal Resources, which is less than 5% of the Coal Reserves. If additional exploration successfully delineates this Coal and it is upgraded to Indicated and/or Measured this material can be included in an updated Coal Reserve estimate.
- The ELW ply has been included as a Reserve for the first time in the 2017 Reserves statement. The inclusion of this seam has added 11Mt of additional Coal Reserves and is supported by recovery of the seam during operations 2017.

- Optimisation of working section horizons and the associated impact on project costs and CHPP yields is ongoing at the site and may have a minor impact on the stated reserves.
- Open Coal Reserves that are supported by Measured Resources are classified as Proved Reserves and Coal Reserves supported by Indicated Resources are classified as Probable Reserves. The one exception is at the southern end of OC3 where all Coal Reserves are classified as Probable for both Measured and Indicated Resources, primarily due to limited sub-crop drilling.
- RPM is not aware of any other environmental, legal, marketing, social or government issues which may hinder the economic realisation of the Reserves.

Ashton

- Coal Reserves that are supported by Measured Resources are generally classified as Proved Reserves and Coal Reserves supported by Indicated Resources are classified as Probable Reserves. Approximately 10Mt of Probable Reserves have been derived from Measured Resources, this being the lower seam panels around the Bowmans Creek alluvials. The detailed level of mine planning and ongoing operating experience in these areas provide sufficient confidence in the Modifying Factors to at least pre-feasibility study level of accuracy as defined by the JORC Code.
- The multi-seam nature of the deposit complicates the mining process. The mine layouts adopt an offset strategy, such that gateroads in underlying seams are below the goaf of the immediate seam above. The offset layout strategy is consistent with contemporary practice for extracting from multiple seams. This practice generally allows greater resource recovery than the alternative of stacking longwalls and having the gateroad panel below an overlying goaf results in improved development conditions. The trade-off however is the potential for additional face crush resulting from stress concentration on the longwall face of lower seams. This may negatively impact longwall productivity, increase out-of-seam dilution and increase operating costs.
- Current impacts to alluvial groundwater resources are within the approved predictions and impacts. The previous extraction of LW6b in the Pikes Gully Seam resulted in higher peak inflows than what was estimated in the groundwater modelling. The groundwater model was revised in 2016 and further updated in 2017 and the new model indicated that there are potential compliance risks with extracting the lower seam longwall panels around the Bowmans Creek alluvials. Assessment is ongoing and, in the interim, the longwall panel extraction sequence has been modified such that the first 5 longwall panels in the Upper Lower Liddell Seam will be extracted prior to the final 3 longwall panels in the Upper Liddell Seam being extracted. This permits further time to assess the potential groundwater issue but there remains the risk that some or all of the lower seam longwall panels around the Bowmans Creek alluvials will not be extracted. At a worst case scenario, this could reduce Reserves by 10Mt and Marketable Reserves by 5Mt however RPM considers this a low risk
- The Ashton open cut Reserves are subject to the Company reaching an agreement to purchase land in the SEOC area. The open cut is not scheduled to commence until 2024
- RPM is not aware of any other environmental, legal, marketing, social or government issues which may hinder the economic realisation of the Reserves

Yarrabee

- Coal Reserves that are supported by Measured Resources are classified as Proved Reserves and Coal Reserves supported by Indicated Resources are classified as Probable Reserves. The detailed level of mine planning and ongoing operating experience in these areas provide sufficient confidence in the Modifying Factors to at least pre-feasibility study level of accuracy as defined by the JORC Code.
- Reserves have not been reported in the DOM 6 Pit at Yarrabee due to the structural complexity in this area. This area represents potential Reserves upside.
- Reserves have not been reported for the YES pit as additional planning is required. This area represents potential Reserves upside.

Middlemount

- Coal Reserves that are supported by Measured Resources are classified as Proved Reserves and Coal Reserves supported by Indicated Resources are classified as Probable Reserves. The detailed level of

mine planning and ongoing operating experience in these areas provide sufficient confidence in the Modifying Factors to at least pre-feasibility study level of accuracy as defined by the JORC Code.

- As per the reporting requirements of the JORC Code, the Inferred material within the final pit shells is excluded from the Reserve estimate. RPM notes that within the final pit shell at Middlemount there are minor quantities of Inferred Coal Resources and that the inclusion of this coal would not have an impact on the economic pit limits.
- A re-alignment of a small section of Roper Creek is required to extract the full extent of Reserves at Middlemount.
- Middlemount Coal recently acquired a portion of an adjacent lease which has been incorporated into the mine plan in 2018 and has been included in this estimate. Approvals to enable operation in this area are ongoing, however are expected within the timeframe these areas are planned to be mined.

Austar

- The reporting of Coal Reserves for Austar is based on the assumption that the operations permit will be reinstated following discussions with the regulators. If this permit is not reinstated the currently reported Coal Reserves will need to be revised and an alternative mine design, based on the geotechnical conditions will need to be undertaken. This revised mine plan may impact the economics of the project and as such the ability the mine profitably and the quantities of Coal Reserves reported.
- All coal Reserves that are supported by Measured Resources and Indicated Resources are classified as Probable Reserves. The detailed level of mine planning and ongoing operating experience in these areas provide sufficient confidence in the Modifying Factors to at least pre-feasibility study level of accuracy as defined by the JORC Code.
- From a geotechnical perspective, the most significant issues relate to coal bursts, rib control and periodic weighting. Of these, the coal burst issue is easily the most significant and ongoing investigations are being undertaken to improve the ability of the mine to deal with the issue.
- The depth of cover for the future workings ranges from 450 – 700 m. These depths are high by Australian standards.
- RPM is not aware of any other environmental, legal, marketing, social or government issues which may hinder the economic realisation of the Reserves.

Donaldson

- The mine is sufficiently viable to provide a positive NPV under current cost and revenue assumptions but the NPV magnitude is not significant. As such the economic viability of the mine will be particularly sensitive to changes in costs and coal prices.
- The Hunter Expressway traverses the target area and has formed a subsidence protection zone that will necessitate longwall equipment being relocated from one side of the expressway to the other in each longwall panel, leaving a subsidence protection pillar in between.
- Depth of cover for the Lower Donaldson Seam in the target area varies from 120m to a maximum 520m, with an average of 340m. These values are within the range of depths for Australian underground coal mines and are not considered likely to create any major impediments to mining.
- Measured and Indicated Resources have been classified as Probable Reserves. No Inferred Resources have been converted to Reserves. Approximately 1Mt of Probable Reserves have been derived from Measured Resources.
- Donaldson currently pays significant rail and port Take or Pay penalties. Once the mine becomes operational (assuming favourable economic conditions) it will be necessary for the rail and port contracts to mesh better with the actual mine output, otherwise Take or Pay penalties could impact significantly on project value.
- RPM is not aware of any other environmental, legal, marketing, social or government issues which may hinder the economic realisation of the Reserves.

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Stratford and Duralie

- Coal Reserves are primarily supported by Indicated Resources with only minimal Measured Resources estimated in the deposit. These have been classified as Probable Reserves due to the Measure Resources lying outside currently approved operations and an absence of modelled yield data. The ongoing operating experience in these areas provide sufficient confidence in the Modifying Factors to at least pre-feasibility study level of accuracy as defined by the JORC Code.
- As per the reporting requirements of the JORC Code, the Inferred material within the final pit shells is excluded from the Reserve estimate. RPM notes that within the final pit shells there is a large amount of Inferred coal at the Roseville West Pit that predominantly is sitting below the target seams for Reserves. RPM is of the opinion that the exclusion of this coal will not impact on the Reserves.
- Yields at Stratford and Duralie are based on actual washplant data collected at site on a seam by seam basis.

Overall permitting, approval and native title

See ***Section 15***.

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9. Consolidated Operations Plan

9.1 Current Life of Mine Plans

The production plans for the current Assets prepared by RPM, as shown in ***Table 9-2*** *and* ***Figure 9-1,*** are based on the total mineable economic coal. Specifically, this includes Coal Reserves and Inferred Resource contained within the economic pit and underground limits. Based on the total mineable economic coal, the development sequence, pit and/or underground designs, the forecast mine lives for the operations are shown in ***Table 9-1*** as at 30th June, 2018. RPM considers the proposed Life of Mine Development Sequence and Production Forecast to be reasonable and achievable based on the current mining equipment forecasts and designs. RPM does however recommend that further optimisation and long term planning be completed to confirm and optimise the LOM plan outcomes on an ongoing basis as per normal industry practices. This optimisation should focus of the sequence of development in conjunction with capital and operating cost analysis to maximise the profitability of the each operation in particular the fleet management.

RPM highlights that the production schedules in this report includes Inferred Resources which is excluded from the RPM Coal Reserves presented in ***Section 8*** as required by JORC Code.

Based on the Ore Reserve estimate, Mineable Quantities, the project Development Sequence and the Designs, the forecast mine life's for each operation is shown in ***Table 9-1*** as at 30th June, 2018. RPM considers that the proposed Life of Mine Development Sequence and Production Forecast to be reasonable and achievable based on the current mining equipment and designs. RPM does however recommend further optimisation and short term planning. This optimisation should focus on the sequence of development in conjunction with capital expenditure and short term grade variability to maximise the profitability of the Projects.

Table 9-1 Operations Mine Life Estimates as at 30th June, 2018

Operation	Mine life (Years)
HVO	43
MTW	23
Moolarben	20
Yarrabee	38
Austar	17
Ashton	13
Stratford and Duralie	35
Donaldson	11
Middlemount	20

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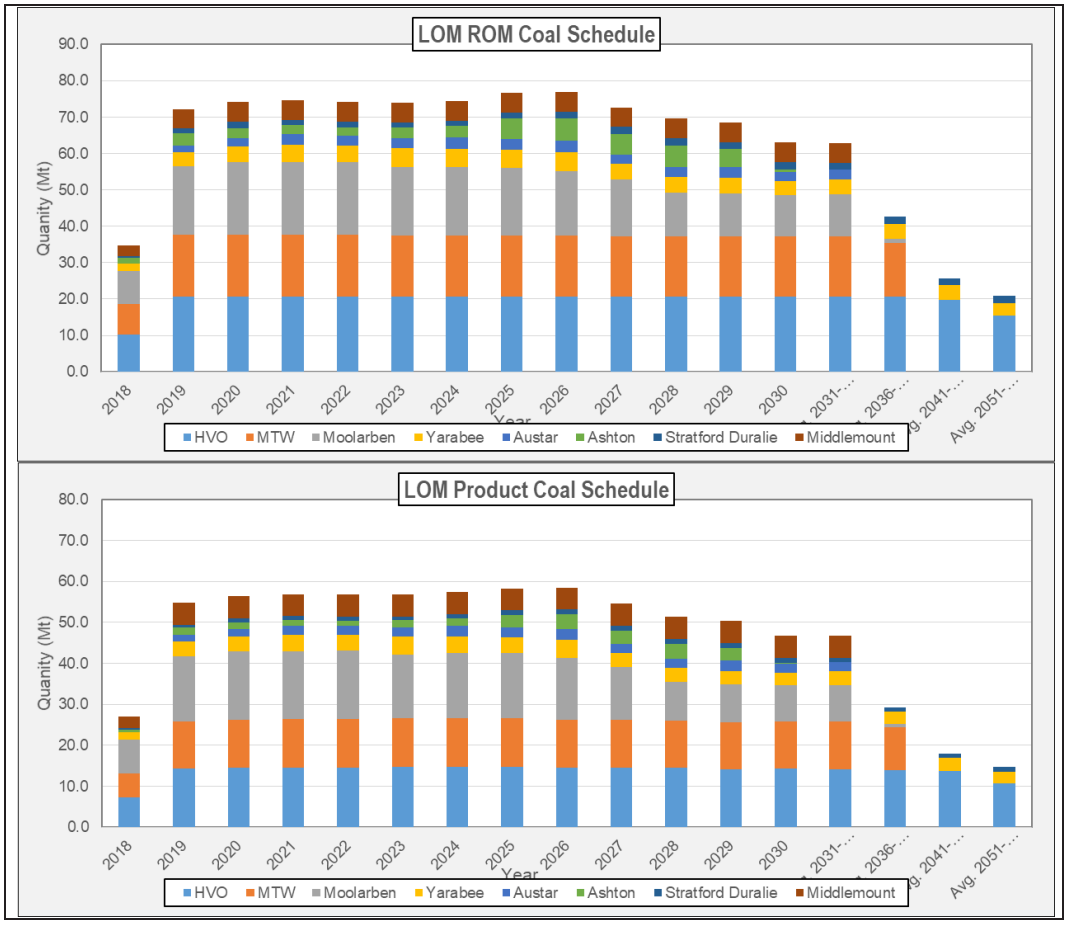
Table 9-2 Operations LOM Plan as at 30th June, 2018

Operation	Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2060	Total LOM
HVO	ROM Coal	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Coal Processed	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Plant Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.9	69.2	69.6
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coal Product	Mt	7.3	14.4	14.5	14.6	14.6	14.7	14.8	14.8	14.6	14.6	14.5	14.2	14.3	14.2	13.9	13.8	10.7	567.4
	Effetive Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.8	69.6	69.6
MTW	ROM Coal	Mt	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			368.1
	Coal Processed	Mt	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			368.1
	Plant Yield	%	69.4	69.4	69.8	69.7	70.0	69.8	69.5	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.6			69.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
	Coal Product	Mt	5.9	11.5	11.8	11.9	11.8	11.9	11.8	11.8	11.7	11.6	11.6	11.4	11.6	11.6	10.4			256.3
	Effetive Yield	%	69.4	67.8	69.4	69.8	69.7	70.0	69.6	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.4			69.7
Moolarben	ROM Coal	Mt	8.9	18.9	20.0	20.0	20.0	18.8	18.7	18.6	17.6	16.5	12.0	11.9	11.3	11.4	1.3			270.6
	Coal Processed	Mt	8.1	13.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	12.0	12.0	11.9	11.3	11.4	1.3			212.7
	Plant Yield	%	71.8	71.1	74.6	72.8	75.4	75.4	76.4	77.1	78.4	78.5	78.4	78.4	78.4	77.8	74.1			76.9
	Coal Bypassed	Mt	2.6	5.9	7.0	7.0	7.0	5.8	6.7	6.6	5.6	3.5								57.9
	Coal Product	Mt	6.1	15.9	16.7	16.5	16.8	15.6	15.9	15.9	15.1	13.0	9.4	9.3	8.8	8.9	0.9			222.3
	Effetive Yield	%	90.8	84.2	83.5	82.3	84.0	83.0	84.9	85.6	85.3	83.4	78.4	78.4	78.4	77.8	70.2			82.1
Yarabee	ROM Coal	Mt	2.1	4.0	4.3	4.8	4.6	5.2	5.1	4.9	5.2	4.2	4.2	4.2	4.0	4.2	4.0	4.0	3.5	147.6
	Coal Processed	Mt	1.1	2.3	3.2	3.6	3.4	3.8	4.1	4.1	4.1	4.1	3.5	3.4	3.5	3.5	3.4	3.4	2.7	120.6
	Plant Yield	%	78.8	85.5	76.9	78.6	76.5	77.4	74.0	74.7	80.4	76.8	76.5	74.1	74.1	73.8	73.4	74.1	75.8	76.1
	Coal Bypassed	Mt	0.9	1.7	1.1	1.2	1.2	1.6	1.0	0.8	1.1	0.7	0.8	0.7	0.6	0.7	0.6	0.5	0.8	26.9
	Coal Product	Mt	1.8	3.1	3.5	4.0	3.8	4.4	4.0	3.9	4.4	3.4	3.4	3.5	3.1	3.3	3.1	3.1	2.9	117.5
	Effetive Yield	%	86.2	91.5	82.0	83.8	82.9	84.4	79.2	78.7	84.4	79.9	79.9	78.2	77.9	77.9	77.1	77.5	82.0	79.6
Austar	ROM Coal	Mt	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6				42.6
	Coal Processed	Mt	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6				42.6
	Plant Yield	%	0.0	86.0	79.0	74.0	70.0	73.0	68.0	70.0	73.0	67.0	73.0	71.0	77.0	73.1				72.9
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
	Coal Product	Mt	0.0	86.0	79.0	74.0	70.0	73.0	68.0	70.0	73.0	67.0	73.0	71.0	77.0	73.1				31.0
	Effetive Yield	%	0.0	86.0	79.0	74.0	70.0	73.0	68.0	70.0	73.0	67.0	73.0	71.0	77.0					72.9
Ashton	ROM Coal	Mt	1.5	3.4	2.9	2.6	2.4	2.8	3.1	5.7	6.2	5.7	5.9	4.8	0.6					47.6
	Coal Processed	Mt	1.5	3.4	2.9	2.6	2.4	2.8	3.1	5.7	6.2	5.7	5.9	4.8	0.6					
	Plant Yield	%	49.1	52.6	54.9	53.5	52.7	59.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1					56.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0
	Coal Product	Mt	0.7	1.8	1.6	1.4	1.3	1.7	1.8	3.1	3.6	3.3	3.5	2.9	0.3					27.0
	Effetive Yield	%	49.1	52.6	54.9	53.5	52.7	59.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1					56.7
Stratford Duralie	ROM Coal	Mt	0.5	1.1	1.7	1.9	1.8	1.3	1.6	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	68.2
	Coal Processed	Mt	0.5	1.1	1.7	1.9	1.8	1.3	1.6	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	68.2
	Plant Yield	%	43.9	56.9	39.4	57.8	58.3	62.4	67.6	64.8	60.1	60.5	60.8	61.4	61.3	61.2	55.3	54.4	36.2	58.4
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coal Product	Mt	0.2	0.6	1.0	1.1	1.0	0.8	1.1	1.3	1.2	1.2	1.2	1.2	1.4	1.2	1.1	1.1	0.7	36.2
	Effetive Yield	%	43.9	56.9	59.4	57.8	58.3	62.4	67.6	64.8	60.1	60.5	60.8	61.4	61.3	61.2	55.3	54.4	36.2	58.4
Middlemount	ROM Coal	Mt	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4				100.4
	Coal Processed	Mt	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4				100.4
	Plant Yield	%	79.7	76.8	78.0	77.0	76.9	77.1	75.8	74.5	74.1	74.1	70.7	74.6	75.9	76.1				75.7
	Coal Bypassed	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
	Coal Product	Mt	2.1	4.1	4.2	4.2	4.2	4.2	4.1	4.0	4.0	4.0	3.8	4.0	4.1	4.1				76.0
	Effetive Yield	%	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	75.9	76.1				75.7
Total	ROM Coal	Mt	34.6	71.9	74.1	75.1	74.4	73.8	74.6	77.0	77.1	72.7	69.6	68.6	63.3	62.9	42.6	25.7	20.9	1,859.9
	Coal Product	Mt	26.2	53.4	55.1	55.6	55.3	55.2	55.7	56.8	56.9	52.8	49.4	48.5	45.5	45.3	29.3	18.0	14.3	1,377.7

Figure 9-1 Graphical Representation of Operations LOM Schedule



RPM highlights that Donaldson is not included in the Operations LOM Schedule as it is currently on care and maintenance pending re-start at the Company's discretion. As outlined in ***Section 8 and 10***, Coal Reserves have been estimated and are included in this Report with detailed studies confirming the economic viability. RPM understands the re-start of Donaldson is dependent on optimal market conditions and performance of the Company's other operations to best fit the asset portfolio and is not dependent on capital or any other technical requirement and demonstrates "Commercial Path to Production". RPM agrees with this approach.

9.2 Upside Opportunities

While the current LOM plans display significant mine lives for each operation, there is potential to further optimise the operation to increase the mine life, bring forward production or realise value through detailed planning. The key opportunities include:

- **HVO/MTW Underground** – High level studies have highlighted the significant potential for an economically viable underground operation. As further outlined in ***Section 16*** this would include multiple areas and could be undertaken in conjunction with the current open pit operations. If undertaken this would increase ROM production by up to 5 to 7Mtpa for each asset and have the added advantage of augmenting take or pay commitments of the groups operation. RPM is aware advanced studies are underway to further evaluate the potential and synergies across the operation.

- **HVO Boundary Coal Pillar**- The current Coal Reserves and LOM plan excludes significant coal within the boundary pillars of the tenement holdings due to the inability of mining across the tenement boundary on the neighbouring tenement (***Figure 9-3***). With the recent Joint Venture Company formed between the Company and Glencore for HVO, this presents the potential for this coal to be exploited via agreement with Glencore. RPM notes that the majority of this coal is within the breakeven strip ratio and would become economic if mining were to occur across the tenement, as such presents significant upside to the current LOM plan. The Company has engaged a third party consultant to estimate the potential boundary coal at HVO. The study indicates that an additional coal tonnage of between 100 and 120Mt could be exploited with extensions of the West, Carrington East, Riverview East and West and Cheshunt Deep pits as shown in ***Figure 9-2***. Detailed integrated planning is required to confirm these tonnages.
- **Blending** – The current LOM plan presented in this Report and the supporting cashflow analysis, assumes no blending occurs either within the operations or between the operations. RPM is aware that the Company has a dedicated marketing department which analyse both short and medium term market conditions to strategically blend the various coal products from each operation to maximise revenue generated. The products generated by the operations are generally high value coal types and blending based on product qualities can realise additional value rather than selling single products from the operations. In addition, as the Company further incorporates HVO/MTW into its operations this blending strategy could be used to further optimise mining operations in both short and medium term planning through careful and meticulous mine plans focusing on:
  - Maximise the exploitation of the in situ resources by potentially increasing pit limits using improved revenue streams and
  - Incorporate the ability to react quickly to market condition by changing the short term mine plan to target seams with specific coal qualities.
- **Moolarben Expansion** –The expansion of the open cut involves optimisations of the approved Stage 1 and Stage 2 operations to increase site ROM coal production to 24Mtpa from the current circa 18Mtpa. The Modification also involves a minor extension to the OC2 pit limit, minor extensions and reductions of the OC3 pit limits, rehabilitation, water management and relocated/additional surface infrastructure. The successful implementation of the Stage 2 expansion plans from 8Mtpa to the forecast at Moolarben demonstrates the Company's ability to achieve organic growth targeting low cost/high margin coal.

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LEGEND

Boundary Pillar Locations

N

0 5km

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

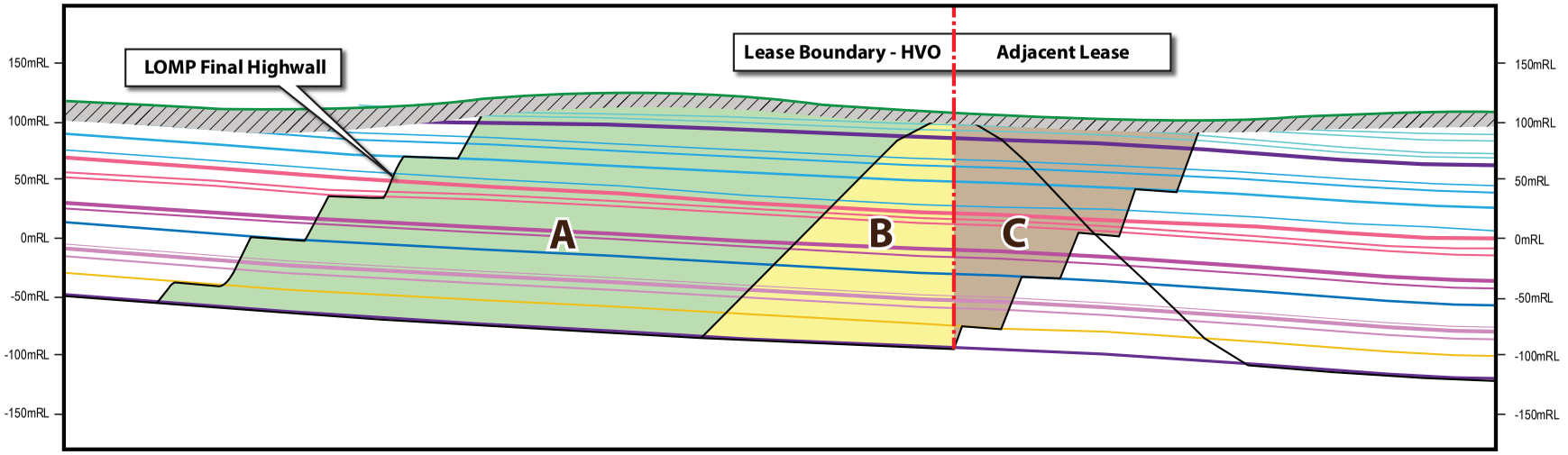
YANCOAL 兖煤澳大利亚有限公司

PROJECT

NAME
COMPETENT PERSON REPORT

DRAWING
HVO BOUNDARY PILLAR LOCATIONS

Figure No.	PROJECT No.	Date
9-2	ADV-BR-11018	November 2018



A	Outside LOMP to lease pillar
B	Lease pillar to vertical boundary
C	Vertical boundary to logical pit/batter. This is from the lease boundary at the final toe of the pit up to the pit crest; this area is the battered final highwall of the pit and mining of this area allows the practical full extraction of coal from the HVO lease areas, including all of the boundary coal.

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DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT: YANCOAL 克煤澳大利亚有限公司

PROJECT
NAME: COMPETENT PERSON REPORT
DRAWING: BOUNDARY PILLAR SECTION

Figure No.	PROJECT No.	Date
9-3	ADV-BR-11019	November 2018

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10. Mining

All mining operations at the Assets are undertaken via conventional truck, shovel, excavator and/or dragline open cut or via underground Longwall mining methods. ROM coal is hauled to Coal Handling Preparation Plants which produce marketable product coal. Subsequent to blending and stockpiling, product coal is loaded onto trains and transported to the Port for sale on the international market.

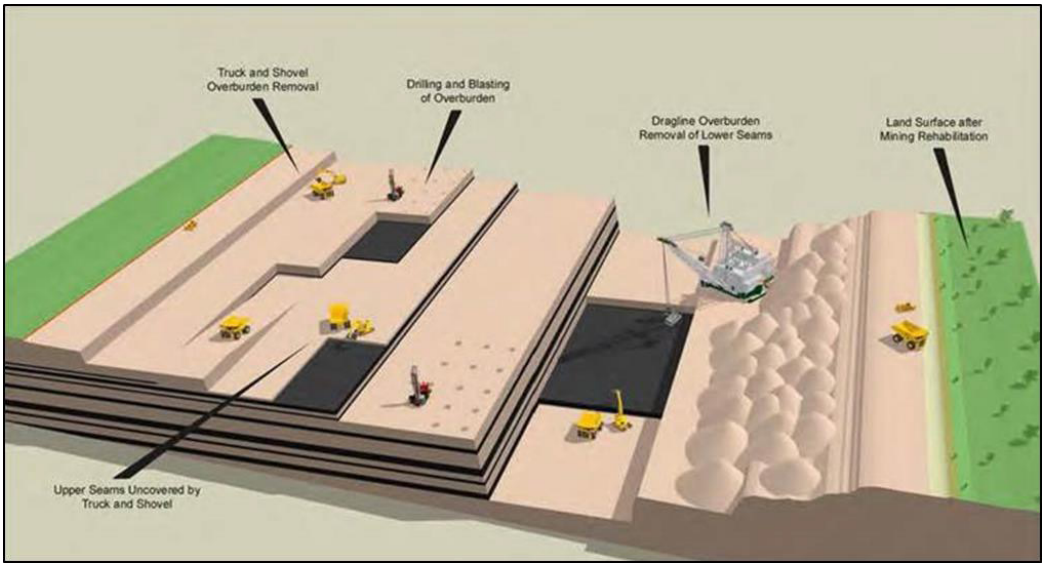
10.1 Mining Method

Open Cut Methods

Coal within the majority of operations occurs as large sub-horizontal bodies which are laterally very extensive. The exception to this is the Stratford and Duralie operation which has steeply dipping coal due to geological structures. The operations utilise large scale open cut mining methods which is summarised below and shown graphically in ***Figure 10-1***.

- Removal and storage of topsoil material via truck and front end loader methods.
- Drilling of a blast pattern.
- Blasting to fragment rock.
- Excavation of waste material with truck and shovel/excavator in the upper benches to uncover coal.
- Excavation of waste material in lower benches by draglines (in certain pits) and
- Digging, loading and hauling of coal via truck and excavator/front end loader methods.

Figure 10-1 Graphical Representation of Open Cut Coal Mining



Some operations utilise additional equipment, when the geological structure permits, that is typically lower in unit operating costs. These include:

- Draglines – usually sit in the lower strata and expose the bottom one or two seams with waste is dumped directly adjacent to the strip of coal being exposed. Draglines are currently operating at HVO and MTW.
- Dozer Push – a single or set of dozers are used to push waste adjacent to the strip being exposed. These can be used with truck and shovel operations and/or a dragline. Moolarben and Middlemount operations currently use dozer push as a primary production method.

The mining direction can also define the mining method. Draglines and dozer push require a strip mining operation where coal is typically mined in long strips, down dip with waste placed in the adjacent strip, usually with large vertical haulage for waste. Haulback, or Terrace Mining, typically mines perpendicular to seam dip with mining progressing along strike. This method may mine deeper coal early in the schedule but also moderates waste haulage which can be placed in the void with minimal vertical haulage.

RPM notes that the open cut mines in this report use the following methods:

Table 10-1 Primary Open Cut Mining Methods

Open Cut Mine	Mining Method	Pre-strip Removal	Additional Waste Removal
HVO	Haulback and Strip mining	Truck and shovel/excavator	Dragline
MTW	Strip mining	Truck and shovel/excavator	Dragline
Moolarben	Haulback mining	Truck and excavator	Dozer Push
Ashton	Haulback and Strip mining	Truck and excavator	
Yarrabee	Strip mining	Truck and excavator	
Stratford and Duralie	Haulback	Truck and excavator	
Middlemount		Truck and excavator	Dozer Push

Underground Methods

As outlined in **Table 10-2**, two underground mining methods are employed within the operation, conventional Longwall and Longwall Top-Coal Caving methods. Both method are well known and understood methods in Australia and are considered conventional mining methods.

Table 10-2 Primary Underground Mining Methods

Underground Mine	Mining Method
Moolarben	Longwall
Ashton	Longwall
Austar	Longwall and Longwall Top Coal Caving
Donaldson	Longwall

Longwall

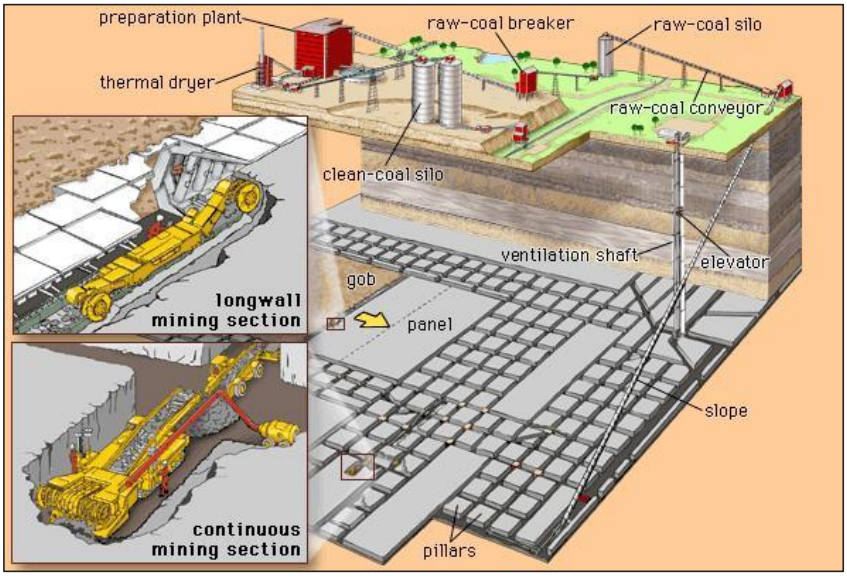
Longwall mining roadways are cut by continuous miners around the perimeter of a rectangular block of coal to form ventilation and access passageways. A longwall shearer is set up at one end of the panel and travels back and forth across the width of the panel, cutting a slice of coal with each pass.

Typically, panels are between 150 metres and 400 metres wide and 1,500 and 5,000 metres long. They are between 2 metres and 5 metres high, dependent on the thickness of the coal seam. The coal is transferred to the surface by conveyors.

The area at the coal face is supported by a series of large hydraulic roof supports. These provide a protective cocoon within which the workers can operate with safety. As each slice of coal is taken, the longwall equipment is advanced. The roof that had been supported by the hydraulic supports subsequently collapses into the void that is created by the removal of the coal seam. The void is referred to as the goaf.

Longwall mining is generally considered to be the safest underground extraction method for coal. It is also superior to other underground mining methods in terms of resource recovery, as well as being more productive and therefore more cost effective. It is however less favourable where the coal seam is affected by geological structures such as faults, rolls, dykes, sills and plugs, or where there are strong inconsistencies in coal quality, seam gradients or seam thickness.

Figure 10-2 Graphical Representation of Longwall Underground Mining



Longwall Top Coal Caving

Longwall Top Coal Caving ("LTCC") is a type of longwall mining applicable to very thick seams (greater than 4.5m) where coal is being left because "conventional" longwall equipment typically cannot mine beyond around 5m mining height. As a result, it generally enables an increased recovery for only an incremental additional cost. The method originated in Europe but has been developed in China in more recent years before being implemented in Australian coal operations.

As shown in ***Figure 10-2***, the lower section of the seam is cut by a conventional longwall set-up except that the longwall supports have a longer rear canopy extending past the base into the goaf. The extended canopies have a sliding door fitted into them. An additional armoured face conveyor ("AFC") is attached to the rear of the chocks and runs directly below the canopy openings.

As the face moves forward, the coal left above the section cut by the shearer falls onto the extended canopies, providing the goaf is caving normally. The sliding doors in the canopies are sequentially opened and the coal falls through onto the rear mounted AFC. The main gate stage loader is extended beyond the face conveyor to enable the rear mounted AFC to discharge coal directly onto it and carry coal to the main gate conveyor system.

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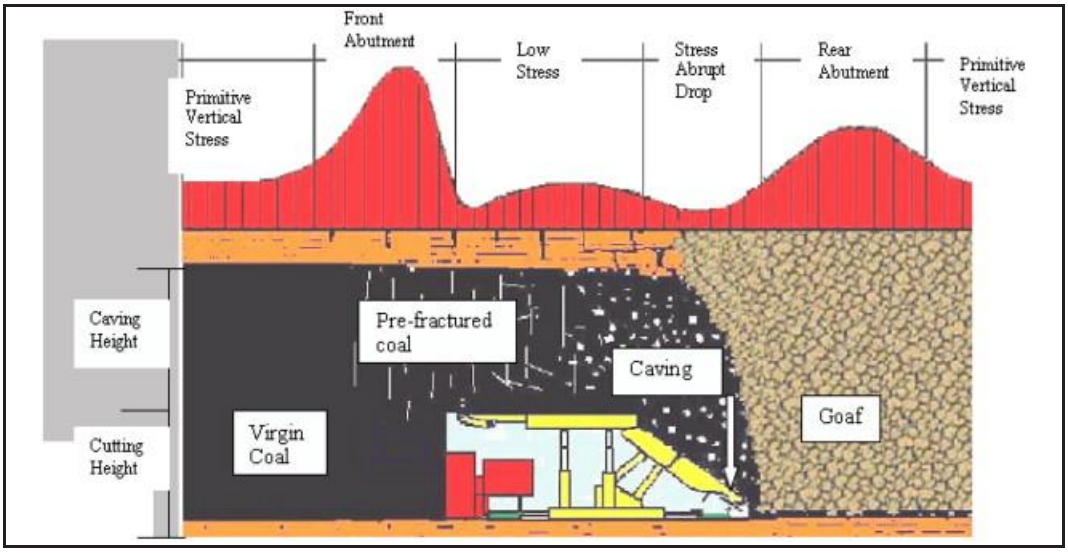
Figure 10-3 Graphical Representation of Longwall Top Coal Caving Underground Mining



10.2 HVO

The HVO site area is approximately 20 km long (North to south) and 10 km wide (Figure 2-2). HVO is divided into HVO North (HVON) and HVO South (HVOS) which are separated by the Hunter River which flows through the HVO leases. There are a number of current active pits and potential future developments at HVO, with the existing operation producing approximately 20Mtpa of run-of-mine coal which results in approximately 14 to 15Mtpa of coal products.

Pit Limits

YAL completed a margin ranking process using XPAC mine planning software which is a process which attributes revenue and costs factors to a set of discreet block data to estimate the incremental and cumulative margin for each coal horizon. The margin ranking results provide an indication of the economic pit limits and also may assist in strategic planning as it allows the relative ranking of pits from high to low margin. The margin ranking was limited to the extents of the pit shells for HVO. The cost assumptions for the margin ranking include:

- Waste removal costs based on budget forecasts with operational improvements to productivity based on YAL benchmarks.
- Drill and blast costs based on YAL cost data.
- All other onsite costs as per the sites budget.
- Offsite costs updated as per YAL expectations.

The outcomes from the margin ranking were analysed and, allowing for cost of capital, a cut off margin of AUD 10.00 per product tonne was selected. Although the margin ranking process is indicative, it provides a good guide for targeting economical reserves for mine planning and scheduling.

The potential basal seams resulting from the margin ranking are outlined in ***Table 10.3***. The basal seam applied in the LOM plan and Reserves reporting is also shown. In some cases the potential economic basal seam may be below the pit design and presents upside for further expansion of the pits.

RPM has reviewed YAL's margin ranking exercise and considers it suitable and has applied these basal seams to the LOM Schedule presented in this Report.

Table 10-3 Margin Rank and Design Seam Floor

Pit	Margin Rank Basal Seam	LOM / Reserve Basal Seam	Comments
West Pit	Barrett	Barrett / Liddell	South of bridge, the pit steps up to Liddell
Wilton Pit	Barrett	Barrett	
Mitchell Pit	Barrett	Barrett	
Carrington West Pit	Bayswater	Bayswater	
Riverview Pits	Warkworth	Warkworth	
Cheshunt Pits	Lower Liddell	Bayswater	Pit limited to Bayswater seam for practical purposes
Southern Pit	Hebden (Lower Barrett)	Lemington	Pit limited to Lemington seam for practical purposes
Auckland Pit	Hebden (Lower Barrett)	Lower Barrett	

In addition to the margin rank, RPM generated a break-even strip ratio to confirm the pit limits. A break-even strip ratio is the ratio of burden (waste) to ROM coal tonnes at which there is AUD0 margin. The cost inputs in the estimation of the break-even stripping ratio were as per those used in the above described margin rank process. The estimated break-even strip ratio for HVO is 17:1. Cumulative strip ratio plots were generated in Geovia Minex software to the appropriate seam floors for each pit area and compared against the break-even strip ratio estimate.

The break-even strip ratio analysis confirmed the results of the margin rank study completed by YAL. RPM also used the break-even strip ratio method to confirm the pit limits at Auckland South and Carrington East which were not included in the margin ranking as they were not included in the previous works completed by the YAL.

The pit limits are shown in ***Appendix C***.

Mine Design

Seismic hazard studies were not included in the documents available. However, the region is classified as a low seismicity area and seismic hazard is not a critical design consideration. RPM considers the geotechnical parameters applied to Assets pit designs are suitable and reasonable for the rock types identified.

The slope criteria adopted in the LOM plan for HVO are shown in the ***Table 10-4***. RPM notes that in some sections of wall the overall slope design may vary depending on the depth and the number of berms in the wall design.

Table 10-4 HVO Pit Design Slopes

Pit	North	East	South	West
West	30	38	30	N/A
Riverview	N/A	N/A	50	37
Cheshunt 1&2	40	N/A	45	45
Cheshunt Deep	40	40	40	40
Carrington West	40	45	44	38
Wilton/Mitchell	40	39	30	17-27
Southern	37-40	22	37-40	37
Auckland	35	35	35	35
Auckland South	37	31-37	37	37
Carrington East	47	45	55	45

Coal is planned to be mined from up to 10 separate pits over the life of the mine. Mine designs are generally based on those generated by the Company however have been reviewed by RPM and considered reasonable. RPM notes the following with regards to mine design:

- Some geotechnical issues have had an impact on design such as mining through alluvial land or in proximity to underground workings, however these have not had a significant impact on the operation,
- In the current pits, bedding is inclined in the direction of the highwall and major faulting generally trends perpendicular to the highwall.
- The weakest strata on site is the alluvial material, which requires significant geotechnical and hydrogeological study to confirm impact on pit design and stability.
- The ongoing design criteria used at the site includes input from:
- Regular geotechnical inspections, reviews and design advice from external geotechnical consultants throughout the entire period of mining operations; and
- Inspections and back analysis of any wall failures to demonstrate causes of failure with preventative measures being incorporated back into wall design.

At HVON the current active mining area is the West pit, however there has been recent mining in the Wilton and Carrington pits. West pit is a dragline pit whereas the Wilton and Carrington pits are planned to be mined via truck and shovel methods only. The West pit targets a Barrett seam floor. Coal seams from the Barrett seam at the bottom of the pit up to the Lemington seam are found in the West pit area with the upper seams more developed as the pit progresses down dip to the southeast.

A centre bridge system is used by the dragline at West pit to gain access into each successive cut. The coal beneath the centre bridge is not recovered with a low-wall ramp system used to gain access to the Liddell and Barrett coal seams at West pit. The pre-strip operations are undertaken by electric rope shovels and large hydraulic excavators loading rear dump trucks. Pre-strip waste is placed into the inpit dumps with coal mined by front end loaders and hydraulic excavators hauled to either of the CHPP's.

Within HVOS, there are two currently operating pit areas; Cheshunt 1 and 2 and Riverview. Riverview pit is located to the west of the Cheshunt pits on the western limit of the HVO lease boundary and has planned to pit limits of approximately 1.2 km wide (west to east) and 1 km north to south. Riverview is a dragline operation with truck and shovel pre-strip with the pit advancing to the south. In the north, the basal seam of the pit was the Warkworth seam (area mined out), with the central area of the pit the Warkworth seam splits away from the Bowfield seam and the floor of the pit is stepped up to a Bowfield floor.

Coal from the Riverview pit is mined by front end loaders and hauled to either CHPP. The in-pit spoil from the Riverview pit will ultimately be rehandled as part of the Cheshunt Deep pit which will target the Bayswater seam beneath the current Riverview pit.

Cheshunt 1 and 2 pits are adjoining mining areas located at the northern end of the HVOS area. The pits are mined by truck and shovel methods with waste being hauled to out of pit / inpit dumps to the north east of the pits either via the eastern endwall or cross pit access between the Cheshunt 1 and Cheshunt 2 pits. A ramp system up the advancing waste dump has been developed which provides access to a number of active dump tip heads. The combined length of operating face at the two pits is approximately 3 km. The pits are developed to the south and southwest and are a subset of the Cheshunt Deep pit extension which is planned in later years of the mine life. Coal seams from the Warkworth seam down to the Barrett seam are identified in the area, however the Cheshunt 1 and 2 pits mine down to the Bayswater seam floor only.

A third party dump study carried out on the 2017 LOM plan identified the following point:

- At the Auckland pit there was a significant shortfall in dump capacity when using the HVO's dump shell limit of 140 mRL. Accordingly, the planned dump height has been increased to 180 mRL to allow a spoil balance to be achieved. RPM highlights there is sufficient time to review and improve the mine plan at Auckland as the pit is not scheduled to commence until 2052.

RPM considers the HVO waste dump designs and strategy to be adequate to support the Life of Mine Production Schedules. Opportunities may exist to optimise waste handling and storage through detailed reviews of mine designs and scheduling.

Mine Schedule

The HVO LOM schedule was developed targeting a ROM coal production rate of 20.6Mtpa from a number of active mining areas at the site. West Pit, due for completion in 2034, is currently mined using a combination of

truck and shovel for pre-strip operations and a dragline uncovering the lower coal seams, has a target of 4.5Mt ROM Coal per annum. At the completion of this pit the dragline will be retired from use at the mine. Riverview Pit is currently being mined by truck/excavator and dragline method. The Riverview Pit is mined to the Warkworth Seam with spoil placed into the mined out void. Following completion of the Riverview Pit in 2024 the dragline will be retired. The in-pit spoil at Riverview will also be re-handled as part of the larger Cheshunt Deep it which targets the deeper seams. The Cheshunt 1 & 2 Pits are adjacent active truck and shovel pits and are a subset of the larger Cheshunt Deep Pit. The Cheshunt 1 & 2 Pits are forecast to mine up to 14.7Mtpa and will be completed in 2023 following transition into the Cheshunt Deep Pit.

The future pits at HVO are the Cheshunt Deep Pit, Southern, Auckland, Carrington East and Auckland South Pits. The Cheshunt Deep Pit is scheduled to be completed in 2041 at which time the Southern, Carrington East and Auckland South Pits will be developed to maintain the total site production rate of approximately 20Mtpa. As these pits are depleted, the Auckland pit will be developed in 2052 with the operation transitioning to a lower production rate of 10Mtpa before completion in 2060.

The HVO schedule results, which RPM consider to be practical and achievable, are presented in ***Table 10-5.***

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Table 10-5 HVO/MTW LOM Production Schedule

Operation	Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2060	Total LOM
HVO	Mining																			
	ROM Coal	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Prime Waste Mined	Mbcm	50.1	87.6	97.4	113.5	121.5	99.5	131.2	140.6	144.2	118.0	120.4	122.7	102.1	114.7	108.5	118.0	88.9	4,604.1
	Rehandle Waste	Mbcm	6.1	10.0	11.2	11.7	11.3	11.3	11.1	8.7	8.2	8.0	7.9	7.8	7.2	5.7	2.2	2.4	1.8	201.2
	Total Waste mined	Mbcm	56.3	97.6	108.6	125.2	132.7	110.8	142.3	149.3	122.5	126.0	128.3	130.5	109.3	120.4	110.7	120.4	90.7	4,805.3
	Prime Strip Ratio	bcm/ROM t	4.9	4.3	4.7	5.5	5.9	4.8	6.4	6.8	5.5	5.7	5.8	6.0	5.0	5.6	5.3	6.0	5.8	5.6
	Total Strip Ratio	bcm/ROM t	5.5	4.7	5.3	6.1	6.4	5.4	6.9	7.2	5.9	6.1	6.2	6.3	5.3	5.8	5.4	6.1	5.9	5.9
	CHPP																			
	Coal Processed	Mt	10.2	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	19.8	15.4	814.9
	Plant Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.9	69.2	69.6
	Bypass Coal	Mt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coal Product	Mt	7.3	14.4	14.5	14.6	14.6	14.7	14.8	14.8	14.6	14.6	14.5	14.2	14.3	14.2	13.9	13.8	10.7	567.4
	Effective Yield	%	71.3	69.9	70.3	70.6	70.7	71.4	71.8	71.7	70.7	71.0	70.3	68.7	69.2	69.1	67.5	69.8	69.6	69.6
	Product Type																			
	Semi Soft Coking	Mt	1.2	4.5	4.6	4.9	4.2	4.1	4.0	4.2	3.7	3.4	2.7	2.7	3.2	3.0	2.6	3.2	2.0	127.3
	Thermal (low ash)	Mt	2.7	4.4	4.4	4.3	4.7	4.9	5.0	4.9	5.1	5.3	5.6	5.5	5.3	5.6	5.8	5.7	4.7	222.2
	Thermal (Mid ash)	Mt	3.1	5.0	4.9	4.7	5.0	5.1	5.1	4.9	5.0	5.1	5.2	5.0	4.8	4.6	4.3	3.6	2.9	173.4
	Thermal (high ash)	Mt	0.3	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.2	1.3	1.1	44.4
MTW	Mining																			
	ROM Coal	Mt	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			368.1
	Prime Waste Mined	Mbcm	51.1	88.5	101.8	105.1	105.8	101.7	102.2	104.4	104.2	102.7	103.1	99.1	95.7	97.2	90.3			2,203.3
	Rehandle Waste	Mbcm	8.0	13.0	16.0	15.4	14.0	13.8	13.8	14.3	14.9	15.0	15.0	15.1	13.9	15.8	13.0			326.3
	Total Waste mined	Mbcm	59.1	101.6	117.7	120.5	119.8	115.5	116.1	118.7	119.1	117.7	118.1	114.2	109.6	113.0	103.4			2,529.6
	Prime Strip Ratio	bcm/ROM t	6.0	5.2	6.0	6.2	6.2	6.0	6.0	6.2	6.2	6.1	6.2	6.0	5.8	5.8	6.1			6.0
	Total Strip Ratio	bcm/ROM t	6.9	6.0	6.9	7.1	7.1	6.8	6.9	7.0	7.1	7.0	7.1	6.9	6.6	6.8	7.0			6.9
	CHPP																			
	Coal Processed	Mt	8.5	17.0	17.0	17.0	17.0	17.0	16.9	16.9	16.9	16.7	16.7	16.6	16.6	16.7	14.8			368.1
	Plant Yield	%	69.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.6			69.7
	Bypass Coal																			
	Coal Product	Mt	5.9	11.5	11.8	11.9	11.8	11.9	11.8	11.8	11.7	11.6	11.6	11.4	11.6	11.6	10.4			256.5
	Effective Yield	%	69.4	67.8	69.4	69.8	69.7	70.0	69.8	69.6	69.5	69.3	69.5	69.1	69.4	69.8	70.4			69.7
	Product Type																			
	Semi Soft Coking	Mt	1.0	2.2	3.0	2.3	2.5	2.7	2.2	2.1	2.3	2.4	2.4	2.4	2.3	3.0	2.7			58.2
	Thermal (low ash)	Mt	2.7	5.2	4.9	5.4	5.3	5.2	5.4	5.5	5.4	5.3	5.3	5.2	5.4	5.1	4.6			114.4
	Thermal (Mid ash)	Mt	1.4	2.7	2.5	2.7	2.6	2.6	2.6	2.6	2.5	2.5	2.4	2.4	2.4	2.2	1.8			51.9
	Thermal (high ash)	Mt	0.7	1.4	1.4	1.5	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.3			32.1

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10.3 MTW

Pit Limits

The MTW pit had a margin ranking process carried out by the YAL. RPM has reviewed YAL's margin ranking exercise and considers it suitable for the estimation of pit limits and has applied basal seams as per **Table 10-6** to the LOM Schedule presented in this Report.

Table 10-6 MTW Margin Rank and Design Seam Floor

Pit	Margin Rank Basal Seam	LOM / Reserve Basal Seam	Comments
Loders Pit	Woodland Hill	Woodland Hill	
West Pit	Mount Arthur	Mount Arthur	
North Pit	Mount Arthur	Warkworth	the Company currently mine to Warkworth Seam

RPM generated a break-even strip ratio to confirm the pit limits. The estimated break even strip ratio for MTW is 16:1 bcm:t.

The Pit limits are shown in ***Appendix C***.

Mine Design

There are currently three operational pits at MTW:

- Loders pit,
- West pit and
- North pit.

Coal is planned to be mined from up to three different pits of which Loders will be completed in 2019. The Company advised RPM that the final highwall overall design slope for the North, West and Loders pit is 55º and the end walls (northern and southern walls) vary between 25° and 35º for operational reasons. In all pits the overall slopes may vary depending on the depth of the pits, the number of benches and the number of required access roads.

RPM has reviewed the current mine plans for the pits that are scheduled to be mined over the life of the project and considers that the pit limits were designed with suitable level of detail taking into account the recommended geotechnical and mining operation parameters.

The strategy used for waste haulage and dumping at MTW can be described by the following rules:

- Loders Pit (Mt Thorley) waste is hauled in pit to Mt Thorley dumps (2018 only),
- Loders pit void will be primarily used as a tailings dam. Some waste will also be placed in the void late in the LOM Plan'
- West Pit waste is hauled to the following dumps in order of preference:
- West Pit in-pit dumps,
- South out of pit Dumps (2018 to 2028 after which South out of pit Dump is full)
- West out of pit dump (2028 to 2038 after which West out of pit dump is full) and
- Loders Pit final void (2038 to 2040),
- North Pit waste is hauled to the following dumps in order of preference:
- North Pit in-pit dumps,
- North Pit out of pit dump (2018 to 2022 after which North out of pit dump is full),
- West Pit final out of pit dump (2022 to 2038 after which West out of pit dump is full) and

- Loders Pit final void (2038 to 2040).

At MTW, waste generally fits within the approved dump limits with the one exception being where the dump over the Loders pit area will need to increase by 5m above the approved dump height of 155 mRL. The additional volume is estimated to be 2.5 Mbcm and is not considered by RPM to be a material issue.

Mine Schedule

In the MTW LOM schedule, the Loders Pit is planned to cease in 2019 leaving the West and North Pits to support production. YAL plans to retire the dragline that was operational at Mt Thorley and modify the dragline operating method in the West and North Pits to a tandem offset dragline method which will commence in 2019. The reduction from three operating dragline pits to two will require a change in the dragline operating method to maintain the required production rates, as a result YAL have completed detailed investigation of the revised dragline operating method. The features of the dragline offset method include:

- Operating two draglines in the same pit;
- Increasing the strip width from 55m to 80 m;
- Allows two coal seam horizons to be exposed at the same time;
- Two pass operation in the West Pit, one pass operation in North Pit;
- Spoil pullback pass in West Pit to achieve a spoil balance and
- 30 day delay for both draglines at the end of each strip to allow for de-coaling operations to take place and preparation of the next strip for dragline operation.

The West and North Pits will continue to develop down dip towards the west of the licence area and have a combined production target of approximately 17Mtpa. The ROM coal production from each pit is variable as it depends on the proportion of time the draglines are operating in each pit for any given year. North Pit ceases production in 2040 and West Pit is completed in 2036.

As the North and West Pits near their western limits the proportion of Inferred coal increases. This presents significant upside for future Reserves if successful drilling results in upgrade of the resource classification. The LOM plan schedule results are presented in ***Table 10-5***.

10.4 Moolarben

Mining operations at Moolarben are undertaken via underground longwall mining and conventional large scale open cut methods using owner operator equipment. Open cut ROM coal is hauled to a Coal Handling Preparation Plant and the underground coal is bypassed, all of which produces a marketable thermal product coal. Product coal is loaded onto trains and transported to the Port of Newcastle for sale on the international market.

Pit Limits

Open Cut

The open cut mine targets the Ulan seam with plies mined together as working sections. Some plies, such as the A2 and the top 200mm of the CL ply are wasted to improve product quality. These adjustments to mining have improved yield outputs which have been included in this estimation.

RPM has determined suitable technical parameters including costs, recoveries to apply in the Coal Reserve estimation process following; discussions with site personnel, review of pre-feasibility level documents, proposed life of mine plans, mining method, tailings dam capacity and the forecast processing plant recoveries for the areas of the Assets where Measured and Indicated Resources have been estimated. RPM notes that the sites are currently operating and that at least pre-feasibly study level documents were available for expansion areas, which formed the basis for the selected parameters.

The following parameters (***Table 10.7***) have been used for the Coal Reserve estimate and reporting at Moolarben:

- Variable metallurgical recoveries (yield) dependent on the ROM coal quality were utilised in the study and are based on the laboratory testing of slim core data. Adjustments are made to allow for inefficiencies of a coal preparation plant when compared to laboratory test work. The factors applied are 93% yield factor and a 1.4% increase in the product ash (reported product ash = laboratory Ash + 1.4%).
- Thermal products are based on the resultant thermal ash which typically ranges from 14.5% to 28% ash products.
- Mining and processing operating costs utilised in the margin ranking and break-even were based on actual operating cost data and forecast performance of the operations as per YAL's life of mine planning process. These costs are based on various expected volumes, plant maintenance and cost estimates over the life of the project. All mining is undertaken by the owner, as such the input costs reflect this with separate operating costs and capital costs for mobile equipment.
- In situ coal estimates have been converted to Run of Mine estimates through the application of Modifying Factors which are outlined in **Table 10-7**. In addition a minimum thickness cut off of 0.3m is applied to the A1 ply and ELW which also has a 55% raw ash cut off. The recoveries are based on reconciliation of site data.

Table 10-7 Moolarben OC Yields

	OC1	OC2	OC3	OC4
A1 Recovery	55%	55%		55%
A1 Ash Addition	13%	13%		13%
ELW Recovery				90%
WS1L Recovery	98%	98%	93%	97%
WS2L Recovery	98%	98%	95%	98%
WS1L Total Moisture	6.1	6.5	6.5	6.1
WS2L Total Moisture	7.5	8.3	8.3	7.5
WS1L Dilution	-0.90%	-0.90%	-0.90%	-0.90%
WS2L Dilution	1.40%	1.40%	1.40%	1.40%

Long term forecast prices were utilised for the economic modelling to underpin reporting of Coal Reserves. The prices for margin ranking and reporting of Coal Reserves are at the point of sale of the products (free of board). The long term forecasts were sourced from third party reports completed by marketing experts provided to the YAL along with discussions with YAL personnel. YAL updates long term pricing forecasts on a 6 monthly basis. RPM is not a commodity forecasting specialist and has relied on third parties for price assumption. As per the JORC Code reporting requirements, RPM has completed independent reviews based on public and internal pricing information and considers the price assumption to be reasonable.

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Table 10-8 Moolarben Open Cut Break Even Strip Ratio Input Parameters

Description	Units	Moolarben
Prices		
SSCC	USD /tonne	-
Thermal	USD /tonne	66 – 88
Exchange Rate	AUD/USD	0.75
Average Mining Costs		
Coal Mining	AUD /tonne	1.70
Waste Mining	AUD /bcm	2.70
Site Overheads		
Processing	AUD /t ROM	5.30
Administration	AUD /t Prod	4.09
Offsite Costs		
Rail	AUD/t Prod	8.45
Port	AUD/t Prod	5.14
Other Offsite Costs	AUD/t Prod	1.68
Average Yield		
CHPP	%	77
Bypass[4]	%	UG Only

Notes:
1. *Coal Prices in USD*
2. *Thermal coal price varies for Mid and High ash products*
3. *All costs in Australian Dollars*
4. *Currently no bypass assumed for the open cut at Moolarben*

The pit limits are shown in ***Appendix C***.

Underground

The target underground mining areas are the deeper areas of the resource, generally located beneath natural ridgelines that are unfavourable to mine via open cut methods. The underground mining strategy is to continue a single longwall operation, sequentially working through the underground resource areas. As per standard practice, the longwall is supported by development activity which currently utilises continuous miners. Development activity proceeds ahead of the longwall and as such there will be points in the mining schedule when two mining areas are operating simultaneously, as development progresses into UG4 while the longwall completes UG1.

There are currently three approved underground mining areas (UG1, UG2 and UG4) although as shown on ***Figure 10-4***, only UG1 and UG4 are included in the LOM plan. UG2, which lies between OC2 and OC4, is relatively small and considered a less attractive target than the other two underground targets. Additional resource areas (UG3, UG5, UG6 and UG7) as shown on ***Figure 10-5***, are considered for underground extraction but exploration and study for these areas have yet to reach a sufficient level of maturity to be included in the plan.

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Figure 10-4 Moolarben underground mining areas

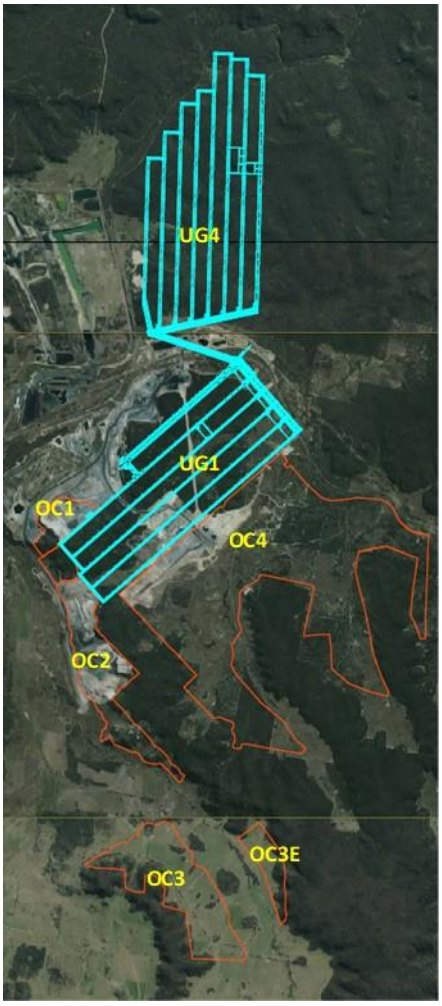
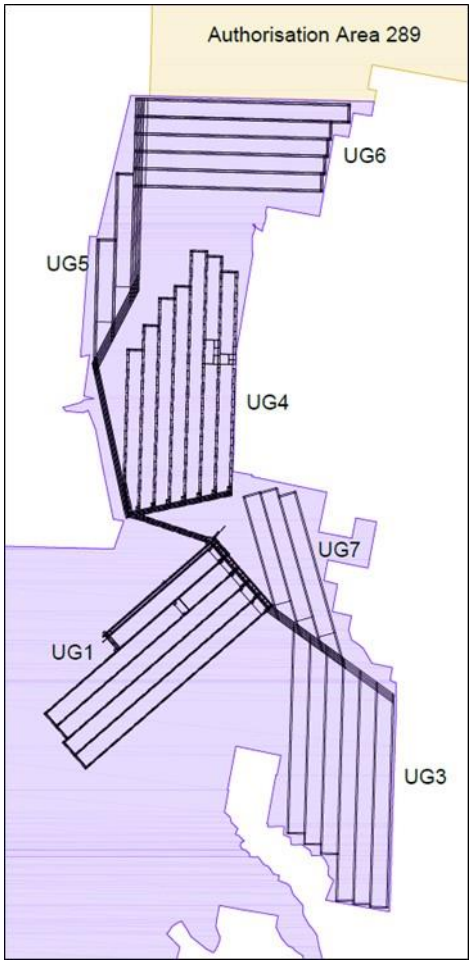


Figure 10-5 UG pipeline projects



Mine Design

Open Cut

The open cut operations consist of five pits labelled OC1, OC2, OC3, OC3E and OC4. Mine designs are based on the 2017 LOM plan generated by Yancoal however have been reviewed by RPM and considered reasonable. RPM note that Reserves are reported for all pits with the exception of OC3E Pit. Pit designs are based on a 75° pre-split wall or 70° trimmed wall with a 45° batter through weathered material. A 12m – 15m berm is placed at the base of the weathering and at required intervals to avoid batters greater than 45m in height. Strip widths vary from 50m to 100m to suit dozer push and excavators respectively.

Information provided by YAL notes the following with regards to pit design:

- An in situ barrier of coal has been left between OC1 and UG1 pits,
- Factors such as 1 in 100 year flood extents, economic limits, adjacent mining operations, geological features, approval limits, coal crops, watercourses and infrastructure define the pit boundaries and
- Extensions to OC3 to the south are under investigation, as such are not included in Coal Reserves.

Waste will be placed as per the approved final rehabilitation surface. RPM have not reviewed this surface but due to the very low stripping ratio in the LOM plan, spoil fit is not seen as a potential issue in the Moolarben mine plan. Dump planning needs to be carried out to ensure the site maintains a minimal noise and dust pollution output.

Both waste and coal mining will be completed using hydraulic excavators in both backhoe and shovel configuration dumping into rear dump trucks. OC4 will have the assistance of a dozer push fleet that has recently been introduced. RPM view this equipment as appropriate for the operations at Moolarben.

Underground

Underground development is undertaken using conventional development equipment. Single-pass bolter-miners (continuous miners) are used in development sections, with shuttle cars used to transport coal to the coal clearance system. The coal extraction methodology has been based on the use of standard Australian continuous miner practices for development and retreat longwall practices for production.

Development in UG1 and UG4 is performed by a combination of conventional development and super unit configurations. Conventional development units consist of one continuous miner and up to two shuttle cars in a panel alternately advancing each roadway and completing a pillar cycle. Super units consist of two continuous miners and two shuttlecars in a panel, with a continuous miner in each roadway to increase the rate of advance of the panel.

Longwall extraction is undertaken using a CAT longwall system applying the Bi-Di method of cutting through use of a twin ranging arm shearer cutting a conventional mining section with a 1m web. Automation technology is being used on the face to ensure face alignment and correct horizons are mined, to support efficient and productive operations.

Long / wide panels with modern longwall equipment, incorporating automation technology provides the potential for highly productive and reliable operations. Although these dimensions are in line with other highly productive longwall operations, they are within current experience levels with the longest panels up to 6 km in length and the widest, up to 400 m. The dimensions are largely constrained by the geometry of the resource and are unlikely to be increased.

UG1 and UG4 are at low to moderate depths of cover, as such stress conditions will be more favourable than experienced at deeper operations. RPM understands that there are no major issues with the strength or competence of the roof and floor.

Exploration has determined that seam gas content is low to negligible across the planned mining domains. Practical ventilation rates are expected to be sufficient for seam gas management by dilution of the atmosphere.

UG1

In UG1 longwall mining will extract the combined D working section (DWS) and DTOP plies of the Ulan Seam with up to 3.4m (3.0m to 3.4m) of the seam to be recovered. Longwall panels will range from 2.4 km to 4.6 km in length and will be 300m wide. The panels have been laid out in a southwest to northeast orientation with an extraction sequence of sequentially mining panels from north to south (towards OC4). Within each panel the longwall will retreat from the southwest (inbye) end to the main headings along the north-eastern boundary. The longwall is currently operating in the first panel (short) panel on the northern side. Both development and longwall operations are currently operating to plan and underground conditions have been favourable as are expected.

Igneous plugs (diatremes) which are expected to impact on production and quality have been identified in UG1 in panel 2 and panel 3. The longwall has been planned to "step around" i.e. not mine, the diatreme in panel 2 but schedules still show full mining through the igneous feature on the inbye end of panel 3. It is expected that the decision on how to mine the inbye end of Panel 3 will be made when more information has been made available as per typical grade control practices.

Although the face width reduces from 300m in UG1 to 250m in UG4, it is relatively straight forward to modify the face equipment for the shorter panel length and there would be no requirement for a major additional capital purchase to affect the transition.

UG4

Expansion into the UG4 mining area will occur once development of UG1 is completed. Due to changes in coal quality, longwall mining in UG4 will extract the DWS seam only with up to 3.0m (2.8m to 3.0m) mining height. Longwall panels will range from 2.4 km to 4.7 km in length and will be 250m wide. The subsidence criteria set out in the Stage 1 approval for UG4 has resulted in retaining a narrower panel width. The panels in UG4 based on YAL's plan will be oriented generally north to south.

Panel layout is impacted by the location of "The Drip" on the Goulburn River (a surface featured waterfall sourced from groundwater). The mine is further bounded by Ulan Road, Goulburn River National Park and the old Goulburn River Valley palaeochannel. In particular the significance of "The Drip" has resulted in a 500m standoff being required from the Goulburn River so that there are no subsidence impacts.

Additionally, several archaeological sites are located above the workings. The approved design accounts for their locations, including the use of a mini-wall to negotiate a cliff line.

Access

The underground access is via portals in the OC1 highwall which has been left open for this purpose. By using an existing highwall the project was able to avoid the significant capital cost of driving inclined drifts from the surface down to the seam. Travelling roads and coal conveying routes have been established between the portal area and the CHPP to provide mine access for personnel, equipment and materials and to clear coal from the mine.

The portals enter the underground at the western corner of the first underground panel in UG1. Access to the main headings is via a double-entry drive running in a north-easterly direction parallel to the first panel. The access roads connect with the UG1 main headings at the northern tip of the layout, which is also the point from which an underground connection to UG4 will be driven. This will be a key junction for the underground operations for both UG1 and UG4 and depending on mine design may remain the central point for all underground operations going forward.

Mine Schedule

Margin ranking has been used to direct the mining sequence and specifically cash rate. The key drivers to this are coal quality, stripping ratio and haulage distance to the CHPP. The strategy takes the low ratio coal from OC2 and OC3 first. OC3E contains a low ratio coal that is used to balance the strip ratio early in the schedule. The high ratio coal in OC 4 is the last to be mined with progression on two faces simultaneously.

The production schedule as per the 2017 LOM plan are shown in **Table 10-9**.

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Table 10-9 Moolarben Quantity Schedule Summary

Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	2036	Total LOM
Total ROM Coal	**Mt**	**8.9**	**18.9**	**20.0**	**20.0**	**20.0**	**18.8**	**18.7**	**18.6**	**17.6**	**15.5**	**12.0**	**11.9**	**11.3**	**11.4**	**1.3**	**270.6**
OC Mining																	
ROM Coal	**Mt**	6.1	13.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	12.0	12.0	11.9	11.3	11.4	1.3	**212.7**
Prime Waste Mined	**Mbcm**	20.2	43.2	42.5	48.7	48.1	37.1	51.6	52.9	49.6	47.8	50.4	49.3	49.5	52.6	1.1	**854.8**
Rehandle Waste	**Mbcm**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Total Waste mined	**Mbcm**	20.2	43.2	42.5	48.7	48.1	37.1	51.6	52.9	49.6	47.8	50.4	49.3	49.5	52.6	1.1	**854.8**
Prime Strip Ratio	**bcm/ROM t**	3.3	3.3	3.3	3.7	3.7	2.9	4.3	4.4	4.1	4.0	4.2	4.1	4.4	4.6	0.9	**4.0**
Total Strip Ratio	**bcm/ROM t**	3.3	3.3	3.3	3.7	3.7	2.9	4.3	4.4	4.1	4.0	4.2	4.1	4.4	4.6	0.9	**4.0**
UG Mining																	
UG ROM Coal	**Mt**	2.8	5.9	7.0	7.0	7.0	5.8	6.7	6.6	5.6	3.5						**57.9**
UG Development	**Mt**	0.3	0.6	0.5	0.5	0.5	0.5	0.4	0.3	0.1							**3.8**
UG Longwall	**Mt**	2.5	5.3	6.5	6.5	6.4	5.3	6.3	6.2	5.6	3.5						**54.1**
Development	**km**	11.6	21.0	19.7	19.9	20.8	19.4	16.4	13.3	3.1							**145.2**
CHPP																	
Coal Processed	**Mt**	6.1	13.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	12.0	12.0	11.9	11.3	11.4	1.3	**212.7**
Plant Yield	**%**	71.8	77.1	74.6	72.8	75.4	75.4	76.4	77.7	78.4	78.5	78.4	78.4	78.4	77.8	74.1	**76.9**
Plant Product	**Mt**	4.4	10.0	9.7	9.5	9.8	9.8	9.2	9.3	9.4	9.4	9.4	9.3	8.8	8.9	0.9	**163.5**
Bypass (UG only)	**Mt**	2.8	5.9	7.0	7.0	7.0	5.8	6.7	6.6	5.6	3.5						**57.9**
Coal Product		7.2	15.9	16.7	16.5	16.8	15.6	15.9	15.9	15.1	13.0	9.4	9.3	8.8	8.9	0.9	**221.4**
Effective Yield	**%**	80.6	84.2	83.5	82.3	84.0	83.0	84.9	85.6	85.3	83.4	78.4	78.4	78.4	77.8	74.1	**81.8**
Product Type																	
14.5% Ash @ 6,040 NAR	**Mt**	2.8	5.9	7.0	7.0	7.0	5.8	6.7	6.6	5.6	3.5						**57.9**
17.0% Ash @ 5,850 NAR	**Mt**	3.1	5.7	5.1	5.2	5.0	5.2	5.0	5.2	5.2	5.2	5.2	5.0	4.8	4.9	0.4	**89.5**
28.0% Ash @ 5,200 NAR	**Mt**	1.9	4.0	4.2	3.8	4.3	4.1	3.6	3.6	3.7	3.6	3.6	3.7	3.4	3.5	0.5	**65.8**
23.0% Ash @ 5,450 NAR	**Mt**	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5		**9.0**
Total Product	**Mt**	**8.1**	**15.9**	**16.7**	**16.5**	**16.8**	**15.6**	**15.9**	**15.9**	**15.1**	**13.0**	**9.4**	**9.3**	**8.8**	**8.9**	**0.9**	**222.3**

Figure 10-6 Moolarben ROM Coal Schedule

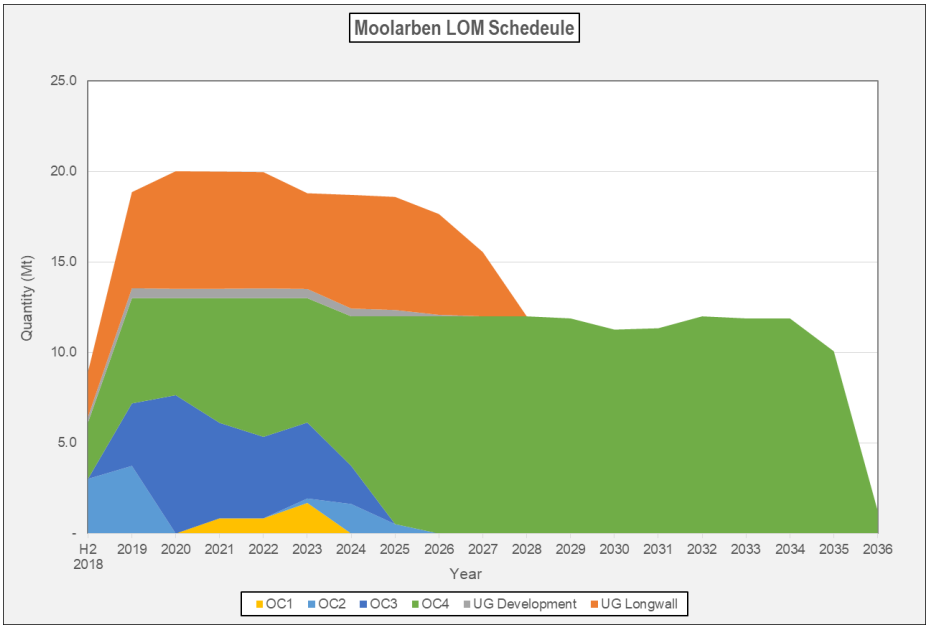
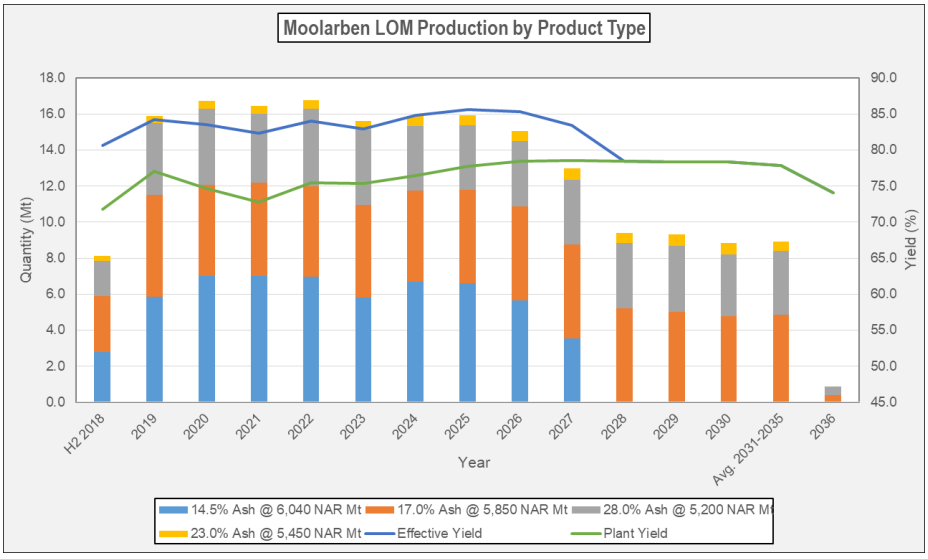


Figure 10-7 Moolarben Product Coal Schedule



10.5 Ashton

Pit Limits

Open Cut

The pit limits at Ashton were defined in the South East Open Cut (SEOC) PFS study. The SEOC pit is constrained by a combination of surface features, lease boundaries and seam subcrop. The western and northern limit is based on an offset from Glennies Creek which flows across the Ashton leases and into the Hunter River in the south. Seam dip to the west and sub crop to the east. The Lower Barrett Seam subcrop form the basis for the low wall of the pit in the east. The southern limit is determined by the lease boundary.

RPM reviewed the pit limits through the estimation of a break even stripping ratio and comparison to the ROM model. The key inputs to the estimate of the break-even strip ratio are shown in **Table 10-10**. Based on the inputs the estimated break even strip ratio is 12:1 (bcm/t ROM) which is significantly higher than the LOM strip ratio.

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Table 10-10 Ashton SEOC Break Even Strip Ratio Input Parameters

Description	Units	Ashton
Prices		
SSCC	USD /tonne	110
Thermal	USD /tonne	-
Exchange Rate	AUD/USD	0.75
Average Mining Costs		
Coal Mining	AUD /tonne	6.02
Waste Mining	AUD /bcm	4.68
Site Overheads		
Processing	AUD /t ROM	5.79
Administration	AUD /t Prod	4.71
Offsite Costs		
Rail	AUD/t Prod	5.45
Port	AUD/t Prod	3.07
Other Offsite Costs	AUD/t Prod	7.15
Average Yield		
CHPP	%	61
Bypass[4]	%	N/A

Notes:
1. *Coal Prices in USD*
2. *All costs in Australian Dollars*
3. *No Bypass assumed for Ashton SEOC*

The pit limits are shown in ***Appendix C***.

Underground

The Ashton underground mine covers an area approximately 4 km long (N-S) and 2 km wide (E-W). The physical mining constraints used to determine the underground target area are the lease boundary to the east, south and west, whilst the New England Highway traverses the lease and has formed a boundary between the open cut operations to the north and the underground mine on the southern side.

Depth of cover for the four seams in the target area varies from 40m to a maximum 290m. These depths are not considered likely to create any major impediments to mining.

Mine Design

Open Cut

A geotechnical study of the SEOC area was completed in the 2010 by a third party. The outcomes of the study was the recommendation of pit design criteria which included overall slopes of 60 to 62 degrees. The pit design includes bench slopes of 75 degrees and up to two 15m wide berms. The low wall design is a 45 degree slope from the base of weathering to topography.

A flood protection levee is required to be constructed along the western and northern limits of the pit. Incorporated into the levee structure is the ROM pad for the SEOC. Materials to construct the levee will be sourced from within the SEOC mine footprint. Ashton plan to develop a low permeability barrier along the western side of the pit to prevent groundwater inflows via the alluvial material associated with Glennies Creek. The barrier will be developed as a trench ahead of the mining operation.

The out of pit dump has been designed to the east of the pit between the low wall and the lease boundary. The out of pit dump is ultimately merged with the inpit dump.

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Underground

From a geotechnical perspective, the mine has generally good development and longwall conditions. Roof and floor materials are generally competent and the underground roadways exhibit high levels of roof and rib stability. The seams vary in thickness, as well as undulating across the lease. This results in slightly higher levels of out-of-seam dilution, as well as reducing confidence in seam volume calculations.

Three drifts have been driven from the open cut to gain access to the target area. One drift houses the main coal clearance conveyor. A second drift is for personnel and materials access, configured as a rubber tyred drive in, drive out drift. The remaining drift initially served as return ventilation roadway and was connected to the main mine fan. This roadway has since been superseded by a 5.5m internal diameter upcast shaft to satisfy the return air ventilation requirements.

Typical parameters used for the mine plan layout include:

Table 10-11 Ashton UG Design Parameters

Parameter	Ashton
Main headings roadways	5
Gateroad panel roadways	2
Main headings pillar length (centres) (m)	30 – 100
Main headings pillar width (centres) (m)	25.3
Gateroad pillar length (centres) (m)	100
Gateroad pillar width (centres) (m)	33.4 – 60.4
Roadway width (m)	5.4
Roadway height (m)	2.7
Longwall panel width (block width) (m)	205
Longwall cutting height (m)	
Longwall caving height(m)	
Lease boundary Minimum barrier (m)	20
Longwall Extraction Height (m)	2.3 – 2.8

The longwall mining method is employed at Ashton underground. The mine is operated seven days a week, 24 hours a day on a rotating shift basis.

One feature of multi-seam mining is that the location and severity of geological structure in the lower seams is generally significantly clarified during mining of the upper seams. As the Pikes Gully Seam has been fully extracted at Ashton underground, no reduction in recoverable tonnes of the lower seams has been made for geological structure.

A small north-south trending dolerite dyke was mined through in the eastern part of the Pikes Gully and Upper Liddell seam layouts. The dyke was found to be up to 4m thick and up to 214 MPa UCS. Softer zones within the dyke were mined by the longwall without significant issues, while explosives were used to mine through the harder zones. The dyke has been pre-mined in the Upper Lower Liddell Seam, ahead of longwall extraction.

Additional mining factors were applied to the Coal Resources model for deriving ROM Coal quantities. The approach to convert in situ to ROM coal and the application of mining factors involved the following:

- Roof and Floor Dilution: It was assumed that a combined minimum of 100 mm of higher ash material will be mined with the roof and the floor of the coal seam during development and longwall operations, thereby diluting the in situ coal quality. The quality defaults assigned to the waste rock were assumed to be relative density of 2.34 t/cu.m, ash of 85% and specific energy of 0 kcal/kg;
- Moisture: Relative density data in the geological model is based on assumed in situ moisture of 6.5%, while all qualities are based on air-dried moisture gridded values. Preston Sanders has been used in the

estimation of in situ moisture. RPM has assumed that ROM moisture will be 8.65% and product moisture will be 8.5%.

Mine Schedule

Mining commenced in the ULLD Seam longwall in 2017. Panels progress from east to west until 2021 when the longwall is planned to be moved to the ULD seam to exploit the remainder of the western longwall panels. Following this the eastern longwall panels are completed in the ULLD before moving to the Lower Barrett seam in 2024. Underground operations are scheduled to be completed at Ashton in 2029.

The South east open cut (SEOC) has been approved however a condition of approval is that Ashton owns 100% of the land or has access agreements in place. At present this has not been achieved and hence the commencement date is not currently scheduled until 2024. RPM notes that this date is not fixed nor does the current plan if changed impact the underground operations. As such if all approvals and permit conditions are met operations can commence prior to plan. The SEOC schedule commences in the northern end of the pit and progresses to the south in a haulback mining method. All waste is initially hauled to out of pit waste dumps followed by inpit dumping when sufficient dump capacity is generated.

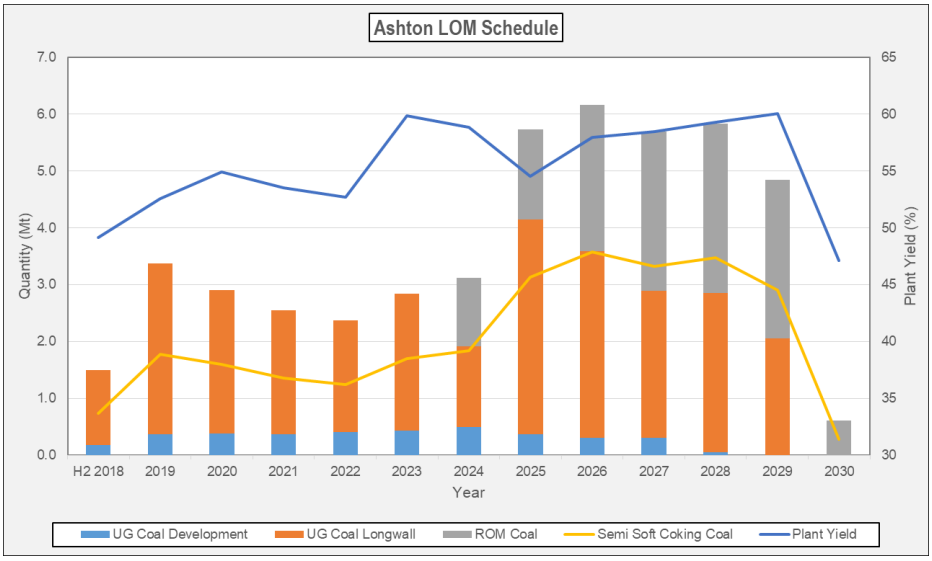
The combined underground and open cut quantity schedule for Ashton is shown in **Table 10-12**.

Table 10-12 Ashton Quantity Schedule Summary

Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total LOM
Total ROM Coal	**Mt**	**1.5**	**3.4**	**2.9**	**2.6**	**2.4**	**2.8**	**3.1**	**5.7**	**6.2**	**5.7**	**5.9**	**4.8**	**0.6**	**47.6**
UG mining															
Total UG Coal	**Mt**	1.5	3.4	2.9	2.6	2.4	2.8	1.9	4.2	3.6	2.9	2.9	2.1		**33.0**
UG Coal Development	**Mt**	0.2	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.0			**3.7**
UG Coal Longwall	**Mt**	1.3	3.0	2.5	2.2	2.0	2.4	1.4	3.8	3.3	2.6	2.8	2.1		**29.3**
Development	**km**	7.0	14.3	15.0	13.5	15.7	15.5	17.8	13.6	11.7	11.4	3.0			**138.5**
OC Mining															
ROM Coal	**Mt**							1.2	1.6	2.6	2.8	3.0	2.8	0.6	**14.5**
Prime Waste Mined	**Mbcm**							11.3	12.9	18.2	20.4	20.5	16.7	2.4	**102.3**
Rehandle Waste	**Mbcm**							0.1	0.1	0.2	0.2	0.2	0.2	0.0	**1.0**
Total Waste mined	**Mbcm**							11.4	13.0	18.4	20.6	20.7	16.9	2.4	**103.4**
Prime Strip Ratio	**bcm/ROM t**							9.3	8.1	7.1	7.3	6.9	6.0	4.0	**7.0**
Total Strip Ratio	**bcm/ROM t**							9.4	8.2	7.1	7.4	7.0	6.0	4.0	**7.1**
CHPP															
Coal Processed	**Mt**	1.5	3.4	2.9	2.6	2.4	2.8	3.1	5.7	6.2	5.7	5.9	4.8	0.6	**47.6**
Plant Yield	**%**	49.1	52.6	54.9	53.5	52.7	59.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1	**56.7**
Bypass	**Mt**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Coal Product	**Mt**	0.7	1.8	1.6	1.4	1.3	1.7	1.8	3.1	3.6	3.3	3.5	2.9	0.3	**27.0**
Effective Yield	**%**	49.1	52.6	54.9	53.5	52.7	59.9	58.8	54.6	57.9	58.4	59.3	60.0	47.1	**56.7**
Product Type															
Semi Soft Coking Coal	**Mt**	**0.7**	**1.8**	**1.6**	**1.4**	**1.3**	**1.7**	**1.8**	**3.1**	**3.6**	**3.3**	**3.5**	**2.9**	**0.3**	**27.0**

Figure 10-8 shows the Ashton life of mine quantities including the product coal and predicted Washplant yield.

Figure 10-8 Ashton LOM Schedule Summary



10.6 Yarrabee

Yarrabee operations are contained within 10 Mining Leases (ML's), one Mineral Development Licence (MDL) and four Exploration Permits for Coal (EPC's). The area covered by these licenses and permits is about 9,100ha with the area having approximate dimensions of 13.5 km north south and 10 km east west.

Pit Limits

Within in the mine footprint are the designated mining pits:

- On the eastern side of the deposit Yarrabee East North (YEN) in the northern and central eastern side of the deposit;
- Also on the eastern side of the deposit to the south of YEN pit is Yarrabee East South (YES) pit;
- Domain (DOM) 6 the northern most pit on the western side of the deposit; and
- DOM 2 N and DOM 2 S in the central to southern regions of the west side of the deposit.

Previous mining Domains 1, 3, 4 and 5 and the northern most part of YEN have been mined out. These areas were also structurally complex however containing the lower strip ratios of Yarrabee.

Pit optimisation completed by the YAL has been used as the basis to determine Yarrabee's pit limits. The input costs were validated against the annual budget costs and the revenue values for the product coal were sourced from the marketing team of YAL.

Pit limits were targeted to achieve sufficient margin based on the optimiser shell to allow for a buffer of sustaining capital and other variances not captured in the optimiser process.

Pit limits at Yarrabee are not only defined by pit optimisation, however by the complex geology where the pits end at major fault intersections or at the edge of synclines. Pits are generally designed along the floor of the basal seam for stability. As a result structural regions can become entirely economic or not. Many of the areas within the pit limits have steeply dipping coal and requires additional coal to maintain wall stability.

RPM generated a break-even strip ratio to confirm the pit limits. The cost inputs in the estimation of the break-even stripping ratio were similar to those used in the above described margin rank process. The estimated break-even strip ratio for Yarrabee is 24:1 bcm /t ROM.

The break-even strip ratio analysis confirmed the results of the pit optimisation study completed by YAL. RPM has reviewed the current mine plans for the pits that are scheduled to be mined over the life of the projects and considers that the pit limits were designed with suitable level of detail taking into account the recommended geotechnical and mining operation parameters.

Table 10-13 Yarrabee Break Even Strip Ratio Input Parameters

Description	Units	Yarrabee
Prices		
High Ash PCI	USD /tonne	98
PCI	USD /tonne	131
Exchange Rate	AUD/USD	0.75
Average Mining Costs		
Coal Mining	AUD /tonne	1.75
Waste Mining	AUD /bcm	3.06
Site Overheads		
Processing	AUD /t ROM	11.45
Administration	AUD /t Prod	4.60
Offsite Costs		
Rail	AUD/t Prod	20.4
Port	AUD/t Prod	13.3
Other Offsite Costs	AUD/t Prod	3.5
Average Yield		
CHPP	%	75
Bypass	%	15

Notes:
1. *Coal Prices in USD*
2. *All costs in Australian Dollars*

The Pit limits are shown in ***Appendix C***.

Mine Design

Seismic hazard studies were not included in the documents available however, the region is classified as a low seismicity area and seismic hazard is not a critical design consideration.

Geotechnical hazards are controlled through mine planning via determination of wall angles, placement of benches and pit wall orientation. Independent geotechnical assessments are conducted annually and recommendations are implemented in the mine plans.

Pits are generally designed to be mined down dip of the deposit to reduce geotechnical hazards. Pit orientation is designed to intersect major faults and the bedding planes in the area perpendicular to their strike. This limits the presence of wedge material in highwalls through fault and fracture planes. Highwalls are designed to achieve an average angle of approximately 45° with shallower wall angles in the tertiary material and catch benches at the base of weathering (BoW)

The Yarrabee mine planning team manages the technical components on site. A specialist geotechnical consultant is used to monitor mine plans, conduct regular field inspections and validate the Yarrabee geotechnical management process. Each of the current pits are assessed and all of the dig plans are assessed to ensure a Factor of Safety associated with the design is greater than 1.2.

RPM considers the geotechnical parameters applied to pit designs are suitable and reasonable for the rock types identified.

Overburden is hauled to a combination of in-pit and out of pit or out of pit dumps. Once pits are in a steady state of operation (after completion of the boxcut) all of the waste that is excavated can be hauled to inpit dumps.

With the development of DOM 6 and YES pits during the LOM plan, boxcuts will be excavated for the development of these pits that will require out of pit dumping before steady sate conditions are in place that will require all waste removal to be dumped in pit.

Waste movements from the excavation source to its destination assumes all waste is scheduled block by block for the entire schedule and waste dumps are designed for each annual period using the "max spoil" method to determine the closest practical dumps for each period.

RPM considers the Yarrabee waste dump designs and strategy to be adequate to support the Life of Mine Production Schedule. Opportunities may exist to optimise waste handling and storage through detailed reviews of mine designs and scheduling.

Mine Schedule

The current operation is producing from DOM 2 and YEN pits at an annual mining rate of approximately 3.5Mtpa ROM coal which will produce about 3.0Mt per annum of product coal. DOM 2 coal is being produced down to the Pollux seam which constitutes the pit floor. YEN pit coal seams are also being mined down to the Pollux seam which constitutes the pit floor.

The LOM plan for Yarrabee is to increase the annual production from the current level of about 3.5Mtpa to an average level of 4.1Mtpa ROM with the annual tonnage ranging between 3.4Mtpa ROM to 5.2Mtpa ROM. The earlier years of the schedule, when the higher margin pits are mined, allows for an increase in the maximum production due to the higher bypass recovery, while in the later years in the poorer quality pits (YEN South and YES) the bulk of the ROM coal that is produced requires washing to produce product specification and hence the annual product coal production in the schedule decreases.

The years of increased production is realised through a capital upgrade to the wash plant that will increase the feed rate to 585tph with an annual washing capacity of 4.1Mt per annum. Where the feed tonnage is less than the annual tonnage requiring washing, the excess coal will be bypassed as high ash thermal coal product YP5.

Table 10-14 Yarrabee Quantity Schedule Summary

Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-	Avg. 2041-	Avg. 2051-	Total LOM
OC Mining																			
ROM Coal	**Mt**	2.1	4.0	4.3	4.8	4.6	5.2	5.1	4.9	5.2	4.2	4.2	4.2	4.0	4.2	4.0	4.0	3.5	**147.6**
Prime Waste Mined	**Mbcm**	23.5	43.9	63.7	65.3	66.8	67.9	67.8	69.1	67.5	66.9	61.1	68.5	67.7	67.4	67.7	67.1	43.8	**2,277.0**
Rehandle Waste	**Mbcm**	1.2	2.2	3.2	3.3	3.3	3.4	3.4	3.5	3.4	3.3	3.1	3.4	3.4	3.4	3.4	3.4	2.2	**113.9**
Total Waste mined	**Mbcm**	24.6	46.1	66.9	68.5	70.1	71.3	71.2	72.5	70.8	70.3	64.1	71.9	71.0	70.7	71.1	70.4	46.0	**2,390.9**
Prime Strip Ratio	**bcm/ROM t**	11.4	11.0	14.8	13.6	14.5	13.1	13.3	14.1	13.0	15.9	14.5	16.3	16.9	16.0	17.1	17.0	12.5	**15.4**
Total Strip Ratio	**bcm/ROM t**	12.0	11.5	15.5	14.3	15.2	13.7	14.0	14.8	13.6	16.7	15.3	17.1	17.8	16.8	18.0	17.8	13.1	**16.2**
CHPP																			
Coal Processed	**Mt**	1.1	2.3	3.2	3.6	3.4	3.6	4.1	4.1	4.1	3.5	3.4	3.5	3.4	3.5	3.4	3.4	2.7	**120.6**
Plant Yield	**%**	78.8	85.5	75.9	78.6	76.5	77.4	74.0	74.7	80.4	75.8	75.5	74.1	74.1	73.8	73.4	74.1	75.8	**76.1**
Bypass	**Mt**	0.9	1.7	1.1	1.2	1.2	1.6	1.0	0.8	1.1	0.7	0.8	0.7	0.6	0.7	0.6	0.5	0.8	**26.9**
Coal Product	**Mt**	1.8	3.7	3.5	4.0	3.8	4.4	4.0	3.9	4.4	3.4	3.4	3.3	3.1	3.3	3.1	3.1	2.9	**117.5**
Effective Yield	**%**	88.2	91.5	82.0	83.8	82.9	84.4	79.2	78.7	84.4	79.9	79.9	78.2	77.9	77.9	77.1	77.5	82.0	**79.6**
Product Type																			
PCI Coal Ash 9.5% S 0.65% P 0.100%	**Mt**	0.7	2.7	2.8	2.4	2.5	2.8	2.9	2.7	3.1	2.6	2.5	2.5	2.3	2.4	2.1	2.3	1.5	**82.1**
PCI Coal Ash 12.0% S 0.85% P 0.150%	**Mt**	0.2	0.4	0.3	0.5	0.5	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.9	**15.7**
YP5 High Phos High Flourine (Thermal)	**Mt**	0.9	0.6	0.4	1.1	0.8	1.2	0.9	0.7	0.8	0.5	0.5	0.5	0.6	0.5	0.6	0.4	0.4	**19.7**

Figure 10-1 Yarrabee LOM Schedule by Pit

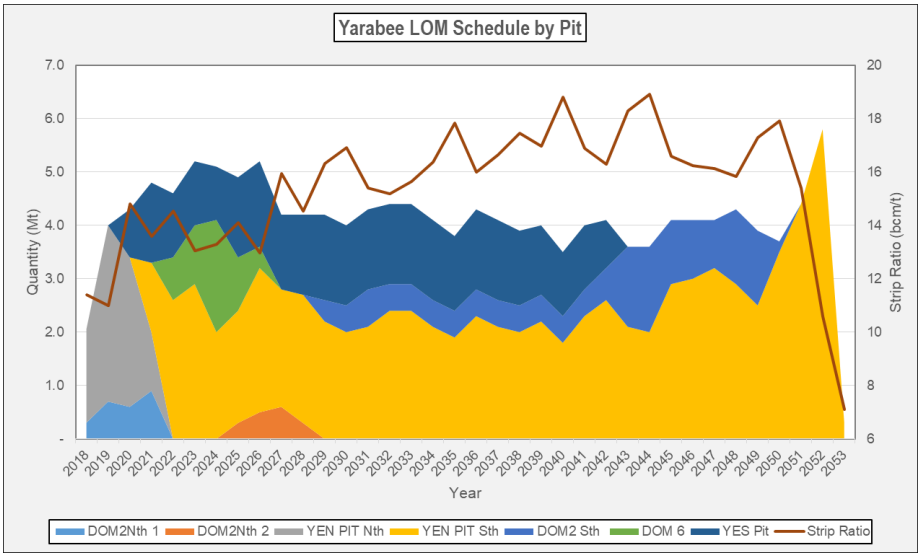
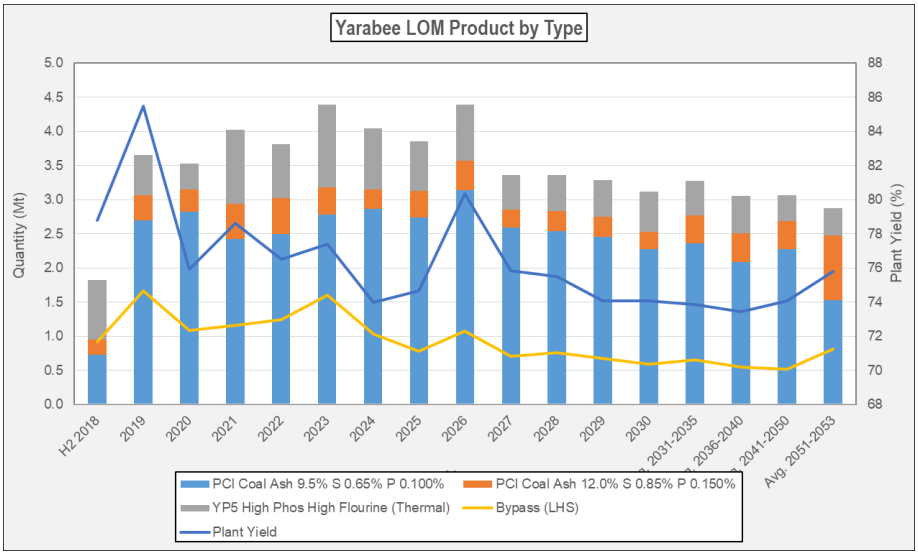


Figure 10-2 Yarrabee LOM Product Schedule



10.7 Stratford and Duralie

Pit Limits

The ply geological models provided by a third party included both coal surfaces and quality for coal plies, except for the CoDam model and the Avon North model which only included structure. The geological models used are outlined in ***Table 10.15***. In the case of Avon North, insufficient raw coal quality data existed to allow a model to be generated. In this instance coal quality defaults were used based on historical experience in the same seams in the neighbouring Stratford Main Pit.

RPMGLOBAL

Table 10-15 Stratford and Duralie Geological Models

Pit Area	Model Name	Model Date	Quality Included
Roseville West (RVW)	WCR _0811	Sep 2011	Yes
Avon North (AN)	StratfordStrat_0315model	Mar 2015	No
Stratford East (SE)	SE_0512	Jun 2012	Yes
CoDisposal (CoDam)	CODAM_0912	Sep 2012	No
Stratford South (SS)	GC_0812	Aug 2012	Yes
Grant & Chainey (GC)	GC_0812	Aug 2012	Yes
Duralie West (DW)	DuralieMicroModel0716	Jul 2016	Yes
Duralie East (DE)	DUR_0714	Jul 2014	Yes

The process used by a third party for the 2017 JORC Reserves estimate included a minimum interburden thickness of 300 mm which was applied to the Coal Resource geological model to create a working section. The mining quantities from this model subsequently had a 95% recovery factor applied to represent the in situ to ROM coal mining factor. The values reflect current working knowledge for various hydraulic excavator and truck mining methods and equipment sizes used for waste and coal mining at Stratford and Duralie. Small excavators (350 t class and 100 t class) and trucks (150 – 180 t class) have been selected for mining as an owner/operator mine.

The Roseville West geological model had an additional mining factor applied with the rejection of isolated coal plies. Any ply that met two of the following criteria was removed from the ROM model:

- Where the incremental stripping ratio was less than 10:1 bcm:t;
- Where the coal thickness was less than 500 mm; and/or
- Where the underburden is greater than 5m.

All in situ density was modelled at 6% total moisture and washed product was produced at an 8% as received moisture.

To provide guidance on the selection of pit limits, the ROM geological models and metallurgical, cost and revenue factors were used as inputs for a series of pit optimiser simulations completed across the deposit as part of the 2017 Coal Reserves. Each mining area was simulated in the Geovia Minex Optimiser (Optimiser) based on specific combinations of working section geological models and assumptions relevant to each mining area.

The pit limits are shown in ***Appendix C***.

Mine Design

The following pit designations were created by a third party and both the process and outcomes have been reviewed by RPM and deemed appropriate for the Coal Reserves estimation.

Roseville West Pit

- The Roseville West LOM pit is a result of pit optimiser analysis using current economic assumptions. No detailed pit design has yet been completed on this pit with the optimiser shell used to estimate Coal Reserves. The northern and southern pit limits are constrained by the lease limit and the coal ROM stockpile respectively. The northern end of the pit targets the Bowens Road seam with the southern end saw toothing on the Bowens Road seam and the Deards seam. The pit shell does include over 50% of Inferred Coal Resource, however, this coal generally lies in the bottom and western edge of the pit which can be excluded from mining with little impact on the upper lying, Reserve classified coal seams.

Avon North

- The Avon North mining area has extensive reverse faulting. This faulting results in a terraced pit design to the east with the Avon H ply the basal seam on the eastern low wall. Detailed ramp designs are needed to demonstrate how access to the bottom of the pit will be achieved.

Stratford East

- The SE pit is limited to the east by seam outcrops with the low wall following the Clareval seam. The highwall angle and endwall batter angles were at a maximum of 40°. The northern limit of the pit is a dam and out of pit dump.

Stratford South Avon

- The northern endwall crest is limited by a watercourse and runs to the fault in the south and the low wall targets the Avon seam. Detailed pit design with ramp access has not been completed for this pit but is not considered a major risk with a similar pit structure mined previously in the Duralie Mine.

Duralie West

- The Duralie West Weismantel current pit design is almost complete. Optimisation work showed a potential expansion to the north called Wards River Station Pit (Wards). Most of this pit falls in AUTH0315 which Yancoal are currently applying to have converted to a mining lease. The Pit runs along the same strike as the current DWW pit and stops approximately 300m before the Bucketts Way road.

Duralie East

- Two pits were identified in the eastern crop of the Duralie deposit, targeting the Clareval and Weismantel crops. Pits designs were created and used in LOM schedule however only the Weismantel pit was taken forward a potential coal Reserve.

RPM has previously developed mine plans for the Stratford and Duralie mining areas as part of the Stratford and Duralie Coal Basin Mine Planning Study. The key pit design changes in this JORC Reserve are larger and deeper Avon North (AN) and Roseville West (RW) pits, smaller Stratford East, Stratford South Avon and Duralie East Weismantel pits. The high level dumping analysis conducted as part of the Mine Planning Study is still deemed relevant to this JORC Reserve estimate.

Mine Schedule

The mining schedule was based on the block data for each pit supplied by a third party, generated as part of the 2017 JORC Reserve estimate. The data includes Inferred and non-classified coal and has been included in the schedule but has not been classified as a Coal Reserve. RPM have used the block data to create a LOM schedule that aligns with the first five years of the site's forecast. Production increases to 1.4Mt in 2019 and then 2.0Mtpa ROM coal is achieved in 2027 and held for the life of the mine. With these targets, Stratford and Duralie has a predicted mine life of 36 years to 2053.

Table 10-16 Stratford and Duralie Schedule Summary

Year	Units	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2053	Total LOM
OC Mining																			
ROM Coal	**Mt**	0.5	1.1	1.7	1.9	1.8	1.3	1.6	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	**68.2**
Prime Waste Mined	**Mbcm**	2.8	7.0	7.9	13.0	11.5	7.6	12.4	14.2	13.6	11.1	11.7	11.1	14.3	11.3	10.3	10.0	4.4	**359.4**
Rehandle Waste	**Mbcm**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Total Waste mined	**Mbcm**	2.8	7.0	7.9	13.0	11.5	7.6	12.4	14.2	13.6	11.1	11.7	11.1	14.3	11.3	10.3	10.0	4.4	**359.4**
Prime Strip Ratio	**bcm/ROM t**	6.2	6.5	4.7	6.8	6.4	5.8	7.7	7.1	6.8	5.6	5.9	5.5	6.2	5.7	5.1	5.0	2.2	**5.3**
Total Strip Ratio	**bcm/ROM t**	6.2	6.5	4.7	6.8	6.4	5.8	7.7	7.1	6.8	5.6	5.9	5.5	6.2	5.7	5.1	5.0	2.2	**5.3**
CHPP																			
Coal Processed	**Mt**	0.5	1.1	1.7	1.9	1.8	1.3	1.6	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	**68.2**
Plant Yield	**%**	49.9	56.9	59.4	57.8	58.3	62.4	67.6	64.8	60.1	60.5	60.8	61.4	61.3	61.2	55.3	54.4	36.2	**58.4**
Bypass Coal	**Mt**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Coal Product	**Mt**	0.2	0.6	1.0	1.106	1.0	0.8	1.1	1.3	1.2	1.2	1.2	1.2	1.4	1.2	1.1	1.1	0.7	**38.2**
Effective Yield	**%**	49.9	56.9	59.4	57.8	58.3	62.4	67.6	64.8	60.1	60.5	60.8	61.4	61.3	61.2	55.3	54.4	36.2	**56.0**
Product Type																			
Semi Hard Coking	**Mt**	0.1	0.4	0.6	0.5	0.4	0.3	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.3	**17.4**
High Ash Thermal	**Mt**	0.1	0.2	0.4	0.6	0.6	0.5	0.6	0.7	0.7	0.6	0.6	0.6	0.8	0.7	0.6	0.6	0.4	**20.8**

Figure 10-9 Stratford and Duralie Schedule by Pit

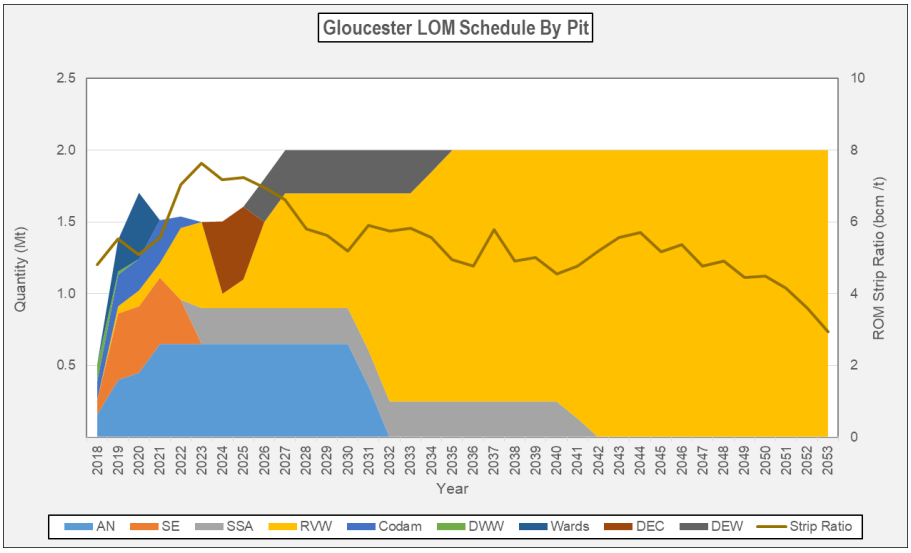
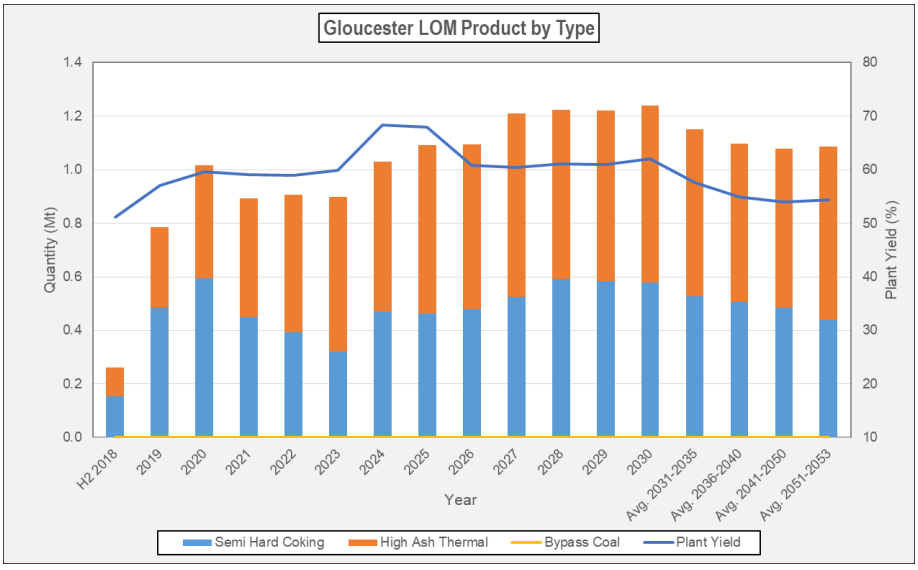


Figure 10-10 Stratford and Duralie Product Schedule Summary



10.8 Austar

The conventional longwall and the Longwall Top Coal Caving ("LTCC") mining methods are employed at Austar Mine.

Mine Limits

The Austar underground mine covers an area approximately 6.5 km long (N-S) and 9.5 km wide (E-W). The physical mining constraints used to determine the underground target area are a combination of the lease

boundaries, geological structure and old mine workings. Seam thickness over the target area is consistently above 6m except where the identified seam splitting in the east occurs.

The Quorrobolong Fault extends down the south-west side of the Stage 3 area and the Abernathy Fault along the northern boundary of the Stage 3 area. The Kitchener Dyke runs through the middle of the Stage 3 area and it is currently proposed to take the longwall face through the dyke. The dyke is proposed to be pre-mined where appropriate but it may also be necessary to step the longwall face around the dyke in areas.

The Pelton Seam overlies the Greta Seam. The interburden varies considerably in thickness but is consistently laminated and caves well. The strata above the Pelton Seam (which has a material impact on the mining environment) is the Cessnock Sandstone which is typically 30m thick and very strong.

The Greta Seam at Austar is unusual in comparison to other seams, in that it has a very low, consistent desorbable gas content at seam depths in excess of 400 m. The desorbed gas is predominantly CO_2.

Gas drainage requirements to date have been limited, with in-seam exploration holes connected to return airways where required.

The Greta Seam has high pyritic content in its roof plies. This renders the seam liable to spontaneous combustion. An underground fire did occur in 2003, due to spontaneous combustion in a longwall goaf. The mine has adopted new practices aimed specifically at preventing any further spontaneous combustion incidents. These practices include revised goaf seal construction methods, as well as the inclusion of a surface nitrogen plant to assist with goaf inertisation. Subsequent mining experience has shown that sound management of this issue can prevent any significant incidence of spontaneous combustion.

Mine Design

A drift has been driven from the surface to gain access to the Greta Seam. The drift houses the main coal clearance conveyor, as well as being used for personnel and materials access, configured as a steep grade drift with rails and a dolly car system. The mine has 5 shafts which provide the bulk of the ventilation capacity for the underground workings.

Table 10-17 Austar UG Design Parameters

Parameter	Austar
Main headings roadways	5
Gateroad panel roadways	2
Main headings pillar length (centres) (m)	90 – 100
Main headings pillar width (centres) (m)	50 - 61
Gateroad pillar length (centres) (m)	100 – 150
Gateroad pillar width (centres) (m)	51 – 60
Roadway width (m)	5
Roadway height (m)	3.2
Longwall panel width (block width) (m)	226
Longwall cutting height (m)	2.3 – 2.8
Longwall caving height(m)	0.0 – 3.9
Lease boundary Minimum barrier (m)	20
Longwall Extraction Height (m)	

Additional mining factors were applied to the Coal Resources model for deriving ROM Coal quantities. The approach to convert in situ to ROM coal and the application of mining factors involved the following:

- Coal Loss: It was assumed that an average of 25% of the coal from the caving section coal will be lost during longwall extraction utilising the LTCC method;
- Roof and Floor Dilution: The development roadways incorporate coal tops and bottoms and therefore no out-of-seam dilution has been included for development operations. It was assumed that a 30 mm of higher ash material will be mined with the floor of the coal seam during longwall operations and that any longwall

caving tonnes will be supplemented with an additional 8% (by mass of the caving tonnes) of roof dilution. The quality defaults assigned to the waste rock were assumed to be relative density of 2.38 t/cu.m for floor dilution and 2.40 t/cu.m for roof dilution and ash of 90%;

- Moisture: Relative density data in the geological model is based on assumed in situ moisture of 5.0%, while all qualities are based on air-dried moisture gridded values. Preston Sanders has been used in the estimation of in situ moisture. RPM has assumed that ROM moisture will be 6.0% and product moisture will be 6.0%.

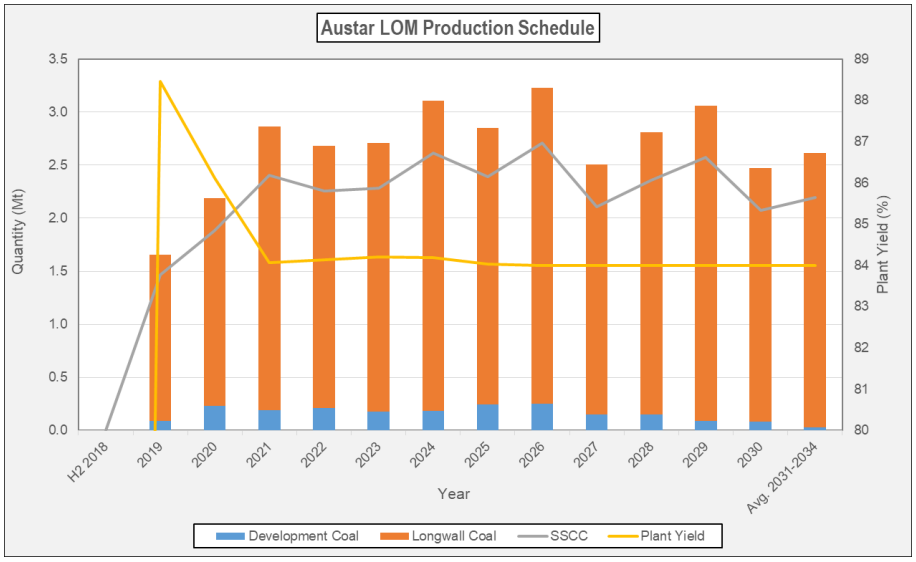
Mine Schedule

RPM is aware that the longwall operating permit is currently suspended with no definitive timeframe for reinstatement. Through discussions with the Company, RPM has assumed that this permit will be reinstated by the end of the 2018 and as such normal operations will recommence in 2019. Furthermore, RPM notes that all site personnel have been relocated to other mines in the district and have not be made redundant. As such upon reinstatement the site personnel can be recommissioned to the mine at short notice.

Table 10-18 Austar Schedule Summary

Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2034	Total LOM
UG Mining																
UG ROM Coal	**Mt**	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6	**42.6**
Development Coal	**Mt**	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.0	**2.2**
Longwall Coal	**Mt**	0.0	1.6	2.0	2.7	2.5	2.5	2.9	2.6	3.0	2.4	2.7	3.0	2.4	2.6	**37.8**
Development	**km**	0.0	4.2	10.4	8.5	9.4	8.0	8.3	11.0	11.1	6.6	6.5	3.9	3.7	2.8	**97.3**
Development main	**km**	0.0	1.6	3.0	0.7	3.8	1.3	1.3	3.8	2.0	2.2	1.6	0.0	0.4	1.0	**22.7**
Development gateroad	**km**	0.0	2.7	7.5	7.8	5.7	6.7	6.9	7.2	9.1	4.4	5.0	3.9	3.3	2.3	**74.6**
CHPP																
Coal Processed	**Mt**	0.0	1.7	2.2	2.9	2.7	2.7	3.1	2.8	3.2	2.5	2.8	3.1	2.5	2.6	**42.6**
Plant Yield	**%**	0.0	88.4	86.1	84.1	84.1	84.2	84.2	84.0	84.0	84.0	84.0	84.0	84.0	84.0	**84.3**
Bypass Coal	**Mt**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Coal Product	**Mt**	0.0	1.5	1.9	2.4	2.3	2.3	2.6	2.4	2.7	2.1	2.4	2.6	2.1	2.2	**35.9**
Effective Yield	**%**	0.0	88.4	86.1	84.1	84.1	84.2	84.2	84.0	84.0	84.0	84.0	84.0	84.0	84.0	**84.3**
Product Type																
Semi Hard Coking Coal	**Mt**	0.0	1.5	1.9	2.4	2.3	2.3	2.6	2.4	2.7	2.1	2.4	2.6	2.1	2.2	**35.9**

Figure 10-11 Austar Production and Product Summary



10.9 Donaldson

Mine Design

The Donaldson underground mine covers an area approximately 8km long (N-S) and 7km wide (E-W). The physical mining constraints used to determine the underground target area are the existing workings to the north, M1 Freeway to the east, the lease boundary to the south and seam splitting to the west. The Hunter Expressway traverses the target area and has formed a subsidence protection zone that will necessitate longwall equipment being relocated from one side of the expressway to the other in each longwall panel, leaving a subsidence protection pillar in between.

Depth of cover for the Lower Donaldson Seam in the target area varies from 120m to a maximum 520m, with an average of 340m. These values are within the range of depths for Australian underground coal mines and are not considered likely to create any major impediments to mining.

From a geotechnical perspective, the mine is expected to have generally good development and longwall conditions. Roof and floor materials are generally competent and the underground roadways should exhibit satisfactory levels of roof and rib stability. The seam varies in thickness from 2.0 – 2.9m.

The three existing adits at Abel Mine will be used to gain access to the target area. One drift houses the main coal clearance conveyor. A second drift is for personnel and materials access, configured as a rubber tyred drive in, drive out drift. The remaining drift initially served as return ventilation roadway and was connected to the main mine fan. This roadway has since been superseded by a 5.5m internal diameter upcast shaft to satisfy the return air ventilation requirements.

Table 10-19 Donaldson UG Design Parameters

Parameter	Donaldson
Main headings roadways	5
Gateroad panel roadways	2
Main headings pillar length (centres) (m)	70 – 100
Main headings pillar width (centres) (m)	35
Gateroad pillar length (centres) (m)	100 – 150
Gateroad pillar width (centres) (m)	35 – 50
Roadway width (m)	5.4
Roadway height (m)	2.7
Longwall panel width (block width) (m)	250 - 300
Longwall Extraction Height (m)	2.4 – 3.2

The longwall mining method is proposed at Donaldson underground.

Seam splitting in the roof in some areas could create localised zones of less competent roof. It is anticipated that the level of roof support will need to be increased in these areas.

Gas studies have determined that compared to other operating and planned longwall operations, Donaldson would be considered in the medium range for longwall gas emissions. Various levels of pre-drainage and post-drainage will be necessary, as depth of cover and other factors vary.

Additional mining factors were applied to the Coal Resources model for deriving ROM Coal quantities. The approach to convert in situ to ROM coal and the application of mining factors involved the following:

- Out of Seam Dilution: Seam splitting and seam thickness variation across the target area results in stone forming part of the working section (mid-seam or at the seam roof) during development and longwall operations, thereby diluting the in situ coal quality. The quality defaults assigned to the waste rock were assumed to be relative density of 2.2 t/cu.m, ash of 80% and specific energy of 0 kcal/kg;

- Moisture: Relative density data in the geological model is based on assumed in situ moisture of 2.5%, while all qualities are based on air-dried moisture gridded values. Preston Sanders has been used in the estimation of in situ moisture. RPM has assumed that ROM moisture will be 6% and product moisture will be 11%.

Mine Schedule

The mining schedule was based on the XPAC model created by Donaldson, generated as part of the 2017 JORC Reserve estimate. The data includes Inferred and non-classified coal and has been included in the schedule but has not been classified as a Coal Reserve. RPM have reviewed the LOM schedule and considers it reasonable, albeit that there is currently no set date for commencement of the mine. ROM production peaks at 5.8Mt in year 10 of operation. Average ROM production (once in steady state operation) is 4.7Mtpa. With these targets, Donaldson has a predicted mine life of 18 years.

Table 10-20 Donaldson Schedule Summary

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	TOTAL
Development	metres	9,661	23,409	27,016	24,713	17,988	9,182	9,525	9,340	10,055	12,423	18,588	14,681	9,358	9,457	9,575	8,348	-	-	223,318
Development ROM Coal	kt	227	534	617	580	422	220	223	219	236	290	433	338	214	217	224	198	-	-	5,192
Longwall ROM Coal	kt	-	-	4,331	4,309	4,342	4,537	5,227	4,311	5,286	5,507	4,109	4,328	4,700	4,031	3,914	3,633	3,467	2,667	68,701
TOTAL ROM PRODUCTION	**kt**	227	534	4,948	4,889	4,764	4,757	5,451	4,529	5,523	5,798	4,542	4,666	4,915	4,249	4,138	3,830	3,467	2,667	73,893
CHPP Feed	kt	227	534	4,948	4,889	4,764	4,757	5,451	4,529	5,523	5,798	4,542	4,666	4,915	4,249	4,138	3,830	3,467	2,667	73,893
CHPP Product	kt	122	316	3,023	2,926	2,505	2,306	2,629	2,130	2,489	2,570	2,094	2,129	2,306	2,134	2,191	2,086	1,917	1,462	37,335
CHPP Yield	%	54%	59%	61%	60%	53%	48%	48%	47%	45%	44%	46%	46%	47%	50%	53%	54%	55%	55%	51%
Bypass	kt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Effective Yield	%	54%	59%	61%	60%	53%	48%	48%	47%	45%	44%	46%	46%	47%	50%	53%	54%	55%	55%	51%
TOTAL PRODUCT COAL	**kt**	122	316	3,023	2,926	2,505	2,306	2,629	2,130	2,489	2,570	2,094	2,129	2,306	2,134	2,191	2,086	1,917	1,462	37,335

RPM is aware ongoing studies are being completed to optimise Donaldson prior to commissioning.

10.10 Middlemount

Middlemount operations are contained within two Mining Leases (ML's) and one Mineral Development Licence (MDL). The area covered by these licenses and permits is about 1,600 ha with the area having approximate dimensions of 5 km north south and 2 km east west.

Pit Limits

The open cut pit limits at Middlemount are based on the following criteria:

- An off set of 50m on the Middlemount seam from the Jellinbah fault on the eastern side of the deposit;
- An off set of approximately 300m on the Pisces Upper seam along the northern boundary of ML 70379;
- The southern boundary within ML 70379 is the diversion and flood protection levee associated with Roper Creek.

RPM generated a break-even strip ratio to confirm the pit limits. A break-even strip ratio is the ratio of burden (waste) to ROM coal tonnes at which there is AUD0 margin. The cost and revenue inputs in the estimation of the break-even stripping ratio are outlined in the table below. The estimated break-even strip ratio for Middlemount is 17.5:1 bcm /t ROM.

RPM has reviewed the current mine plan for the pit and notes that the majority of the strips and blocks in the Middlemount design are within this break-even strip ratio and is satisfied with the determination of the mine pit limits.

Table 10-21 Middlemount Break Even Strip Ratio Input Parameters

Description	Units	Yarrabee
Prices		
SHCC	USD /tonne	147
PCI	USD /tonne	131
Exchange Rate	AUD/USD	0.75
Average Mining Costs		

Coal Mining	AUD /tonne	4.72
Waste Mining	AUD /bcm	4.92
Site Overheads		
Processing	AUD /t ROM	5.63
Administration	AUD /t Prod	6.3
Offsite Costs		
Rail	AUD/t Prod	18.0
Port	AUD/t Prod	6.0
Other Offsite Costs	AUD/t Prod	8.6
Average Yield		
CHPP	%	75
Bypass[3]	%	-

Notes:
1. *Coal Prices in USD*
2. *All costs in Australian Dollars*
3. *No Bypass assumed at Middlemount*

The pit limits are shown in ***Appendix C***.

Mine Design

The following outlines the mine design aspects of Middlemount operations.

- The geotechnical design criteria that are applied at Middlemount can be summarised as follows:
- A 35° degree slope for the low wall in weathered Permian and Tertiary/Cenozoic sands;
- Individual 50° degree batter slopes for highwalls, sidewalls and endwalls in weathered Permian and tertiary/Cenozoic sands. 10m berms are included every 12m vertically to give an overall slope angle of approximately 35°;
- 25m berm for the highwalls and on top of the fresh Permian. On some endwalls a 50m haul bench is included;
- Individual 70° slope for the highwalls, sidewalls and endwalls in fresh Permian;
- Above the cast blasting zone 25m berms are included approximately 50m vertically to give an overall angle of 55°; and
- A 25m berm is included on top of the cast blasting horizon.

RPM considers the geotechnical parameters applied to pit designs are suitable and reasonable for the rock types identified. Overburden is hauled to a combination of in-pit and out of pit dumps. At Middlemount the upper tertiary material is excavated and hauled to the out of pit East dump. The East dump is beyond the extent of the Jellinbah thrust fault in the east and does not sterilize any future coal occurrence.

Haul routes from the excavation faces to the east dumps are also shorter than the alternatives which are to the top of the inpit dumps on the western side of the lease.

The Permian waste that is cast blast and dozer pushed from either above the Pisces or Middlemount seams forms the base of the inpit dump in the previously mined out strip. The balance of the Permian waste excavated from the strips and blocks to uncover the coal seams is hauled to the in pit dumping levels using the cast/dozer push waste levels as the base of the in pit dump profile.

Middlemount does have to manage surface water associated with Roper creek, which has branches flowing along the western and eastern boundary of the deposit, with the western branch then flowing to the east along the southern boundary of the deposit. It would appear that appropriate diversions/levees have been put in place to control surface water associated with this creek system. RPM considers the surface mining water management to be suitable for the operations. RPM did not review the flood control management systems.

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Mine Schedule

The existing operation is producing at an annual mining rate of approximately 5.4Mtpa ROM coal which will produce about 4.2Mt per annum of product coal. Coal is being mined from the Middlemount seam, the Tralee seam where it exists greater than 0.3m thick and the basal Pisces seam.

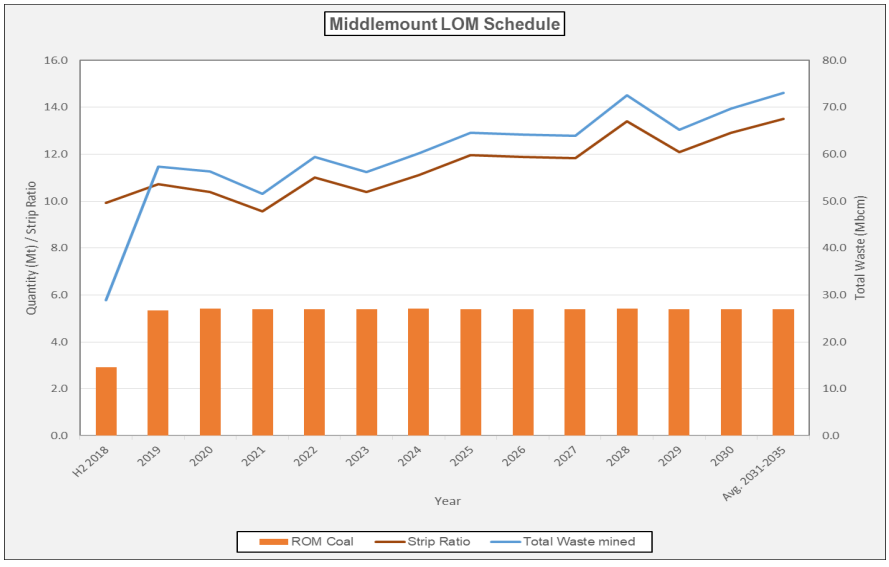
The LOM plan for Middlemount is to continue at a ROM production level of 5.4Mtpa with a progressively increasing strip ratio as the mining sequence progresses down dip from lower strip ratio strips and blocks to higher strips and blocks within the central part of the pit to the Yarrabee fault. The pit will then advance along strike to the north and south which will average the stripping ratio in the deeper sections of the mine. The addition of the north western extension area to the plan provides an additional mining area and assists in averaging the stripping ratio.

The Middlemount production schedule is shown in **Table 10-22** with the product and yield results shown in **Figure 10.12**

Table 10-22 Middlemount Schedule Summary

Year	Units	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2037	Total LOM
OC Mining																	
ROM Coal	**Mt**	2.9	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	2.8	**100.4**
Prime Waste Mined	**Mt**	28.9	57.3	56.4	51.6	59.4	56.2	60.2	64.6	64.2	63.9	72.5	65.2	69.7	73.0	30.9	**1,197.0**
Rehandle Waste	**Mt**																
Total Waste mined	**Mbcm**	28.9	57.3	56.4	51.6	59.4	56.2	60.2	64.6	64.2	63.9	72.5	65.2	69.7	73.0	30.9	**1,197.0**
Prime Strip Ratio	**bcm/ROM t**	9.9	10.7	10.4	9.6	11.0	10.4	11.1	12.0	11.9	11.8	13.4	12.1	12.9	13.5	10.9	
Total Strip Ratio	**bcm/ROM t**	9.9	10.7	10.4	9.6	11.0	10.4	11.1	12.0	11.9	11.8	13.4	12.1	12.9	13.5	10.9	**11.9**
CHPP																	
Coal Processed	**Mt**	2.7	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	2.8	**100.2**
Plant Yield	**%**	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	75.9	76.1	77.0	**75.8**
Bypass	**Mt**																**0.0**
Coal Product	**Mt**	2.1	4.1	4.2	4.2	4.2	4.2	4.1	4.0	4.0	4.0	3.8	4.0	4.1	4.1	2.2	**76.0**
Effective Yiekd	**%**	79.7	76.8	78.0	77.0	76.9	77.1	75.6	74.5	74.1	74.1	70.7	74.6	75.9	76.1	77.0	**75.8**
Product Type																	
PCI Coal	**Mt**	0.8	1.7	1.5	1.4	1.6	1.9	1.6	1.7	1.7	1.9	1.5	1.8	1.7	1.7	0.8	**31.3**
Coking Coal	**Mt**	1.3	2.4	2.7	2.7	2.5	2.3	2.5	2.3	2.3	2.1	2.3	2.2	2.4	2.4	1.3	**44.7**

Figure 10-12 Middlemount Schedule Summary



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11. Processing and Blending

11.1 Blend Strategy

Due to the number of pits, product types and required product specification of its customers, the Company has the ability to blend ROM coal and washed coal to optimise products and revenue. The concept of a blend strategy is to shift the coal supply philosophy from operational constraints to be driven by customer demand. This strategy facilitates blending high and low quality coals from the various Company mines within each operation required to meet some standard product specifications.

The concepts of a companywide blend strategy are sound but may be difficult to translate into real outcomes for the project and further planning is warranted.

11.2 Coal Processing Overview

CHPP are typically separated into four functional areas; 1) ROM coal receival, 2) beneficiation or washing, 3) reject disposal and 4) product coal stockpiling and train loading.

- ROM coal receival – ROM coal from the open cut or underground coal faces is trucked or conveyed to the ROM coal receival area where it is crushed to a maximum size (typical <50mm) that enables it to be efficiently washed (based on testwork completed). ROM coal can also be stockpiled in this area prior to crushing to assist with wash scheduling, blending or when the CHPP is down for maintenance. After crushing, coal is then either stockpiled and later reclaimed, or fed directly into the Plant for washing.
- Beneficiation or Washing – Washing or beneficiation is the separating of the coal from the waste products (rejects). Once fed into the Plant, the coal is separated into various size fractions which are each washed using different types of separating equipment.
- Reject disposal - The coarse and fine waste, or reject, can be disposed of together or more commonly disposed separately with coarse reject being trucked to the waste dumps (to be disposed of with the overburden from the mine) and fine reject, or tailings, being pumped to a tailing storage facility.
- Product coal stockpiling and Train Loadout – washed coal (commonly called product coal, saleable coal or marketable coal) is stockpiled into separate stockpiles depending on its quality. It is then loaded onto trains for railing to the port. Blending can occur on the product stockpiles when two or more separate coal products are combined to meet a particular market specification.

Bypass coal is ROM coal that does not require washing to meet the marketing specification. After extraction, ROM coal is crushed, bypass coal is placed directly onto the product coal stockpile.

11.3 HVO

HVO site infrastructure, consisting of two coal preparation plants and two coal loading points, is in reasonable condition however much of the equipment requires ongoing maintenance due to its age. RPM is aware that significant sustaining CAPEX has been provisioned as part of the ongoing maintenance to minimise downtime and ensure utilisation is consistent with the planned production. These costs have been included in the cost forecast in ***Section 14***.

HVO Coal Handling and Preparation Plants (CHPP)

HVO utilises two wash plants in the HVO north area, as shown in ***Figure C-1***. The plants are considered to be well maintained and are capable of typical industry benchmark utilisation of 7,200 hours per year, however ongoing maintenance is required. Debottlenecking of plant circuits where necessary and with a consistent feed of coals to not overload any part of the processing circuit, should enable a total throughput of 21Mtpa, which is in excess of the current mine target of 20.6Mtpa ROM Coal and the potential to produce up to 16Mtpa of Product. The design capacity of the CHPPs is based on 7000 operating hours per year. RPM notes that it is the product type, quality and quantities including the distribution of the size fractions in the feed that will dictate the ultimate capacity of the plants during the mine life. The combined HVO CHPP facilities have a capacity to produce approximately 16Mtpa products currently with 20-25% SSCC and the balance being a range of low to high ash thermal coals.

Hunter Valley CHPP

The Hunter Valley CHPP (HVCPP) is located in the central eastern portion of HVO north and has a ROM coal throughput capacity of approximately 2,500tph or approximately 17Mtpa ROM. The utilisation of the plant in 2015 was less than 80% based on potential throughput and typical 7,000 operating hours per year, however has an upside of 7,200 operating hours per year. The HVCPP was commissioned in 1982 and has development consent to process 20Mtpa ROM coal. The flowsheet for the HVCPP is shown in ***Figure 11-1*** with the plant producing up to three thermal coal products.

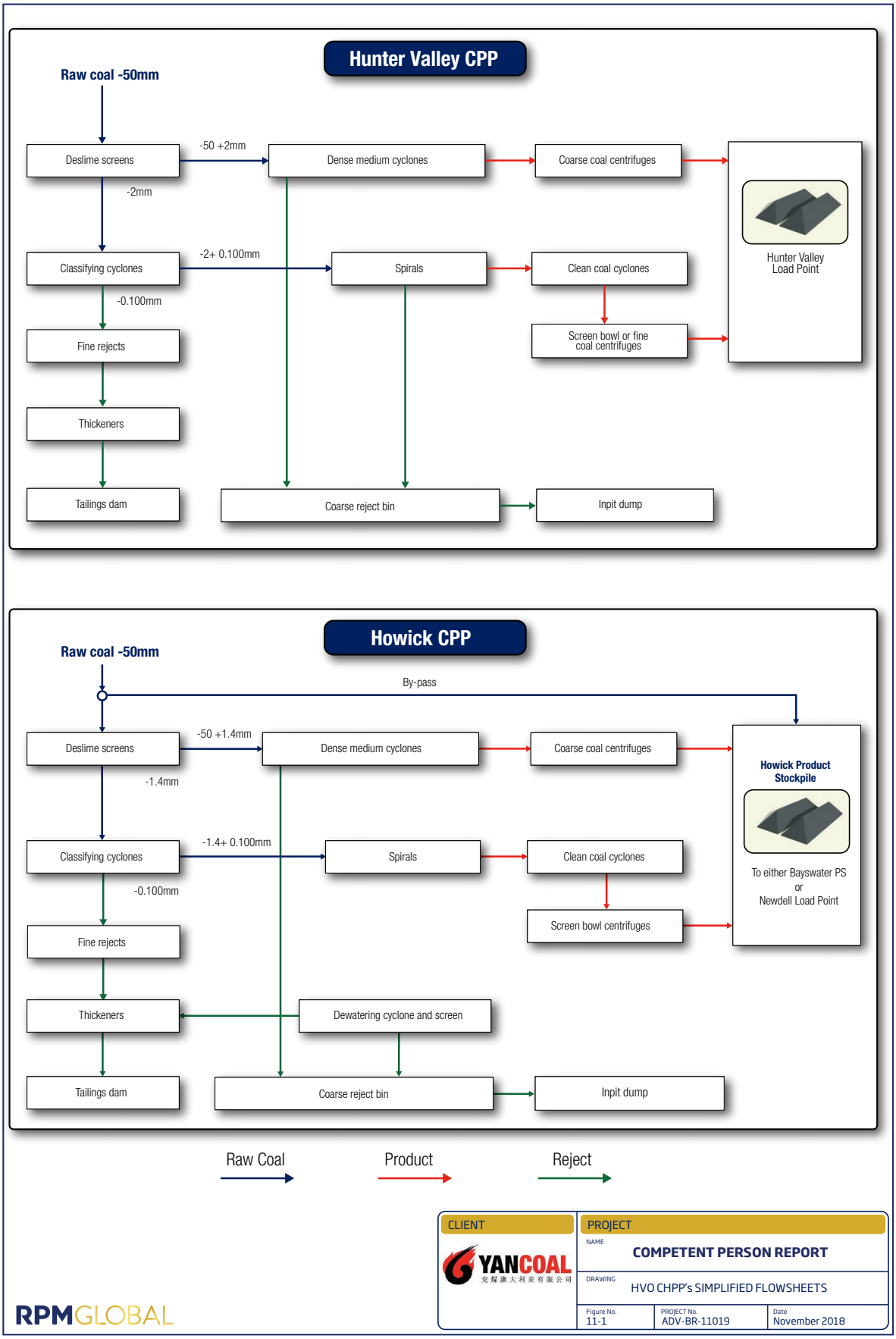
Howick CHPP

The Howick CHPP (HCPP) is located in the northern part of the lease and has a ROM coal capacity of 450tph or approximately 3.2Mtpa. The HCPP was originally designed and constructed to supply product thermal coal to the adjacent Bayswater Power Station however that is no longer serviced with all coal exported. The HCPP was commissioned in 1982 and has consent to process 6Mtpa of ROM coal with a flowsheet as shown in Figure 10-1.

RPM Comments

RPM notes that:

- The SSCC products from HVO have better fluidity than those produced at the MTW operation. However, the CHPP has to wash the ROM coals very hard and at a low S.G. of 1.3 to get the right SSCC properties for sale.
- There are some clayey seams and interburden materials that can cause loss of yield and higher ash thermal coals at HVO.
- HVO undertakes regular integrity inspections to keep the CHPP infrastructure in good working order and this was evidenced during the brief HVO site visit.
- Due to the sticky nature of some ROM coals (like the Bowfield seam) HVO typically schedule feed to the CHPP without allowing the coals to 'age' on the stockpile.
- The HVCPP can bypass raw coal to Product Coal stockpiles however no bypass is assumed as part of the LOM plan presented in ***Section 9*** and ***Section 10***. RPM considers this to be an upside to the project value and OPEX.
- Both CHPP's have product samplers however no ROM coal or reject samplers. Mass balance checks across the CHPP facility, for reconciliations and for plant optimisation, are completed by manual sampling.
- RPM considers this to be a shortfall in the ability to actively control the feed and wash settings on a real time basis and could be a contributing factor to the poor outcomes of the reconciliation.
- Product coal sampling is used to fine tune blending onto trains and onto PWCS and NCIG port stockpiles. Final blending and sampling is always done at the ports – which have incoming sampling and sampling on the outgoing ship loading streams.
- Typical in-pit coal inventory is around 1Mt ROM.


Hunter Valley CPP
Raw coal -50mm
Deslime screens
-50 +2mm
Dense medium cyclones
Coarse coal centrifuges
-2mm
Classifying cyclones
-2+ 0.100mm
Spirals
Clean coal cyclones
-0.100mm
Fine rejects
Screen bowl or fine coal centrifuges
Hunter Valley Load Point
Thickeners
Tailings dam
Coarse reject bin
Inpit dump
Howick CPP
Raw coal -50mm
By-pass
Deslime screens
-50 +1.4mm
Dense medium cyclones
Coarse coal centrifuges
Howick Product Stockpile
-1.4mm
Classifying cyclones
-1.4+ 0.100mm
Spirals
Clean coal cyclones
To either Bayswater PS or Newdell Load Point
-0.100mm
Fine rejects
Screen bowl centrifuges
Thickeners
Dewatering cyclone and screen
Tailings dam
Coarse reject bin
Inpit dump
Raw Coal
Product
Reject
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
HVO CHPP's SIMPLIFIED FLOWSHEETS
Figure No. 11-1
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Coal Yield

The coal yield from the HVCCP in 2015 was 77% and the plant processed 92% of the total coal washed at HVO with a combined yield from both plants of 76% with the decrease due to the small contribution from the Howick CHPP with yield of 67% (***Table 11-1***) During 2016 this yield stayed consistent at 76% with a total throughput of approximately 18Mt of ROM coal, however decreased slightly to 75% in 2017 (versus 69% planned). The actual distribution of these coals to the individual plants is not provided in the data, however the current plan is for a maximum of 20.6Mtpa of ROM coal feed, as such a similar Yield is forecast.

RPM notes that the HVCCP and HCPP both process coal from the Cheshunt Pits, West, Wilton and GRS (completed) Pits with markedly different yield outcomes. The majority of the coal being delivered to the HCPP is from the Foybrook Formation coal seams although raw ash from all seams appears variable within each pit. There is no apparent explanation to the lower yields obtained at the HCPP apart from a slightly lower efficiency. Coal from the top of the seam sections may be diverted to the HCPP with higher dilution included.

Table 11-1 HVO Plant Yields (2015)

Pit	HVCPP			HCPP		
	Feed (kt)	Product (kt)	Yield (%)	Feed (kt)	Product (kt)	Yield (%)
Cheshunt1	4,469.7	3,493.0	78.1%	3.1	2.1	68.1%
Cheshunt2	3,227.1	2,403.9	74.5%	5.4	3.1	56.8%
Cheshunt Deep	224.9	174.4	77.5%			
Riverview North	583.1	433.9	74.4%			
Riverview West	2,440.3	1,805.0	74.0%			
West Pit	1,748.2	1,415.0	80.9%	889.1	604.5	68.0%
Wilton	466.0	381.2	81.8%	279.3	171.6	61.4%
Glider Pit	298.5	242.6	81.3%	20.4	10.7	52.5%
GRS	179.7	131.1	73.0%			
Total	**13,637.6**	**10,479.0**	**76.8%**	**1,197.3**	**791.9**	**66.1%**

The Company's models forecast that there will be a gradual trend for decreasing yield over time (average 74% in the first 10 years to average 68% in the last 10 years. This is primarily due to the change in the mix of the seams being mined. RPM is aware these yields were forecast to be conservative to account for the age of the equipment.

RPM notes that the high total yields currently being achieved at HVO are not consistent with the raw data in the coal quality ROM models. RPM has taken a conservative approach and reduced the yields by 3% partly in consideration to provide a balance between the actual results and yield model outcomes. RPM notes these higher yields could be related to the mining method being utilised to minimise dilution and lower ROM coal ash content. This is evidenced by the performance in 2017 with 69% planned versus the actual of 75% however this is forecast to increase to 71% in 2018.

Product Coal Handling

There are two train loading points at HVO, the Hunter Valley Rail Loading Point and the Newdell Rail Loading Point, as shown in ***Figure 11-1***. An 8km long cable belt conveyor connects the HVCPP with the Hunter Valley Rail Loading Point while the HCPP Product Coals are trucked to the Newdell Rail Loading Point as the volumes are typically low at up to 3Mtpa. Overflow from the Hunter Valley Loadout point can be sent to the Newdell loading point via a transfer conveyor, which also facilitates blending for product specifications.

Product coals of the different product types are segregated onto Product Coal stockpiles at each loading point and thereafter kept separate. Product coal is blended from the required stockpiles to meet specific customer and marketing requirements. Most blending is done off Product Coal stockpiles and onto trains. Product coal is typically campaign railed to either PWCS or NCIG to build shipments at the ship terminal. HVO has a large number of stockpile machines (Stackers/ Reclaimers) that are aging and that could be suffering from the early stages of structural fatigue. Unfortunately, little information has been provided for review on this matter. Structural integrity assessments have been provided for review on this matter and include the stockpile

machines, however that information is more than 4 years old (prepared in 2012) and does not provide any clarification on the likelihood of an HVO stockpile machine failure or the costs associated with a major rebuild of one or more of these machines to significantly extend their service lives. Due to this, additional CAPEX has been included as a contingency.

The number of products produced by HVO adds complexity to the coal supply chain network in that additional Product Coal stockpile capacity is required both at the mine and at the port to allow shipments to be campaigned to specific customer requirements. The Company's proposed introduction of the Hunter Blend Strategy will likely place even more pressure on HVO mining operations, wash plant performance, coal loss minimisation, ROM, raw and Product Coal stockpile capacity, train management and port operations in an attempt to realise incremental improvements to efficiencies, with further works to be undertaken to confirm the assumed improvements. RPM highlights that the LOM plan does not include these assumed improvements.

11.4 MTW

A regional road (Putty Road) separates the WML and MTO operations. An overpass was constructed to facilitate haul truck access between the sites when the operations were combined in the early 2000's. An additional overpass has been completed to enable overburden to be dumped in the mined out voids of MTO with waste from WML pits.

MTW consists of two coal wash plants and two rail loading points which are connected via a series of conveyors throughout the site.

While RPM has not been provided with a detailed plant and equipment list, maintenance records, utilisation records, or any other information to allow for a thorough assessment of the serviceability of coal handling plant and equipment, wash plants, RPM has completed a review of the forecast costs, historical production records and maintenance requirements. In addition, during the site visit RPM completed a high-level review of the equipment in operation and considered, while ongoing maintenance is required, the forecast costs outlined in ***Section 13*** and the onsite infrastructure is suitable to support the forecast production.

Coal Preparation Plants

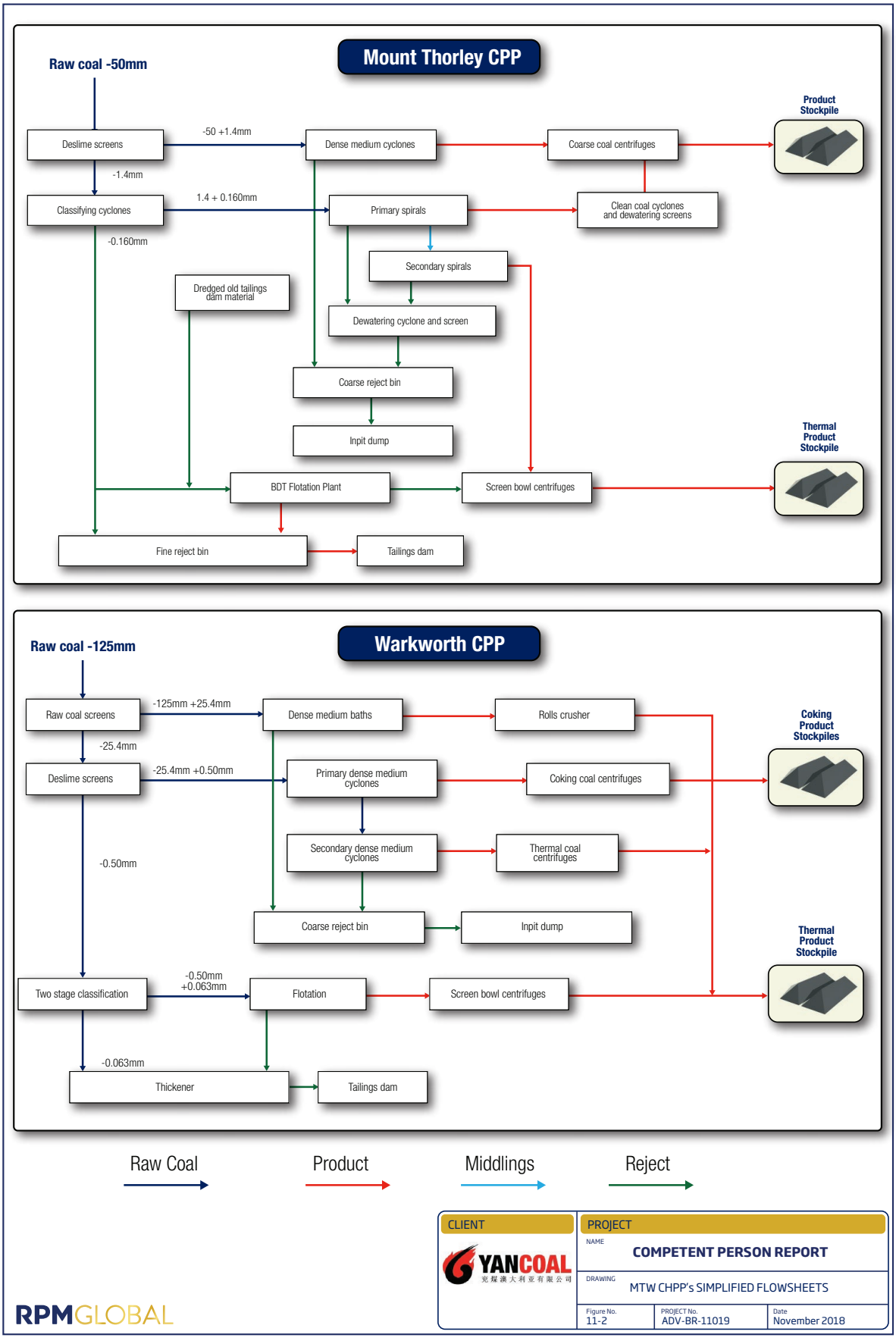
The CHPP facilities at MTW are well-established and capable of processing up to 18Mtpa ROM Coal feed. While the infrastructure is quite old, it appears to be reasonably well maintained which is required and forecast to continue. There are two CHPP's at MTW (Warkworth CHPP and Mt Thorley CHPP) which have a combined capacity of 18.6Mtpa ROM Coal feed to produce between 12Mtpa to 13Mtpa products. These CHPP's produce a number of products which comprise a range of thermal coals and a single semi-soft coking coal via a flowsheet as shown in ***Figure 11-2***.

Coal Yield

The average product yield for the MTW is forecast to be LOM 69.6%. This varies year-on-year from 67.8% to 70.0% and is in-line with recent yield performance by MTW as shown in ***Table 11-2***. This annual variation is mainly due to the differing proportions of coal seams that are produced at MTW each year. RPM highlights that the MTW Blakefield seam is 'clayey' and thus somewhat more difficult to beneficiate relative to the other seams. Most of the other MTW seams are easier to wash without loss of yield and/or reduction in Product Coal quality.

Table 11-2 Historical MTW Yield Performance

Year	2013	2014	2015	2016	2017
Yield	67.2%	68.4%	67.7%	68.0%	67.0


Mount Thorley CPP
Raw coal -50mm
Deslime screens
-50 +1.4mm
Dense medium cyclones
Coarse coal centrifuges
Product Stockpile
-1.4mm
Classifying cyclones
1.4 + 0.160mm
Primary spirals
Clean coal cyclones and dewatering screens
-0.160mm
Secondary spirals
Dredged old tailings dam material
Dewatering cyclone and screen
Coarse reject bin
Inpit dump
Thermal Product Stockpile
BDT Flotation Plant
Screen bowl centrifuges
Fine reject bin
Tailings dam
Warkworth CPP
Raw coal -125mm
Raw coal screens
-125mm +25.4mm
Dense medium baths
Rolls crusher
Coking Product Stockpiles
-25.4mm
Deslime screens
-25.4mm +0.50mm
Primary dense medium cyclones
Coking coal centrifuges
Secondary dense medium cyclones
Thermal coal centrifuges
-0.50mm
Coarse reject bin
Inpit dump
Thermal Product Stockpile
Two stage classification
-0.50mm +0.063mm
Flotation
Screen bowl centrifuges
-0.063mm
Thickener
Tailings dam
Raw Coal
Product
Middlings
Reject
CLIENT
YANCOAL
兖煤澳大利亚有限公司
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MTW CHPP's SIMPLIFIED FLOWSHEETS
Figure No. 11-2
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Coal Product

Both MTW CHPP facilities produce a split of approximately 80% thermal and 20% SSCC products. RPM notes that while there is little detail to support the product split; considers that the overall mix seems reasonable for similar mines in MTW part of the Hunter Region and the historical production. The thermal coals are of varying ash levels allowing the operation to maximise revenue through blending.

MTW in-pit coal inventory is typically 1Mt which allows for the management of the delivery to the CHPP of coal types to suit the product blending strategy in the short and medium term.

Coal Handling

The MTW blending strategy typically starts in the pit with various seams delivered to the ROM coal stockpiles and washed one seam at a time in campaigns to maximise yields and throughput. Some seam blending partners are identified (those seams with similar wash characteristics) that are blended onto raw coal stockpiles ahead of washing.

MTW has a large number of stockpile machines (Stackers/Reclaimers) that are aging and that could be suffering from the early stages of structural fatigue. Structural integrity assessments have been provided for review on this matter and include the stockpile machines, however that information is more than 4 years old (prepared in 2012) and does not provide any clarification on the likelihood of a MTW stockpile machine failure, or the costs associated with a major rebuild of one or more of these machines to significantly extend their service lives. Due to this, additional CAPEX has been included as a contingency.

The MTW operations rely upon blending onto trains and at the port to achieve the required product coal quality for each shipment.

The Company's site management have confirmed that near term future MTW CHPP tailings will be impounded in the Loders Pit where mining will be completed in 2019. Half of the Loders Pit final void will also be used for overburden waste placement and other half for tailings emplacement.

There are two Train Load Outs (LTO) on the Mount Thorley rail loop with a combined capacity of up to 19Mtpa in railings. The two TLO bins are located close enough together such that a train can be loaded from Mount Thorley and Warkworth TLO bins at the same time, which helps with blending and doubles the speed of train loading.

11.5 Moolarben

Coal Preparation Plant (CHPP)

The Moolarben CHPP was designed as a 1,800tph, two module plant (2 x 900tph throughput) able to be operated in single or two product mode. The CHPP processes include two stage dense medium cyclones (DMC) for the -50mm to +1.8mm sized coal, two stage spirals for the -1.8mm to +0.1mm sized coal and two stage froth flotation for the -0.1mm sized coal.

Both modules were designed to operate for over 7,300 hours per year (approximately 83% overall utilisation including maintenance allowance) to achieve a 13Mt coal feed per annum rate. RPM understands that at the time of commissioning that the second product mode was not configured as a result of the selected mining practice at the time and to achieve this capability at some later stage a reconfiguration of the DMC and spirals circuits would be required. In RPM experience the decision to modify the coal processing strategy would require detailed study and is largely driven by the ROM coal characteristics producing favourable product splits and a market being available for the products produced. Additionally such a change can result in reduced overall feed throughput which would also have to be considered for such a change. There are two Open Cut ROM coal receival feeders that can operate at a peak rate of 2,500tph which provides ample throughput to maintain CHPP feed. Coal hopper and surge bin capacity of 1,800 tonnes allows for storage of approximately 1 hours processing to assist with management of any ROM coal receival system delays.

Coal from underground mining is placed on a 100kt ROM stockpile and bypasses the CHPP being crushed and conveyed straight to an UG product coal stockpile. The UG coal handling system is similar to the OC and has a throughput of 2,500tph for an annual rate of up to 8Mt ROM pa, sufficient for the UG mining output.

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Coal Yield

The average washed product yield for the Moolarben CHPP is forecast to be LOM 77% with the overall yield including bypass coal approximately 82%. The washed product only yield varies year-on-year from 73% to 78% with annual variation mainly due to the differing proportions of coal seams that are produced from the Open Cut operations each year while overall yield ranges between 76% and 88% with varying quantities of bypass coal associated with ramp up and down of underground mine output. RPM has not up to this point had access to significant historical plant performance data however understand the scheduled performance is largely in line with the outcome of the 2015-2016 years with a Plant yield of 77% being achieved in 2016 and 76% in 2017.

The site has developed a detailed coal washability database with the assistance of a specialist coal quality consultancy to improve the coal product yield and quality for future mining areas. This has resulted in a modest forecast improvement in CHPP yield. The validation of the model is being completed using large diameter borehole cores which is standard practice for the type of modelling undertaken.

Coal Product

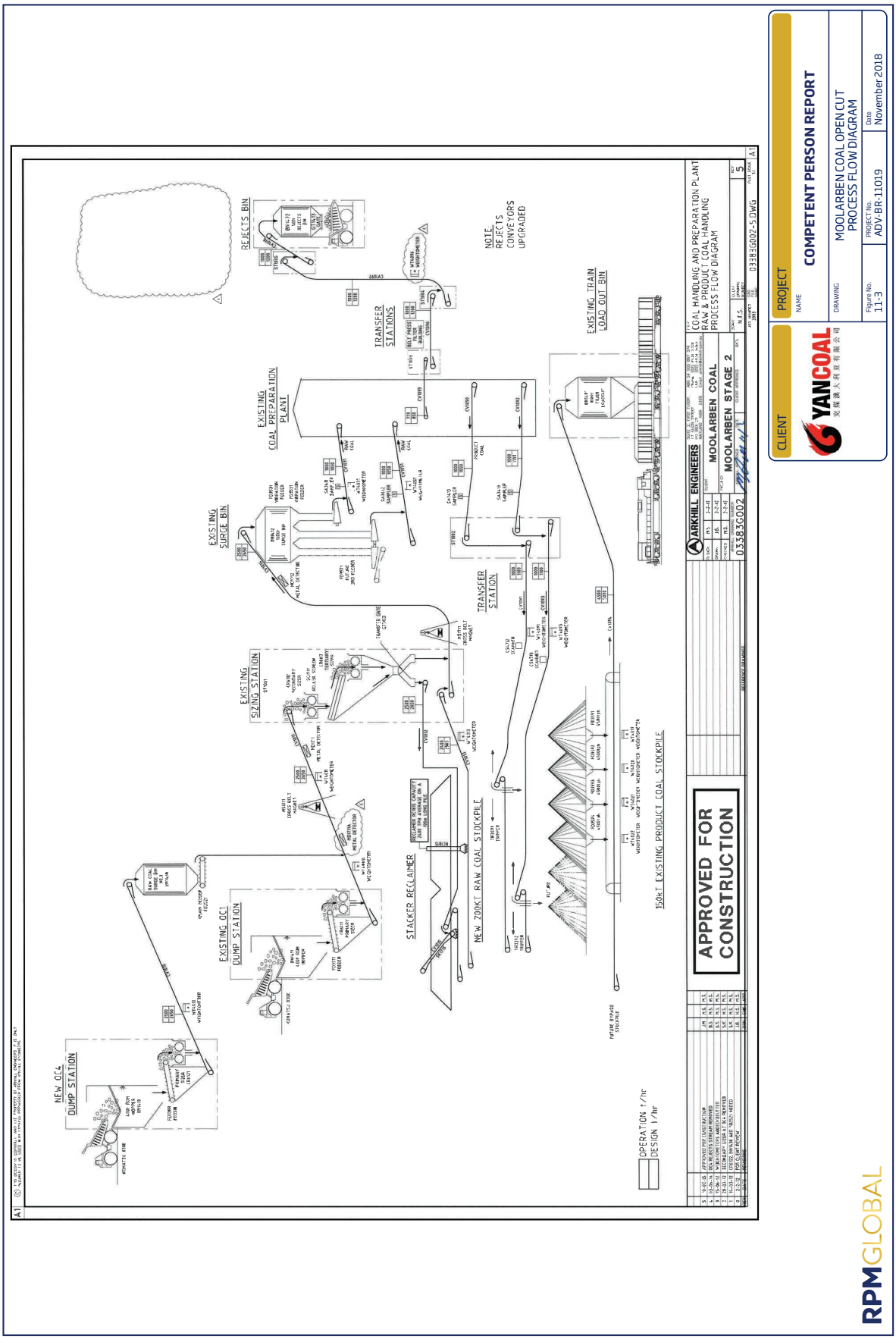
The CHPP facilities thermal coal products only with product ash categories of 16%, 18%, 22% and 28%. The proportion of each product in the LOM plan is summarised below in **Table 11-3**.

In-pit coal inventory is typically 1Mt which allows for the management of the delivery to the CHPP of coal types to suit the product blending strategy in the short and medium term.

Table 11-3 LOM Product Coal Split ***(1)***

	Product Ash Category (%)			Total Product
Product	16	18	22/28	
LOM Total Product (Mt)	61.7	95.3	97.8	254.8

(1) Source: Moolarben 2017 Life of Mine Plan.pdf, Tables 1-2 & 1-3.


NEW OC4 DUMP STATION
EXISTING OC1 DUMP STATION
STACKER RECLAIMER
NEW 2000t RAW COAL STOCKPILE
150kt EXISTING PRODUCT COAL STOCKPILE
EXISTING SIZING STATION
EXISTING SURGE BIN
TRANSFER STATION
EXISTING COAL PREPARATION PLANT
TRANSFER STATIONS
REJECTS BIN
EXISTING TRAIN LOAD OUT BIN
NOTE. REJECTS CONVEYORS UPGRADED
APPROVED FOR CONSTRUCTION
OPERATION t/hr
DESIGN t/hr
ARKHILL ENGINEERS
MOOLARBEN COAL
MOOLARBEN STAGE 2
COAL HANDLING AND PREPARATION PLANT RAW & PRODUCT COAL HANDLING PROCESS FLOW DIAGRAM
0338360025.DWG
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MOOLARBEN COAL OPEN CUT PROCESS FLOW DIAGRAM
Figure No. 11-3
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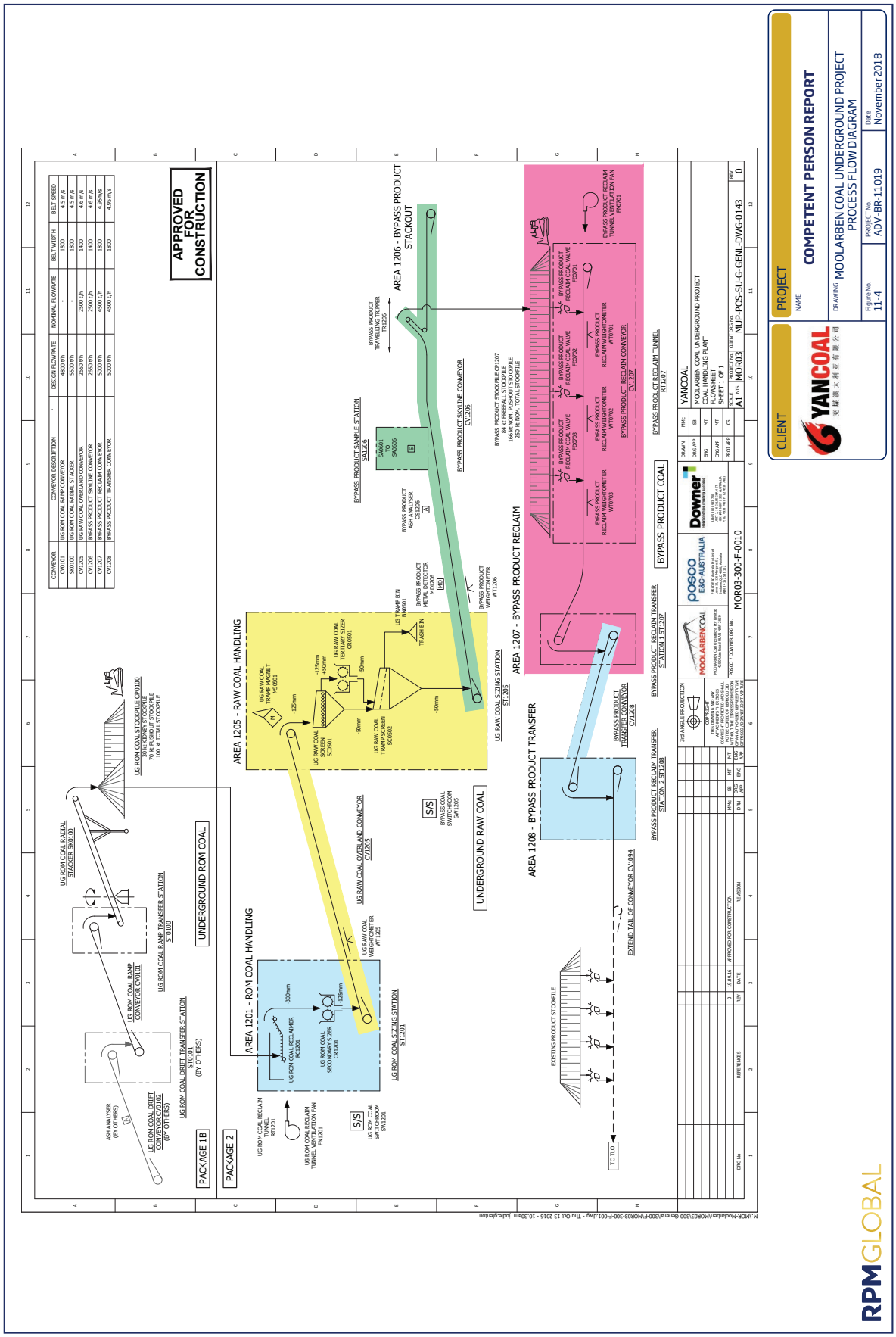
APPROVED FOR CONSTRUCTION
AREA 1205 - RAW COAL HANDLING
AREA 1201 - ROM COAL HANDLING
AREA 1206 - BYPASS PRODUCT STACKOUT
AREA 1207 - BYPASS PRODUCT RECLAIM
AREA 1208 - BYPASS PRODUCT TRANSFER
UNDERGROUND ROM COAL
UNDERGROUND RAW COAL
PACKAGE 1B
PACKAGE 2
CLIENT
PROJECT
YANCOAL
COMPETENT PERSON REPORT
MOOLARBEN COAL UNDERGROUND PROJECT
PROCESS FLOW DIAGRAM
Figure No. 11-4
PROJECT No. ADV-BR-11019
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Coal Handling

The Moolarben blending strategy typically starts in the pit with various seams delivered to the ROM coal stockpiles and washed one seam at a time in a campaign to improve yields and throughputs. The Raw Coal stockpile and associated stacker reclaimer system allows for separate stacking and reclaiming of coal based on quality which provides sufficient flexibility to batch wash coal to meet coal product quality requirements.

Stockpile capacity for the end to end CHPP system is the equivalent of approximately 16 days production.

Table 11-4 Stockpile Capacity

Facility	Capacity (kt)	Days Production
OC1 ROM	200	8
OC4 ROM	120	5
ROM UG	100	6
Product	180	5
Prod. UG Bypass	250	14
Total	850	38

With the existing stockpile facilities available at maximum ROM and product coal production rates there is substantial capacity to maintain throughput during off site rail or port outages.

A single train loading bin and dedicated rail loop with a capacity of up to 18Mtpa in railings. Port allocation exists at both the PWCS Kooragang Coal Terminal (KCT) and the Newcastle Coal Infrastructure Group (NCIG) facilities.

The CHPP is relatively new, well-constructed and laid out and is expected to be able to deliver the sustained higher throughput rates outlined in the LOM plan with regularly completed maintenance and the continuation of typical industry operational standards.

11.6 Ashton

The Ashton CHPP consists of two modules. Module 1 was constructed in 2004 however is currently being dismantled. The mine plan is based on using the operating Module 2 which has a throughput capacity of 600 to 800 tpa subject to the nature of the ROM feed. The CHPP includes Dense Media Cyclones, spirals and flotation process which are all industry standard.

The plant is currently operating on a 5 day roster, which at the achieved throughput rates provides for sufficient operating time to wash the ROM coal from the underground project which has a peak rate of 3.4Mtpa. To achieve the LOM plan peak production rate of 6Mtpa which includes coal from both the underground and the South East Open Cut, Yancoal propose to operate the plant on a 24/7 roster system. An allowance in the financial model has also been made for an upgrade of the reject drain and rinse screen and dense medium cyclone circuit.

Ashton has been processing coal seams from the Foybrook coal measures since 2004 including the Pikes Gully seam through to the Upper Hebden seam. The Ashton CHPP washes to a 9.5% ash product which is based on analysis of value versus yield.

Stockpile capacity at Ashton is currently 250kt for the underground ROM coal and 400kt for product coal. The plant has a LOM yield of 56.8% and is forecast at 49.1% for 2018 based on the expected dilution due to seam thickness. This is in line with the 42% in 2017, which was caused by seam thickness variations at the commencement of a longwall panel. These seam thickness variations are expected to decrease based on increased geological knowledge from drilling.

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11.7 Yarrabee

The Yarrabee CHPP was commissioned in 2009 to enable more ROM coal to be processed to produce a PCI coal product. The CHPP uses standard technology and liberates coal through sizing, gravity and flotation separation. After sizing, dense medium cyclones are used for processing the coarse material and spirals and flotation cell are used for the fine coal.

The CHPP was originally commissioned with a nameplate capacity of 350tph. Through debottlenecking improvements, the current throughput capacity is 450tph. Yarrabee commissioned a study to assess alternatives for increasing throughput at the site. The two options were to install a new module and achieve a rate of 700tph or to make further upgrades to the existing plant and achieve a rate of 585tpa. The option to modify the existing plant through upgrades has been selected as the basis for this plan.

Bypass coal is hauled to various bypass stockpiles located adjacent to YEN Pit or at the CHPP. Bypass coal is crushed at each bypass pad by a mobile crushing plant. Bypass product coal is then hauled 37km direct from the bypass pads to the Boonal rail siding. Washed coal is crushed at the main CHPP pad and fed directly into the CHPP feeder bin. Washed product is placed into stockpiles which are managed by dozers to maintain capacity. Product coal is also hauled by road train to the Boonal siding. The Boonal Load Out Facility is owned and operated by a Joint Venture between Yancoal and Jellinbah Coal Mine.

Potential bypass coal is identified in the geological model and confirmed through the application of appropriate loss and dilution assumptions to estimate the run of mine coal quality. If the quality of the coal meets the required product specification then the coal can be bypassed. Because of the campaign washing of coal on a seam by seam basis, data can be collected to correlate wash plant yield with ROM ash on a seam basis. This correlation allows prediction of actual CHPP yields for each seam and ply from each pit. This method has been used for the estimation of Marketable Reserves.

The Yarrabee CHPP operates on a six day, three panel roster with planned maintenance schedules on the down day.

The plant has a LOM yield of 76% and is forecast at 78.5% for 2018 resulting in an effective yield of 86.7%. This is in line with the 75% in 2017 and an effective yield of 83%.

11.8 Stratford and Duralie

The Stratford CHPP is a two-stage plant processing coarse, fine & ultrafine coals to achieve specified coal quality and to maximise product yield. The CHPP is fed by Front End Loader (FEL) which feeds the nominated ROM coal blend from the stockpiles into the CHPP ROM Bin. The coal goes through the raw coal circuit which reduces the coal to a top size of 50mm before entering the plant. The coal is then separated into various size fractions by screening and by classification. The following systems are used in the nominated size fractions:

- Dense Medium Cyclones, 50 mm - 1.4 mm size fraction,
- Spirals, 1.4 mm +0.25 mm size fraction,
- Teetered Bed Separator, 1.4 mm - 0.25 mm size fraction and
- Flotation, < 0.25 mm size fraction.

The Stratford CHPP has excess capacity with low utilisation in the proposed life of mine plan. It is therefore not anticipated that plant upgrades will be required to achieve the proposed plan. The following points outline the development and improvements made to the Stratford CHPP:

- 1995 initial plant nameplate 350 tph
- 1996 Daniels Bath circuit installed to scalp rock out of the Avon pit feed. Nominal capacity increased to 500tph.
- 1997 First HBF and Jameson cells, TBS & Lime silo upgrade. Nominal feed rate to 550tph.
- 2003 Duralie mine started. Stratford main pit (Avon seam) completed. Due to the change in feed coal types (Duralie feeds had much less rock), the Daniels Bath circuit was no longer required and was removed. Nominal capacity reduced to 400tph.

- 2007 SMART cell installed as a secondary flotation machine.
- 2008 – Drum filter installed to filter product from the Smart Cell due to overloading of the original HBF.
- 2009 - 2010 Fines upgrade and new product stockpile expansion. Double pumping of co-disposal.
- 2011 Desliming screen and coarse coal centrifuge upgrade enabled 670tph on Duralie feed tonnes and 490tph on Stratford feed tonnes, Second HBF and Jameson cell upgrade. Drum filter removed.
- 2013 Raw coal crushing and screen tower upgrade

The plant has a LOM yield of 59.6% and is forecast at 59.4% for 2018. This is much lower than the 71% achieved in 2017. There are a large number of seams mined that have varying forecast yields, mining in 2017 was from a higher yielding seam. The development of the Avon North and Roseville West pits in 2018 will result in a reduction in the average annual yield at the site.

11.9 Austar

The Austar CHPP was designed, built and installed in the early 1960's and has undergone substantial modifications since this time. The CHPP is located to the north of Wollombi Rd near the village of Pelton.

The design feed rate of the plant is 600tph, however improvements have enabled the plant to operate at rates between 720 to 750tph which provides capacity to process 5Mt per annum. The Austar is a Heavy Medium plant with a fine coal spirals circuit. There are two heavy medium circuits which are set up to treat different size fractions:

- No.1 Circuit treats the 12mm to 1mm size fraction using dense medium cyclones (DMC),
- No.2 Circuit treats the 40mm to 12mm size fraction also using DMC and
- Fines (-1mm) are treated in the spirals circuit.

ROM coal is transported from the pit top to the CHPP via a 2.5km overland conveyor. After primary sizing ROM coal can either be fed directly into the CHPP or stored on the ROM stockpile. Washed coal is transported to the product stockpile via a skyline conveyor and tripper and deposited on the washed coal stockpile via the moving tripper.

Product coal is transferred via a reclaim tunnel and the reclaim conveyor which operates at a rate of 1,200tph. The reclaim conveyor transfers the product coal to a rail loadout bin which sits directly over the rail line adjacent to the CHPP.

The plant has a LOM yield of 84.2% and is forecast at 86.1% for 2018. This is lower than the 91% achieved in 2017 due to the planned dilution and mine methods.

11.10 Donaldson

Donaldson coal has historically been hauled via road train to the neighbouring Bloomfield Colliery where it was processed under a toll washing arrangement. The mine is currently under care and maintenance, however RPM understand that this is the proposed coal processing option for the mine in the future.

11.11 Middlemount

The Middlemount CHPP designed in 2007 and construction was completed in 2010. The plant has had modifications completed to aspects of the design in 2011 which were aimed at improving coking coal yields from the plant. The CHPP is a single stage plant with the ability to produce two products. The plant uses standard industry technologies which includes; dense medium cyclones, spirals and Jameson cell systems.

The Middlemount plant has a nominal throughput capacity of 700tph and operates 24 hours per day, 7 days a week. This is sufficient to process up to 5.4Mtpa of ROM coal feed. The Middlemount plant operates at high utilisations by industry standards.

All ROM coal is washed at Middlemount to produce PCI and semi hard coking products. Product coal is stored on two separate stockpiles with a combined capacity of 250kt.

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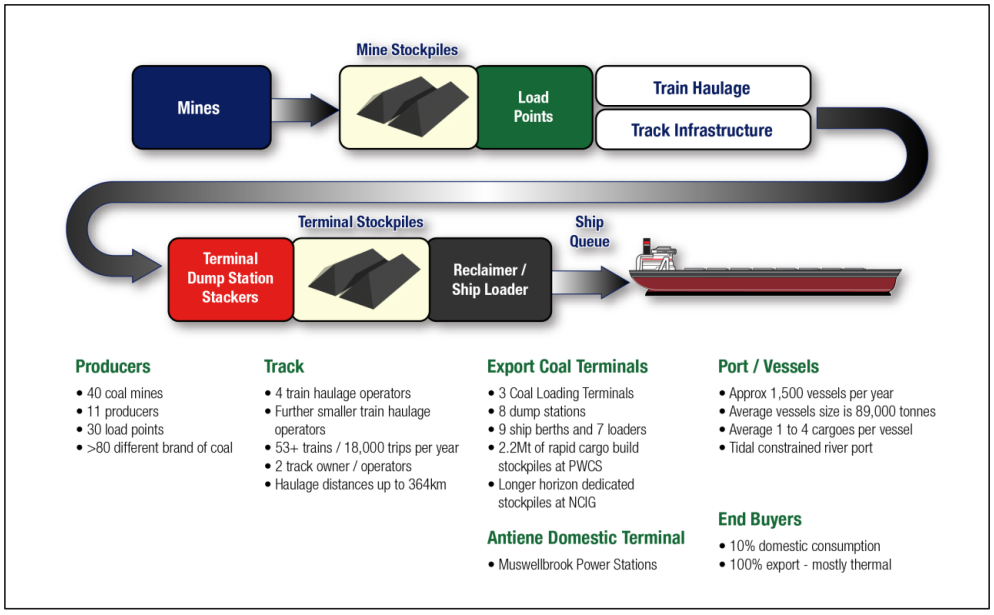
12. Railway and Port Infrastructure

Upon arrival at the various loading points within the Assets, the coal is transferred to coal trains for transport via railway to one of three terminals at the deepwater port in Newcastle, or one of three ports in Gladstone and Mackay in QLD.

The Newcastle terminals are operated by Port Waratah Coal Service ("PWCS") and Newcastle Coal Infrastructure Group ("NCIG") and service the Company as well as other coal producers in the region. The ports in Queensland include the Port of Gladstone, the Port of Abbott Point and the Port of Hay Point. The company exports via four separate coal terminals in Queensland

Both the rail networks and port facilities are operated by third parties and, as such, the Company has various contracts in place. The NSW network is a regulated network that is often referred to as the Hunter Valley Coal Chain ("HVCC") and requires no capital investment from the Company, instead the Company pays contracted rates. An overview of the HVCC as at 2012 is shown in ***Figure 12-1***. RPM highlights this figure shows the current total user of the network, not just the Company.

Figure 12-1 Overview of HVCC at as 2012.



SOURCE: PROVIDED BY THE COMPANY

12.1 NSW Rail Supply Chain

The Company's supply chain is a sub-set of the broader rail and port network operating in NSW (***Figure 12-2***) which is a regulated network referred to as the Hunter Valley Coal Chain ("HVCC") which is managed by the Hunter valley Coal Chain Coordinator ("HVCCC"). The NSW mines use the HVCC rail network to transport products to the Port of Newcastle coal terminals PWCS and NCIG with the Company required to schedule coal transport, as do all other HVCC users.

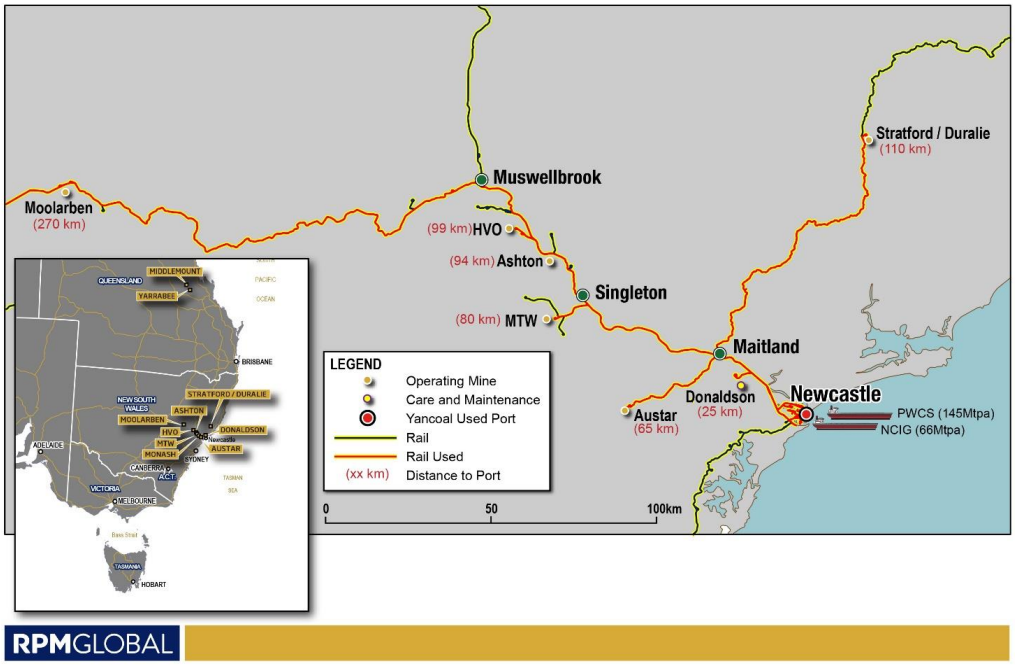
RPM notes that the Australian Rail Track Corporation ("ARTC") provides all below-rail access with capacity aligned to contracted port volumes for all HVCC users. The ARTC is a federal government owned corporation established in 1998 that manages the majority of the interstate rail network in Australia. The role of the ARTC is to operate and coordinate the operation of the national rail network and to ensure rail capacity will be sufficient to meet future growth demands. Importantly for the Company the ACCC restructured the access framework

for the Hunter Valley rail system that resulted in the ARTC contracting directly with coal producers for rail access for coordination with the HVCCC.

RPM is aware that ARTC has produced a 2017 to 2026 Hunter Valley Corridor Capacity Strategy report which outlines the necessary rail infrastructure requirements to meet the track capacity requirements of the coal industry over this period. The system improvements are proposed to be funded by access charges paid by the coal producers utilising the track as per current arrangements.

It is expected that below-rail capacity will lag port capacity in the HVCC until 2017 when a number of the key congestion projects are expected to be completed. Importantly, the corridor strategy also identifies the necessary rail network upgrades that would enable track system capacity to support the development of terminal 4 at PWCS by delivering system capacity of approximately 280-300Mtpa. RPM has not reviewed this strategy document and provides this information for reference only.

Figure 12-2 Assets Rail Network to Port of Newcastle



Rail Contracts

Through discussion RPM is aware the company has sufficient rail access and freight contracts to meet its current production requirements for each asset. RPM notes that as per industry standards renegotiations occur periodically, as such allotments for the LOM are expected to be available. Rail contracts are commercially sensitive and as per JORC Code clause 49 information regarding these contracts is not presented in this report.

12.2 NSW Port Facilities

Upon arrival at the Port of Newcastle, the products are exported via coal terminals PWCS and NCIG. Several producers utilise these terminals which have a total nameplate capacity of 211Mtpa after recent expansions. Similar to the rail supply chain, the port facilities are operated by a third party. Below is a brief summary of each of the terminals. RPM presents this for information purposes only.

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PWCS

The PWCS terminal has a capacity of 145Mtpa and consists of two terminals, namely Carrington Terminal and Kooragang Terminal, as described below:

- Carrington Terminal – Commenced operation in 1976 and is located on 51Ha of land on the south side of Newcastle Harbor. Initially with 16mtpa of capacity it has been expanded to the current level of 25mtpa. Coal is transported by rail or road, with the vast majority by rail, to two offloading facilitates. Two ship loaders are in operation.
- Kooragang Terminal – Commenced operation in 1984 and is located on 265Ha on the North side of Newcastle Harbor. With an initial capacity of 15mtpa, it has been incrementally increased to the current capacity of 120mtpa. All coal is received via rail into four offloading facilities.

PCWS has a plan developed for an additional terminal (Terminal 4) to be constructed in stages according to demand. This terminal is yet to commence construction however technical studies are underway along with the governmental approval process. No timeline has been set for construction of the 120Mtpa capacity terminal due to recent decreases in commitments of throughput from various coal producers.

NCIG Terminal

The NCIG terminal commenced operation 2010 with an initial capacity of 30Mtpa, after further stages of expansion were completed resulting the current capacity of 66Mtpa. The terminal contains storage capacity of 5.7Mt, which is allocated based on proportion of the capacity allocation.

Port Contracts

Each coal producer is provided with a contracted port allocation which is the upper limited of export coal and are obliged to meet under a TPC. RPM is aware the Company does not necessarily follow these allocations per operation. Instead, the Company takes into consideration the NCIG port capacity allocation and splits that on a Product Coal optimisation basis between its operations. As with the rail allocation RPM is aware the company has sufficient rail allotments to meet its current and medium term production requirements. RPM notes that as per industry standards renegotiations occurs periodically, as such allotments for the LOM are expected to be available, further more as these contracts are commercially sensitive, as per JORC Code clause 49 information regarding these contracts is not presented in this report.

The current port capacity contracts do not reflect mine ownership, nor do these reflect the current ARTC rail allotment agreements for contracted volumes from each operation. Given the Company also holds the rail contracts which are in excess of current Assets product requirements, the mines are exposed to substantial TPC charges. RPM notes that these additional charges are INCLUDED in the OPEX as outlined in **Section 14**.

The Company holds the typical 10 year rolling TPC port contracts at both NCIG and PWCS. Whilst these long-term contracts act as security over the Assets operations they can also be problematic in terms of meeting, however not exceeding, contracted volumes. In fact, the Company has failed to export sufficient coal volumes to cover all of its NCIG and PWCS port contracts for at least the last 5 years. That would indicate that the Company has made a commercial decision to accept TPC charges for unused port capacity rather than not have that capacity in hand should it be required.

It is necessary for the Company to revise the allocations and assess the risk for TPC penalties. This is important as the NCIG port has a higher charge than PWCS however better cargo handling and blending facilities.

12.3 Hunter Region Infrastructure Comments

RPM is of the opinion that the current HVCC and contracts in place are sufficient to support the forecast production as reported in this Report. HVO expansion plans, in combination with a 12Mtpa MTW production volume, will require additional rail and port capacity that the Company does not currently have secured (other than that noted above). As with all 10 year evergreen rail and port capacity allocations it is possible to apply for additional train paths and port capacity on an annual basis. There is sufficient time for the Company to use the annual process to apply for increased allocations if it so desires and in the current market, there should be no issues in receiving increased rail and port allocations in a timely manner. However, this scenario could rapidly change with relatively minor increases to the current FOB Port of Newcastle revenues across the coal industry.

The proposed Terminal 4 expansion at Newcastle Port is on hold. Even without that project proceeding there are a number of efficiency upgrades underway at PWCS and NCIG that will increase the Port handling capacity over the short to medium term without the need to invest in a major upgrade like T4.

In the current climate it is difficult to predict when the next cycle of major rail and port expansion projects will proceed, however expansions of the HVCC are not seen as short to medium term risks to the implementation or timing of any expansion.

There always exists some confusion about medium to long term rail and port charges. However, at this point in time RPM considers there are some opportunities for coal miners to seek and obtain better deals across the HVCC.

12.4 QLD Rail Supply Chain

The Yarrabee and Middlemount mines are located in Queensland's Bowen Basin. The mines of the Bowen Basin are connected to the ports by four separate rail networks; Moura, Blackwater, Goonyella and Newlands which collectively are referred to as the Central Queensland Coal Network (CQCN). The total network includes 2,670km of rail track and has a total capacity of approximately 360Mt per annum.

Coal from the Yarrabee mine is railed via the Blackwater System to the Port of Gladstone and coal from Middlemount is railed via the Goonyella System to the Port of Hay Point and via the Newlands network to the Port of Abbot Point.

The below rail infrastructure of the CQCN is owned and managed by Aurizon Network. Aurizon Network's operations are governed by 99 year lease arrangements with the State of Queensland. Access to the rail network is managed under a detailed process approved by the competition regulator, the Queensland Competition Authority. The CQCN can be seen in ***Figure 12-3***

There are currently two above rail operators on the CQCN; Aurizon Operations and Pacific National. Middlemount Mine has above rail contracts in place with Pacific National and Yarrabee with Aurizon Operations.

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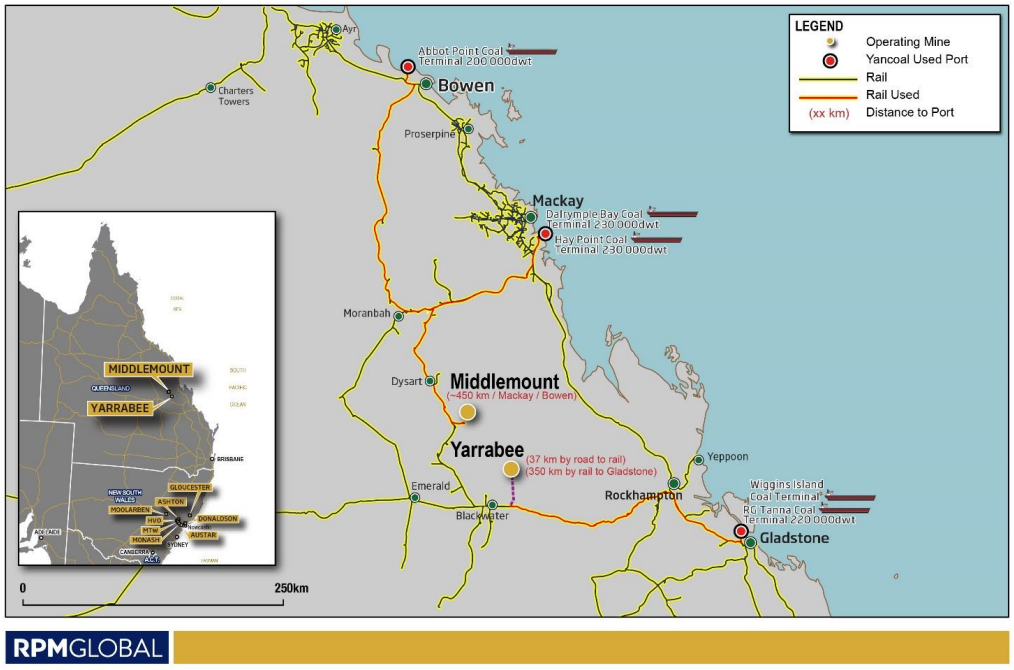
Figure 12-3 Queensland Rail Networks and Ports



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12.5 QLD Port Facilities

The Bowen Basin is serviced by five coal terminals across three ports. Between the two Queensland based operations coal is exported via four of the coal terminals: Yarrabee has a contracts with Wiggins Island Coal Terminal and RG Tanna Coal Terminal. Both of the terminals are based at the Port of Gladstone. Middlemount Coal has contracts with Abbot Point Coal Terminal at the Port of Abbot Point and with Dalrymple Bay Coal Terminal at the Port of Hay Point.

Abbot Point Coal Terminal

The Port of Abbot Point is Australia's northernmost export facility located approximately 25 km North of Bowen in North Queensland, Australia. The T1 terminal has a nameplate capacity throughput of 50Mtpa. In fiscal Year 2016-2017, 25.4Mt was shipped through Abbott Point

The facilities at Abbot Point comprises coal handling and stockpile areas, a rail unloading facility, a single trestle jetty and a conveyor connected to a berth and shiploader 2.75 km offshore.

Dalrymple Bay Coal Terminal

Dalrymple Bay Coal Terminal (DBCT) is located 38km south of Mackay in the Port of Hay Point. The coal terminal has a nameplate capacity of 85Mtpa. DBCT was established by the Queensland Government in 1983 and in 2001 awarded a 50 year lease plus a 49 year option to DBCT Management Pty Ltd.

The facilities at the site include four berths, three ship loaders, train unloading facility and coal stockyards with a live capacity of 2.3Mt.

Wiggins Island Coal Export Terminal

The Wiggins Island Coal Export Terminal (WICET) is located to the west of the RG Tanna Terminal in the Port of Gladstone. WICET has a current capacity of 27Mtpa and a current throughput of 16Mtpa. The offshore wharf

and loading facilities are situated north of Wiggins Island, adjacent to the Targinie Channel. The rail unloading facilities are located immediately south of the North Coast Line (NCL) and are connected to the Golding Point stockyard via a 5.6km long overland conveyor.

The facilities include a train unloader, stockyard with a capacity of 1.85Mt, wharf and shiploader.

RG Tanna Coal Terminal

RG Tanna Coal Terminal (RGTCT) is located in the Port of Gladstone. The coal terminal has a nameplate capacity of 74Mtpa. The terminal is operated by the Gladstone Ports Corporation which is a Queensland Government owned corporation.

The facilities at the site include four berths, three ship loaders, three train unloading stations and coal stockyards with a live capacity of 5.8Mt in up to 22 separate stockpiles.

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13. Site Infrastructure

Supporting regional and local infrastructure for the Assets is well established and has ample capacity for the continued support of the planned LOM operation. The Assets are located in close proximity to regional townships and serviced by national highways and good quality tarred roads. The surrounding towns provide suitable accommodation and supporting industries for the operations. Below is a description of the major infrastructure requirements of the Assets (other than rail and port transport infrastructure). RPM's observations during the various site visits confirm each site has fit for purpose infrastructure in suitable condition to support the estimated project life.

13.1 Transportation Facilities

All of the mines are currently operating with the exception of Donaldson which is currently under care and maintenance. As part of the site visits, RPM observed that the installed transport infrastructure including rail loading facilities, site access roads and conveyors were generally in good working condition. Open cut projects will require periodic construction of haul roads and site access roads however this is standard practice for operating mines.

RPM make the following specific comments:

- MTW - A new heavy vehicle underpass (beneath the Putty road) has recently been completed to allow overburden to be hauled from Warkworth pits to Mt Thorley waste dumps. This is the second heavy vehicle road linking the two mines.
- Stratford and Duralie - two road diversions are required to achieve the life of mine plan. The roads are not main thoroughfares. The Wenham Cox Road diversion is required to access the Avon North pit which is due to commence in the next 12 months. The Johnsons Creek Road will be required to mine the Duralie East pits from 2024.
- The SEOC at Ashton will require a new ROM pad and overland conveyor for coal handling.
- Ashton currently relies on trains using the Ravensworth Operations rail loop which is managed by Glencore to turn trains around after loading at Ashton. The rail loop access agreement expires in 2024 and either a renewal or alternate strategy is required to complete the LOM Plan.

13.2 Buildings and Yards

The operations are equipped with the usual complement of facilities including parking areas, gate-houses, offices, warehouses, storage yards, workshops, scrap yards, laboratories, change rooms, lunch rooms, emergency-service facilities (medical clinics and fire-fighting), food-service facilities, etc. required to serve the mines and plants.

RPM have not completed a detailed audit of the facilities at each site. Given the majority of the sites are operating mines, RPM anticipate that the existing infrastructure is in place to support mining activities except for the following specific comments:

- Ashton LOM plan suggests the requirement of additional workshop due to the isolated location of the SEOC. Capital allowance is included in the LOM Plan for site infrastructure adjacent to the SEOC pit.

13.3 Water Supply and Storage

HVO

Water supply requirements for HVO differ depending on whether the area is a net user or producer of water during the various rain seasons as outlined in ***Section 2***. The water management system for HVO, including the West Pit, operates through the separation of clean and dirty water via separate water circuits between the tails and CHPP facilities. The main consumption of water is for dust suppression on haul roads, mining areas and coal stockpiles and CHPP circuit losses. Water has historically been supplied from three sources:

- surplus mine water stored in pit (and subsequently pumped);

- intercepted runoff water; and
- ground water percolation into the open-cuts.

HVO has an active water management strategy and manages surface and subsurface water according to key objectives:

- Ensure that statutory requirements and corporate standards are met;
- Manage catchments and water on the mine lease in a way that minimises surface water impacts to environment and downstream neighbours and limits interference to mining production;
- Maintain quality control and segregation of clean and mine affected water;
- Reduce reliance on fresh water usage; and
- Keep the local community and regulators informed of activities where required and to respond quickly and effectively to issues and complaints.

RPM is aware that HVO is not connected to the Singleton Shire town water supply with potable water trucked in from local suppliers in the Singleton and Muswellbrook area. Rehabilitated Class I and II land on the Alluvial Lands mining area is irrigated using an agricultural licence issued by NSW Office of Water (see ***Section 14***). The licence and allocation were pre-existing and were purchased with the land before mining commenced.

MTW

Water supply and on-site storage at MTW was significantly upgraded by approvals for major out of pit dams in 2009 and is further secured by access to Hunter River entitlements and also supply supplement via HVO. The current operations and possibly the expanded operation should it occur, are adequately covered by raw water supply and storage infrastructure.

Following the internal and regulatory approvals being secured construction of two dams, South out of pit Dam and North out of pit Dam were completed to increase out of pit water storage capacity from 685Ml to 2,340Ml, thus allowing the Mt Thorley Pit to be returned to mining. The South out of pit Dam was constructed in 2010 and has a capacity of 2,110 Ml.

If site water stocks are low or not available, fresh water is sourced from the Hunter River via the MTCV Water Supply Scheme. If MTW's allocation has been exceeded during periods of extended dry weather, MTW has historically purchased water from HVO to meet the surplus demand.

MTW has adequate water licences (3GL) to supply washeries and dust management systems across the mine site.

Moolarben

On-site water storage is largely associated with de-watering of the Underground 4 workings. The proposed mitigation strategies and RPM comment are outlined below:

- Making additional areas available for increased on site water retention and storage through modification of planned open cut mining sequence. This strategy potentially decreases the available open cut working room and may decrease mining efficiency or output.
- Desalination and discharge from site relies on achieving he requisite environmental discharge licences from relevant NSW Government department. These licences are typically only made available for the short term discharge of mine water associated with significant storm events.

RPM have not reviewed the detailed water balance modelling associated with the site water storage plan work is ongoing to understand the likely magnitude of impact to open cut mining associated with additional retention and the volume of discharge being proposed to ascertain the likelihood of approvals being granted in relation to existing approvals for other nearby mines.

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Ashton

The Water Management Plan for Ashton was developed in association with the DPE and DPI. The plan was last approved in 2016 and was under review as at 26/06/2017. Underground water management is achieved via

- a series of pumps at low points;
- peak loads identified from the site groundwater model; and
- air operated at face to a series of electric staging pumps (25L/S) either pumped to sumps at the mine access portals or to vertical borehole pumps (40L/S).

Site water balance modelling indicates a progression to a surplus water supply however no detailed water modelling for the SEOC has been completed at this time. A water inventory risk monitoring program is completed monthly and risk around inflows from alluvium during underground mining of ULD seam is reviewed at six monthly intervals. Sufficient licences are in place for predicted water intakes with recent consolidation and simplification of licences. 2007 and 2008 flood events were successfully controlled.

Yarrabee

Yarrabee maintains a water management plan which aims to achieve the following:

- Maintain separation between mine affected water and clean surface water runoff.
- Capture surface water for use on site.
- Comply with statutory requirements.
- Protect local water resources.

The site water balance indicates that the mine has a water deficit of approximately 1,300ML per year. The site has 10 water storage areas of which 9 are mined out voids. Water is preferentially stored in voids with low predicted evaporation levels.

Yarrabee is not susceptible to flooding from the nearby Mackenzie River but has been impacted during periods of heavy rainfall by 12 Mile Creek which runs through the project. Flood diversion structures were developed to mitigate this issue in 2017. There is the requirement of the 12 Mile Creek to be relocated.

Stratford and Duralie

The Stratford and Duralie project has a number of contained water storages including the existing voids at the site, there are also the voids of planned pits as the project is developed. The project water management system is designed to achieve no overflow from contained water storages to downstream watercourses.

The main water requirement is for CHPP make-up supply and for dust suppression. The water balance at the Stratford complex has historically been in surplus. The Main Pit Void water storage is deemed suitable for water and tailings management at Stratford. The Duralie operation has multiple evaporator sprays in place to mitigate some of the excess water.

Austar

Austar has a Site Water Management Plan (SWMP) in place which covers the following aspects of the project:

- Underground mine water management,
- Pelton CHPP Site and
- Surface water storage and management.

There are a number of geographically separated and interrelated systems that are managed as a whole to ensure that the operational needs of the mine are met whilst also meeting licence requirements. There are a number of large water storage areas both on the surface and underground that effectively act as buffers to enable each of the areas listed above to act broadly as independent systems. The site has a water treatment plant which allows the mine to operate almost independently of the town potable water supply. The site only discharges treated water to Bellbird creek in accordance with approved conditions.

Donaldson

A water management plan has been developed for Donaldson and was last updated in 2014. Water supply for the mine is made up from surface water runoff that is diverted to a storage dam on site and mine water from the underground mine. Excess water from the underground mine is currently transferred to Bloomfield CHPP under an agreement between the two parties. During the course of the Life of Mine Plan it is predicted that an excess of water will produced at the site.

The surface water management plan is integrated with the Bloomfield Colliery plan that serves the mine and the CHPP through which Donaldson coal is planned to be processed. The surface water management system includes the following aspects:

- All surface water runoff is directed to the Big Kahuna dam from the mine facilities area
- Underground inflows may be stored in some areas of old workings, inflows from localised areas are to be transferred to Big Kahuna dam
- Water for underground operations is drawn from Hunter Water potable supply
- Water from Big Kahuna dam is used for onsite purposes
- Water is periodically transferred from Big Kahuna dam to Lake Kennerson at Bloomfield via pipeline
- Water may be periodically discharged off site from Big Kahuna dam to Four Mile Creek under approved conditions.

Middlemount

Middlemount mine is currently operating and has sufficient water supply to achieve current planned production at the site. A staged set of flood protection levies are planned at the southern end of the pit to protect the pit from inundation.

13.4 Power Supply

All of the operating sites have developed electrical reticulation systems in place. The sites have sufficient supply to achieve the proposed development plans. Routine ongoing maintenance is all that is anticipated. In addition to this RPM make the following specific comments:

HVO

Electricity is supplied to HVO via a 66kV transmission line and associated substations and switchyards. Electricity is supplied to mining equipment such as draglines, electric rope shovels, employee amenities and CHPP's from the main grid. In addition, 330kV transmission lines pass through HVO.

MTW

As noted in ***Section*** 2 the MTW is an amalgamation of Mount Thorley and Warkworth mines separated by the Putty Road. As a result two separate high voltage electrical supply and reticulation systems are in place with Mount Thorley having a capacity of 66kV, while 33kV was adopted at Warkworth. Both systems are fed from Ausgrid's Mount Thorley 66kV switchyard located approximately 150m east of Warkworth's main administration building.

Recent modifications have been completed to standardise reticulation to the mining fleet across MTW at 33kV. As such electrical supply to the mining fleet at Mount Thorley is supplied from Warkworth.

Moolarben

Power is supplied to the site via a 66kV transmission line from the Ulan Switchyard. The line runs adjacent to the road and rail corridor to the CHPP facilities where a 66/11kV substation is located. The site has sufficient power supply to support the planned operations.

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Ashton

The proposed higher capacity longwall face necessitates the current electrical infrastructure to be upgraded to accommodate higher electrical load requirements. The SEOC requires the relocation of the 132kV powerline and additional aerial lines and transformers.

13.5 Internal Services

Internal services provided by the operations include medical, fire-protection, purchasing, accounting, human-relations, community-relations, environmental-safety-health (ESH), legal and marketing. For the larger sites, these facilities are located onsite and are sufficient for the operation of the mines. The smaller sites have services such as legal, marketing and accounting offsite in the head office. A proportion of these costs are reallocated to the smaller sites in economic modelling.

13.6 Personnel

The management organisation is conventional and considerable effort appears to be devoted to planning, to resolving foreseeable problems ahead of time and taking advantage of opportunities. RPM considers the current structure suitable to manage the operations. Given the majority of the assets are operating mines and have existing workforces in place, RPM anticipate that the main requirement for ongoing recruitment will be for maintaining workforce levels as a result of typical levels of turnover.

The exceptions are that a workforce will be required to run the planned South East open Cut at Ashton and underground operators will be required at Donaldson.

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14. LOM Operating and Capital Costs

The Capital and Operating costs outlined below reflect the Operating Assets Consolidated Production Schedule which is summarized in ***Section 9*** and detailed by operation in ***Section 10***. The forecast costs assume all Inferred Resources are included as coal. All costs are assumed to be Australian Dollars unless denoted otherwise.

RPM notes that the consolidated cost forecast excludes Donaldson (which is presented in ***Section 14.3***, as this is a re-start project with stat date not confirmed due to internal project development priorities of the Company.

This section provides an overview of the annualised costs for each project on a Free on Board and Free on Rail basis as well as CAPEX, however detailed annualised forecasts (broken into those centres in ***Section 14.1***) are provided in ***Appendix G*** for reference. The detailed breakdowns in ***Appendix G*** include the

14.1 Operating Costs

Operating costs for the Projects are reported as Free on Rail ("FOR" or "Onsite Costs") and Free of Board ("FOB" or "FOR plus off site costs") cash costs. These cost centres incorporate the following costs:

- **FOR or Onsite costs**: include all costs to produce the product from mining to the rail loading facilitates and incorporate the following:
  - **Open cut mining of waste and coal**: This includes the drill and blast costs, dragline, excavators, trucks and haulage costs to the waste dumps and CHPP's.
  - **Site Administration (G & A costs)**: This includes technical services and administration labour costs etc.
  - **CHPP**: All costs associated with washing of the coal and transport to the rail loading facilities.
- **FOB costs**: includes all costs to transport the coal products to the ship for transfer to customers. These costs include the following:
  - **Rail**: Costs associated with third party rail freight from the rail loading facilities to the port terminals
  - **Port**: Costs associated with transfer of coal product from rail freight to boat via the coal handling terminals at the Port of Newcastle.
  - **Other costs**: These include royalties (unless otherwise noted) and levies, corporate management and demurrage at the port.

RPM highlights that all costs presented are real costs with no inflation included.

Historical Costs

The historical costs per costs centre and operation as shown in ***Table 14-1*** show a general decrease from 2016 through to 2017. This decrease was primarily due to the cost saving measures the Company implanted across the majority of their operations. The exception to this are Yarrabee and Ashton where increases are due to short term mining difficulties which are isolated in the schedule.

Forecast Operating Costs

Estimated LOM average operating costs for the Assets are summarized in ***Table 14-2*** while the LOM yearly operating costs are summarised in ***Table 14-3***. RPM notes that the unit costs presented in ***Table 14-2*** and ***Table 14-3,*** while sourced from information provided by the Company, were adjusted where considered appropriate to reflect RPM's independent review and LOM schedule presented in this Report. Review of the forecasts clearly highlights the differentiation between the HVO, MTW and Moolarben low cost operations versus the remainder with these assets having significantly lower FOB and FOR costs than the other operations.

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Table 14-1 Historical Average Operating Costs

Operation	Center	Unit	2016	2017	H1 2018
HVO	FOR	AUD/Product t	N/A[1]	50.9	53.2
	FOB	AUD/Product t		72.3	77.3
MTW	FOR	AUD/Product t	N/A[1]	52.1	52.3
	FOB	AUD/Product t		72.0	71
Moolarben	FOR	AUD/Product t	32.5	29.2	22.4
	FOB	AUD/Product t	56.6	54.4	48.9
Yarrabee	FOR	AUD/Product t	62.5	73.3	101.3
	FOB	AUD/Product t	94.7	122.0	146.3
Ashton	FOR	AUD/Product t	82.7	87.0	128.8
	FOB	AUD/Product t	104.4	120.1	166.1
Austar	FOR	AUD/Product t	91.6	67.6	157.3
	FOB	AUD/Product t	120.7	95.8	196.5
Stratford and Duralie	FOR	AUD/Product t	86.0	66.2	124.2
	FOB	AUD/Product t	123.8	101.4	160.6
Donaldson	FOR	AUD/Product t	153.9	Note 2	Note 2
	FOB	AUD/Product t	235.7		
Middlemount	FOR	AUD/Product t	62.40	74.485	84.60
	FOB	AUD/Product t	113.018	137.17	149.67

Source: Total Costs Supplied by the Company with Unit Costs based on total reported tonnages.
Notes: 1. HVO/MTW was purchased in 2017, 2.no production occurred during 2017 and H1 2018 for Donaldson and production during 2016 was limited.

Further analysis shows that the 2017 costs are generally in line with the 2018 forecasts costs for Moolarben and Yarrabee as expected due to the steady state production, however Ashton is significantly lower while Austar and Stratford and Duralie are higher. As outlined in ***Section 11***, RPM expects improvement in the Plant Yield at Ashton due to decreased dilution as such will reduce the FOB costs, however an increase in dilution is expected at Stratford and Duralie, hence the increase in costs.

Austars' increasing costs are a reflection of the changes in operating procedures onsite and production limitations in relation to the management of coal bursts. RPM considers the forecasts reasonable and achievable however notes that the mine is currently not operating with all staff being relocated to nearby mines in the district to minimise OPEX during the shutdown. RPM notes that the FOR cost during H2 2018 are associated with placing the mine of care and maintenance and not operations, while the FOB costs are associated with the Take or Pay contracts for the rail and port.

At MTW and HVO, the 2018 LOM plans were scheduled during 2016 with certain assumptions on equipment and labour efficiency gains as part of the Company's plans. The transaction with Coal and Allied was delayed from January to September 2017 which delayed the ability to achieve meaningful efficiency gains in 2017. As such RPM anticipate that cost savings will begin to be realised at MTW and HVO during 2018 and more so in 2019. RPM also notes that due to multiple pits the OPEX changes over the long life of the projects as such the 2018 H1 numbers do not reflect the LOM averages in most cases as noted in ***Table 14-3***.

Table 14-2 LOM Average Operating Costs

Operation	Centre	Unit	LOM Average Cost
HVO	FOR	AUD/t prod	45.8
	FOB	AUD/t prod	67.2
MTW	FOR	AUD/t prod	49.3
	FOB	AUD/t prod	67.1
Moolarben	FOR	AUD/t prod	25.9
	FOB	AUD/t prod	50.4
Yarrabee	FOR	AUD/t prod	85.2
	FOB	AUD/t prod	124.8
Ashton	FOR	AUD/t prod	67.1
	FOB	AUD/t prod	91.3
Austar	FOR	AUD/t prod	70.5
	FOB	AUD/t prod	95.6
Stratford and Duralie	FOR	AUD/t prod	80.4
	FOB	AUD/t prod	107.1
Donaldson	FOR	AUD/t prod	34.1
	FOB	AUD/t prod	93.8
Middlemount	FOR	AUD/t prod	87.5
	FOB	AUD/t prod	133.1

Source: Unit Costs were provided by the Company however were adjusted to reflect RPM independent Consolidated Production schedule. Unit costs were calculated based on total costs which vary to the Company's due to unit costs changes and production schedule variations.

14.2 Capital Costs

Capital Costs for the project are separated into the following Cost Centres:

- Growth Capital: Includes capital required for the upgrades of the CHPP's and site infrastructure.
- Sustaining capital: Includes capital required to replace mobile and fixed plant as part of ongoing maintenance and production requirements as well as closure costs. This includes all site infrastructure production fleets and CHPP's and Tails Storage Facilities and other CAPEX items. This also includes land purchases required for Ashton.
- A summary of the CAPEX is shown in ***Table 14-3***, while further asset by asset breakdowns are provided in ***Appendix G***.

An average of 228 Million AUD is required per year for Growth and Sustaining CAPEX over the LOM of the group's assets ranging between 258 Million AUD in 2021 to 535 Million AUD in 2020 over the next 10 years. As shown in ***Table 14-3***, the relatively large increases in 2021 and 2024 are due to equipment purchases at Yarrabee and the commencement of SEOC respectively. The majority of the CAPEX is spent at HVO, MTW and Moolarben while Yarrabee, due to it mine life, also requires significant CAPEX.

Growth Capital Expenditure

As the Assets are operating site limited capital development expenditure is required in the near term with the only forecast CAPEX in the next five years for updates to the CHPP's. Growth capital is required for the establishment of the SEOC at Ashton which is planned to commence in 2024.

Sustaining Capital

A variety of sustaining capital levels are required over the remainder of the operational life for of the assets. These vary (as shown in ***Table 14-3 and Figure14-2***) depending on the development sequences, fleet

requirements and life of the Projects. As outlined in ***Section 10***, the operations require continued replacement and sustained maintenance for both mobile and fixed plant to ensure the required production performance and processing yield are met. New and replacement production fleet (shovels, trucks, excavators, UG equipment) capital encompasses the majority of the sustaining capital for all operation (approximately 60%). The remainder of the capital includes maintenance of the CHPP's and site infrastructure construction etc. RPM considers the forecast reasonable to support the LOM mine life plans.

Figure 14-1 Graphical Representation of the LOM OPEX

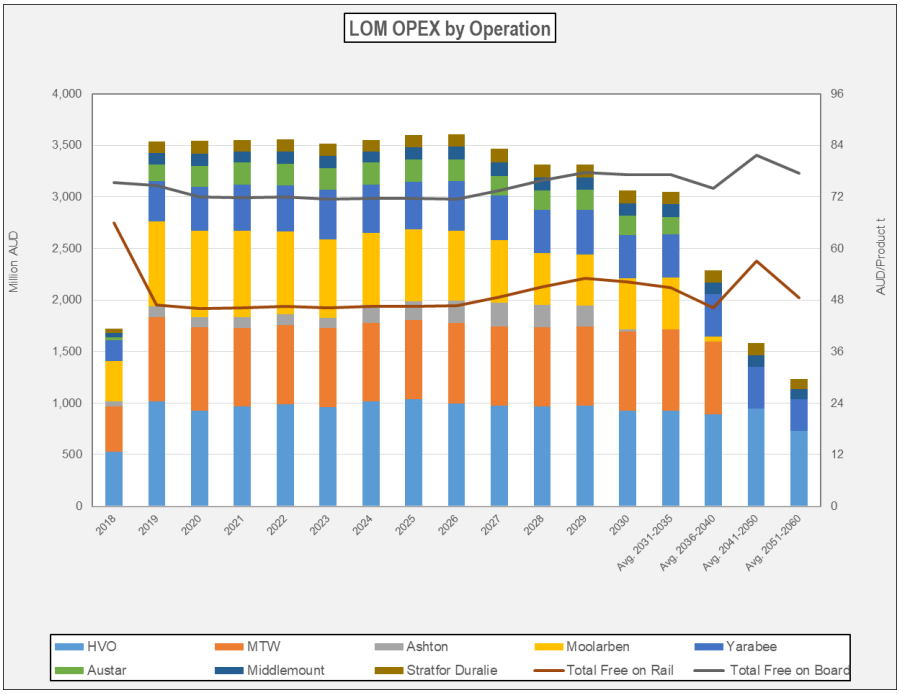

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Table 14-3 LOM Annual (calendar) Operating Costs

Operation	Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2060	Total LOM
HVO	Free on Rail	Million AUD	366	703	610	653	673	639	693	712	676	656	652	664	615	611	579	643	494	**25,628**
		AUD/prod t	50.4	48.8	42.1	44.9	46.2	43.4	46.8	48.2	46.4	44.8	45.0	46.9	43.1	42.9	41.7	46.5	46.2	**45.2**
	Free on Board	Million AUD	529	1,017	923	967	986	957	1,016	1,037	998	972	964	972	928	924	890	948	730	**38,114**
		AUD/prod t	72.7	70.6	63.7	66.5	67.8	65.1	68.6	70.2	68.5	66.4	66.6	68.7	65.1	65.0	64.0	68.6	68.3	**67.2**
MTW	Free on Rail	Million AUD	321	595	586	540	548	543	532	538	549	546	540	543	532	556	501			**12,204**
		AUD/prod t	54.2	51.7	49.7	45.6	46.3	45.7	45.0	45.7	46.8	47.0	46.5	47.4	46.1	47.8	48.2			**47.6**
	Free on Board	Million AUD	435	815	810	763	772	770	759	767	779	772	768	770	762	787	706			**17,208**
		AUD/prod t	73.4	70.8	68.6	64.4	65.3	64.8	64.2	65.1	66.5	66.6	66.2	67.2	66.0	67.6	67.9			**67.1**
Ashton	Free on Rail	Million AUD	60	102	101	104	99	97	175	184	217	229	219	201	21					**1,808**
		AUD/prod t	81.6	57.8	63.4	75.9	79.3	56.8	95.4	58.7	60.7	68.7	62.9	69.0	74.1					**67.1**
	Free on Board	Million AUD	77	141	136	139	136	148	232	258	297	304	298	268	29					**2,462**
		AUD/prod t	104.1	79.6	85.1	102.2	108.9	87.2	126.4	82.4	83.1	91.4	85.6	92.0	99.8					**91.3**
Moolarben	Free on Rail	Million AUD	227	453	441	442	414	390	319	324	319	299	257	251	257	266	26			**5,752**
		AUD/prod t	27.9	28.6	26.4	26.8	24.7	25.0	20.1	20.3	21.2	23.1	27.3	27.0	29.1	29.9	30.0			**25.9**
	Free on Board	Million AUD	393	825	834	837	805	762	697	695	677	611	503	497	496	503	51			**11,196**
		AUD/prod t	48.4	52.0	49.9	50.9	48.0	48.9	43.9	43.7	45.0	47.1	53.5	53.4	56.1	56.5	48.5			**50.4**
Yarabee	Free on Rail	Million AUD	131	249	296	301	301	322	321	317	317	299	282	301	299	289	287	281	198	**10,013**
		AUD/prod t	71.8	68.0	83.9	74.7	79.0	73.4	79.5	82.2	72.3	89.0	84.0	91.6	95.8	88.3	93.8	91.8	68.9	**85.2**
	Free on Board	Million AUD	203	394	432	450	446	484	473	464	482	432	415	432	424	420	410	406	308	**14,661**
		AUD/prod t	111.7	107.6	122.4	111.8	117.0	110.3	117.1	120.2	109.7	128.6	123.8	131.6	136.2	128.4	134.3	132.6	107.2	**124.8**
Austar	Free on Rail	Million AUD	10	119	150	152	156	153	149	158	143	134	135	132	133	116				**2,189**
		AUD/prod t		83.8	86.6	71.8	83.2	77.2	70.6	79.4	60.6	79.7	65.7	60.6	70.2	60.9				**70.5**
	Free on Board	Million AUD	26	156	193	204	204	202	200	206	197	177	184	184	179	163				**2,968**
		AUD/prod t		109.6	111.7	96.4	108.8	102.2	94.8	103.5	83.8	105.3	89.7	84.7	94.3	85.5				**95.6**
Stratfor Duralie	Free on Rail	Million AUD	29	67	80	110	91	63	95	110	106	93	96	93	115	94	87	86	51	**3,068**
		AUD/prod t	126.8	109.2	79.9	99.6	87.2	77.2	87.3	84.9	88.3	77.0	79.4	75.9	82.0	77.2	78.8	78.7	70.6	**80.4**
	Free on Board	Million AUD	42	92	116	150	130	94	121	143	136	124	127	124	150	125	115	113	69	**4,088**
		AUD/prod t	180.7	149.9	115.8	135.8	124.5	114.6	111.9	109.6	113.2	102.2	104.5	101.1	106.9	102.4	104.0	103.8	95.5	**107.1**
Middlemount	Free on Rail	Million AUD	157	316	304	302	299	317	321	329	333	338	347	381	398	416				**6,644**
		AUD/prod t	73.2	76.8	71.9	72.5	71.9	76.1	78.4	81.7	83.2	84.5	90.7	94.5	97.0	101.1				**87.5**
	Free on Board	Million AUD	280	533	524	521	519	523	522	528	514	501	504	544	565	584				**10,108**
		AUD/prod t	130.5	129.7	124.0	125.3	124.9	125.5	127.5	131.3	128.3	125.0	131.7	135.2	137.9	141.9				**133.1**
Total	Total Free on Rail	Million AUD	1,301	2,605	2,569	2,602	2,582	2,523	2,606	2,672	2,660	2,593	2,528	2,564	2,370	2,349	1,481	1,009	743	**67,305**
		AUD/prod t	49.6	48.8	46.6	46.8	46.7	45.7	46.8	47.1	46.8	49.1	51.1	52.8	52.2	51.9	50.5	56.2	52.0	**48.9**
	Total Free on Board	Million AUD	1,984	3,972	3,968	4,032	3,999	3,939	4,021	4,097	4,080	3,891	3,764	3,791	3,533	3,506	2,172	1,466	1,107	**100,804**
		AUD/prod t	75.6	74.4	72.0	72.5	72.3	71.3	72.2	72.2	71.7	73.7	76.1	78.1	77.7	77.4	74.0	81.6	77.5	**73.2**

Source: Unit Costs were provided by the Company however were adjusted to reflect RPM's independent LOM schedule. Unit costs vary to the Company's due to unit costs changes and production schedule variations.
Total Free on Board includes Royalties

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Table 14-4 Annual (calendar) LOM Capital Cost Estimate (Average Per Year)

Operation	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2060	Total LOM
HVO	79.1	80.1	125.5	79.6	88.2	114.8	102.8	116.8	116.2	106.2	106.1	84.1	91.6	102.9	148.1	180.4	54.2	**4,892.1**
MTW	59.7	113.0	119.7	74.7	80.6	68.2	86.7	45.9	120.3	103.2	111.5	104.7	108.1	83.4	33.4	0.0	0.0	**1,780.1**
Moolarben	34.2	97.4	46.7	46.8	101.4	76.7	70.2	50.0	80.6	69.3	53.7	40.3	72.0	32.5	17.6	0.0	0.0	**1,019.2**
Yarrabee	3.5	2.0	136.2	2.0	5.0	4.0	20.4	18.4	2.0	57.5	76.4	31.7	23.7	28.5	26.0	25.9	35.3	**1,020.2**
Austar	0.0	53.1	57.5	24.2	21.7	27.0	18.0	7.3	33.4	29.3	15.6	25.0	19.9	16.7	0.0	0.0	0.0	**365.3**
Ashton	16.4	31.6	39.0	23.3	45.8	141.3	95.0	25.5	28.2	36.0	22.8	16.6	0.0	0.0	0.0	0.0	0.0	**521.6**
Stratford and Duralie	12.9	7.9	2.6	2.5	2.5	2.5	2.5	2.7	2.9	3.1	2.8	2.7	2.5	2.7	2.4	2.4	1.8	**105.6**
Middlemount	10.5	27.7	8.1	5.3	3.1	5.9	4.7	4.4	3.3	3.0	5.3	3.7	3.6	4.3	3.9	0.0	0.0	**125.7**
Total	**216.3**	**412.8**	**535.4**	**258.3**	**348.3**	**440.4**	**400.3**	**271.0**	**387.0**	**407.6**	**394.2**	**308.6**	**321.5**	**271.0**	**231.4**	**208.8**	**91.3**	**9,829.5**

Source:CAPEX Costs Provided by the Company and utilised by RPM in the Coal LOM Schedule

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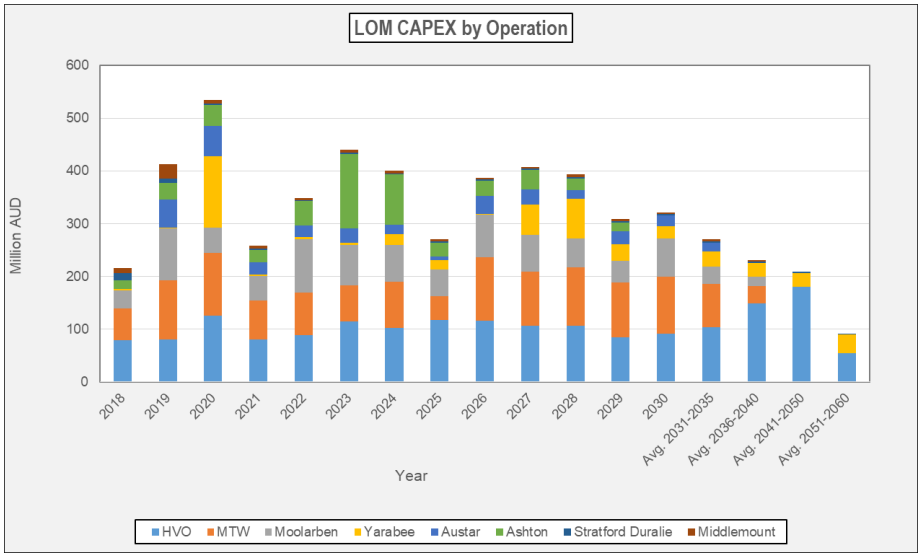
Figure 14-2 Graphical Representation of LOM CAPEX



14.3 Donaldson

Based on the LOM plan, the forecast OPEX and CAPEX for Donaldson are presented in ***Table 14-5*** and ***Figure 14-3***. RPM highlights that as there is no start date as yet, the dates are set by year only.

Table 14-5 Donaldson LOM OPEX and CAPEX

Centre		Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
OPEX	FOR	Mill AUD			90.6	98.5	152.9	151.8	149.2	147.5	155.3	145.0	156.3	159.8	146.8	147.5	149.3	141.9	140.6	136.9	131.3	120.4
		AUD/ ROM t			399.6	184.4	30.9	31.0	31.3	31.0	28.5	32.0	28.3	27.6	32.3	31.6	30.4	33.4	34.0	35.8	37.9	45.1
	FOB	Mill AUD			120.3	134.2	218.7	213.6	207.2	207.0	219.0	199.1	216.1	212.6	192.8	193.7	198.6	188.2	207.3	202.3	194.5	177.8
		AUD/Prod t			986.3	425.4	72.4	73.0	82.7	89.8	83.3	93.5	86.8	82.7	92.1	91.0	86.1	88.2	94.6	97.0	101.5	121.6
CAPEX		Mill AUD	6.7	23.4	29.1	52.4	51.8	45.0	18.1	25.9	3.9	17.7	24.4	18.9	15.6	27.1	17.9	12.9	14.4	12.5	10.6	2.6

Source: Unit Costs were provided by the Company however were adjusted to reflect RPM independent LOM schedule. Unit costs vary to the Company's due to unit costs changes and production schedule variations.
Total Free on Board includes Royalties
CAPEX Costs Provided by the Company and utilised by RPM in the Coal Reserve Schedule

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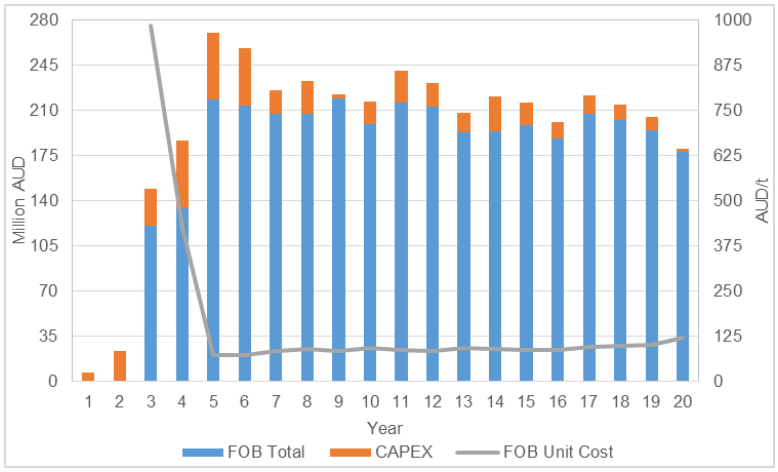
Figure 14-3 Graphical Representation of Donaldson LOM OPEX and CAPEX



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15. Overview of Permitting, Environmental Impact and Social & Community Impact

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15.1 HSE Assessment Overview

The objective of the HSE assessment is to provide an independent evaluation of potential environment, health and safety issues related to the Company's assets that could pose a material risk to future investors. The material threshold agreed for the Project is AUD10M per issue per site. In addition, ERM has identified the following key issues for the assets:

- Key non-material issues associated with recent non-compliances and / or regulatory action;
- Issues subject to actual or imminent prosecution by the environmental or safety regulatory authorities; and,
- Reasonably foreseeable issues within scope that could cause imminent significant delays (i.e. risk of delays associated with non-issue of approvals).

The aspects reviewed in this Assessment were as follows:

- ***Environmental, Safety and Social Management***: Through review of available documentation, ERM assessed the Company's current EHS management across each asset to identify material HSE risks and data gaps, identify potential liabilities and obligations in terms of HSE risks and / or HSE issues that may significantly constrain the Company's future development;
- ***Environmental Approvals***: ERM conducted the following:
- a review of key environmental permits and permit applications; and
- an assessment of environmental, health and safety and social regulatory and compliance issues associated with Project components, based on currently available information.

15.2 Approach

The HSE review of environmental, health and safety issues that could pose a material risk to future investors consisted of the following tasks:

- Review of documents made available by the Company in the Virtual Data Room (VDR);
- Submission of Project questions to the client and Requests for Information (RFI) via the agreed communication process; and
- Review of available public information.

15.3 HSE Governance and Management System

Organisational HSE structure

Yancoal's Health, Safety, Environment Committee sets the direction for the Company's continuing commitment to the highest safety, environmental management and community engagement standards. Working with Yancoal's executive and senior management teams, the Committee helps ensure Yancoal has the leadership, capabilities, systems and reporting procedures required to achieve zero harm.

The Health, Safety and Environment Committee assists the Board in overseeing Yancoal's health, safety and environmental responsibilities, with the following objectives:

- Fulfil its responsibilities in relation to the health, safety and environment (collectively HSE) matters arising out of the activities of the Company;

- Consider, assess and monitor whether or not the Company has in place the appropriate policies, standards, systems and resources required to meet the Company's HSE commitments; and
- Provide necessary focus and guidance on HSE matters across the Company and
- The Committee makes recommendations to the Board.

HSE performance at the Assets is delivered by means of the overarching Yancoal Environment and Community Relations Policy (E&C Policy) which provides the governing principles for environmental and community management.

Environmental Management

Each Asset has an Environmental Management Strategy (EMS), which in turn is supported by a range of procedures, strategies, plans and programmes, designed to deliver compliance with applicable regulatory Commitments, Obligations, Undertakings and Requirements (COURs), which are a function of Project Approval conditions and Environmental Protection Licence conditions for NSW operations and Environmental Authority conditions foe QLD operations. These include:

- Strategies, Plans and Programmes (Environmental Assessments, management strategies, management plans and monitoring programmes); and
- Support Documents (environmental work instructions, training manuals, single point lessons, forms, permits, checklists, registers and risk assessments).

The key building blocks of the EMS are the Environmental Management Plans (EMPs) which have been prepared to guide the day to day management of environmental aspects on the mines. Critical review of a selection of these management plans from all assets indicated that in general, they were of a standard consistent with the size and nature of the development and fit for purpose. In NSW, the conditions of Project Approval require management plans to be prepared to the satisfaction of and / or approved by the consent authority and / or other relevant regulators.

A team of environmental advisors are employed to implement the management plans and maintain the EMS. This team currently consists of 17.5 personnel, as well as two contactors, in addition to corporate support and includes specialists in the fields of environmental approvals and mine rehabilitation and community liaison. This level of resourcing is considered appropriate for the size, complexity and maturity of the mining operations.

The Company is proactively engaged in the local communities in which it operates. In 2017, Yancoal invested more than AUD1.3 million into local initiatives, including environmental projects; employment education and training; community event sponsorship; funding for technology and equipment purchases used by hospitals and regional rescue services; and educational and social initiatives for disadvantaged groups. Yancoal continues to work co-operatively with its community stakeholders, relying upon community consultative committees, local newsletters, community days and site-specific websites to engage and inform stakeholders of relevant matters related to nearby operations.

Health and Safety Management

Yancoal has a set of values and a code of conduct appropriate for a business of its size. Each region has a Health and Safety Management System (HSMS) designed in typical structure for the key elements (based on Australian Standard 4801: Occupational Health and Safety Management Systems) and to cover any specific regulatory issue. The integrated health and safety management system (HSMS) is structured on 13 System elements (leadership& accountability; document control; risk & change management; engineering & design; contractor management & suppliers; consultation & communication; training & competence; operational controls; health & hygiene; emergency management; incident reporting & investigation; measure, monitor & record; and audit & review). The HSMS is audited every two years for regulatory compliance and effectiveness.

The HSMS also requires a site to develop principle hazard management and principle control plans. These plans are reviewed on a 3 yearly basis and fall into two groups depending on the nature of the risk;

- Principle hazard management plans: used to manage risks that have potential to result in multiple deaths in a single incident or a series of recurring incidents;
- Principle control plans: an integrated approach to hazards across different aspects of the operation.

Yancoal has been developing a set of corporate principle hazards and associated control plans for the business. To date they have developed and implemented 4. In 2018/2019 they are implementing a further 9 and conducting two control plan/bow tie workshops. These principle hazard control plans are being developed to ensure consistency of control across the business, effective measurement of effectiveness and overview. This process is being adopted across mining industries as a way to focus on fatality prevention. Although not all of the corporate set of controls have not implemented, the sites will already have controls in place that may be identical (as principle hazard management plans or principle control plans) but are not articulated in a standard way.

Not all risk assessments were available for review. The broad-brush risk assessments are high level and may not identify specialist risks for a specific site (geotechnical associated risks primarily). To identify key safety performance for the purposes of this review, total recordable injury frequency rate (TRIFR) has been used as the key lag performance indicator. The TRIFR numbers quoted against each site are the 12 month moving average from the April 2018 Management report. The comparison figures are taken from the latest regulatory reports as follows:

- UG NSW average 15/16 was 30.4
- UG QLD average 16/17 was 23.8
- OC NSW average 15/16 was 6.6
- OC QLD average 16/17 was 12.6

HSE budgets

Detailed analysis of HSE budgets has not been undertaken in the course of this study, however complementary information, including review of HSE staff numbers and information provided regarding environmental controls implemented in recent years have been used to assess the general adequacy of the EHS budgets of the Assets. The HSE budget for the Assets mines includes provision for 19.5 full time equivalent staff within the mining operations (including two contractors), as well as additional corporate HSE support which is considered adequate. Rehabilitation rates have broadly approximated those nominated in the relevant Mining Operations Plans (MOPs) for NSW sites and Plan of Operations for QLD sites over recent years and progressive rehabilitation budgets are therefore assumed to be adequate. Major projects, such as the retrofitting of mobile plant with noise attenuation measures and the installation of additional noise and dust monitoring equipment have also been funded in recent years, further supporting the view of satisfactory HSE budgeting in recent years.

In summary, the HSE management system at the Assets is generally considered satisfactory for the size, complexity, degree of regulation and risk profile represented by these mines. The HSE management system is comprehensive, adequately resourced and has proven to be broadly effective in managing health, safety and environmental risks. Key asset specific issues are discussed further in ***Section 15.4***.

There is an inherent risk in having contaminated tailings present on-site. It is understood rehabilitation of these materials by encapsulation is planned for the assets, however the variables associated with successful rehabilitation are many and existing budgets available can become insufficient if rehabilitation failures occur. ERM has not considered material risk of contamination tailings and rehabilitation failure, however it is understood that ongoing monitoring of these risks are undertaken by each asset to ensure they do not become material. Closure of any mine before the end of their mine life (e.g. due to environmental and/or health and safety issues), could trigger significant employee redundancy costs, closure and rehabilitation expense and other costs or loss of revenues. Many of these costs will also be incurred where mines are closed at the end of their planned mine life or placed on care and maintenance. ERM has not considered material risk of any unexpected or unplanned mine closures however it is understood that these costs are factored into the mine cashflows.

15.4 Assets

All other assets assessed are currently operational and or under care and maintenance. These assets are discussed further in the following section.

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HUNTER VALLEY OPERATIONS AND MT THORLEY WARKWORTH

EHS Setting and Context

The Upper Hunter region is a rural landscape characterised by irrigated agriculture on the alluvial flats of the Hunter River, transitioning to pastoral land use and nature conservation reserves on the more marginal soil landscapes found in the surrounding hills. The region also includes a number of coal mining operations and two coal fired power stations, situated predominantly on the valley floor. Given the large scale of the project there are a number of potential receptors associated with mining activities in the area. Where possible these are monitored by the company on site. . The Hunter Valley Operations (HVO) is bounded by the localities of Howick, Warkworth, Ravensworth and Jerry's Plains, which is situated 4.5km south east of the closest HVO mining pit.

The Mt Thorley Warkworth (MTW) mine is located immediately to the south of HVO mine. A number of rural residences are located in the vicinity and are potential receptors of dust, noise and light emissions from the mines. The village of Bulga is situated 4km west of the current active mining area at MTW (noting that approved pit limits under the Warkworth Continuation Project are 2.5km from Bulga). These Assets are situated in close proximity to public roads including the Golden Highway (separating the Assets), Putty Road (separating Mt Thorley and Warkworth) and Wallaby Scrub and Charlton Roads which bound the MTW mine to the West. The altered land form is visible to motorists utilising these public roads. Visual amenity is enhanced by the presence of an earthen bund placed on the northern side of Putty Road, to visually screen the mine. This visual screening bund is complemented by a programme of aerially seeding of un-rehabilitated waste dumps that are visible from public roads. Visible waste dumps now have a good cover of grass and shrubs which results in suitable aesthetics, however noting that these waste areas will be rehabilitated in the future, consistent with the MTW Mine Operations Plan (MOP).

The 2016 Annual Review report for HVO identifies a total of 26 complaints during 2016, representing a decrease of 10 community complaints from the previous year. Complaints related to noise, dust and blasting. The 2016 Annual Review report for MTW identifies a total of 463 complaints, down 29% compared to 2015. The 463 complaints were registered by 58 people, 61% were received from 10 individuals, most of which were from Bulga residents, making up 83% of the complaints record.

Heritage Values

MTW and HVO both have comprehensive policies, standards and protocols in place to guide Aboriginal Cultural Heritage management across all of their operations. These policies are applied consistently and in close consultation with the Aboriginal community stakeholders who have interests in this region including the Upper Hunter Valley Aboriginal Cultural Heritage Working Group (CHWG) which was established in September 2005. The CHWG oversees all aspects of Aboriginal Cultural Heritage management associated with MTW and HVO.

The MTW Aboriginal Heritage Management Plan (2017) including the Warkworth Operations Aboriginal Cultural Heritage Zoning Scheme (CHZS) and Aboriginal Cultural Heritage Management Database (ACHMD) is a comprehensive document that guides mine and land use activities. .

A separate Conservation Management Plan for the Wollombi Brook Aboriginal Cultural Heritage Conservation Area (WBACHCA) was developed in June 2017 for the conservation and protection, in perpetuity, of significant Aboriginal cultural heritage landscapes and sites and in particular, the Bulga Bora Ground area, by and for the Aboriginal people of the Upper Hunter. Yancoal will seek to register covenants on the land titles for all of the lands located within the WBACHCA which will prohibit development activities including all mining (open cut, underground, highwall), exploration drilling, mining infrastructure, overburden/top soil dumps and any other associated mining development disturbance. Covenants for each lot that are binding on current and future owners of these lands will be established pursuant to section 88 of the Conveyancing Act 1919 (NSW). The future arrangements for Aboriginal community ownership and control of the WBACHCA lands, including any funding requirements are yet to be determined although it is unlikely to reach the material threshold in any calendar year.

Native Title Claims

NC2013/006 (Scott Franks and Anor on behalf of the Plains Clan of the Wonnarua People) was registered on 16 January 2015. Native Title has not been extinguished for some areas (including crown land, water

ways and access roads) and Native Title may still exist. The majority of the Assets holdings are however not subject to native title and future material risk associated with currently approved projects is not anticipated as a result of the Native Title. It is noted no native title issues occur in the current LOM.

Emission Discharges

Air Emissions

Emissions at HVO and MTW are predominantly a combination of windblown dust and direct emissions from off-road diesel vehicles. Air quality criteria for Total Suspended Particulates, PM10 and deposited dust are detailed in the Project Approvals for the respective operations. Air quality is managed in accordance with site based Air Quality and Greenhouse Gas Management Plans which identify statutory obligations and air quality criteria from the operation's Project Approvals and EPLs, as well as air quality monitoring, management measures and reporting requirements.

Air quality monitoring includes a combination of real time and supplementary dust monitoring. This includes use of real time investigation triggers for ongoing performance assessment, which informs pre-emptive management actions to maintain compliance with criteria. PM10 and meteorological monitoring is a requirement within the site EPLs and additional dust deposition monitoring is undertaken. HVO has previously undertaken studies into best practice control implementation for wheel generated dust and for disturbing and handling overburden in adverse weather conditions as part of a series of completed Pollution Reduction Programs imposed by the EPA on previous versions of EPL 640 (now all complete). The most recent HVO Independent Environmental Audit (ERM, 2016) concluded that for the audit period HVO complied with all air quality criteria. The most recent MTW Independent Environmental Audit (Horn, 2016) concluded that for the audit period MTW complied with all commitments of the MTW Air Quality and Greenhouse Gas Management Plan. Under EPL 1976, EPL 1376 and EPL 640, HVO / MTW were required to undertake dust risk forecasting (by measurement of daily total tonnes moved and timestamped PM 10 concentrations form upwind and downwind of the premises from 1 September 2017 to 30 November 2017. These were to be reported to the EPA by 19 January 2018. Ongoing EPA requirements relating to the trial are unknown.

Current air emissions from the Assets are not considered likely to pose a regulatory risk, given the efficacy of the dust management procedures and process currently in place. These include a real time monitoring and reporting system, paired with a policy of progressively shutting down mobile plant (primarily trucks and drag-lines) in response to elevated dust emissions. Dust emissions from roadways are minimised through regular watering by a water cart fleet, while emissions from other exposed surfaces are reduced by progressive clearing and rehabilitation, aided by aerial seeding of waste dumps that are not proposed for immediate rehabilitation. The potential for ongoing equipment downtime as a result of management responses to elevated dust emissions needs to be managed, particularly as downtime hours are expected to increase as mining at MTW continues in the direction of the town of Bulga (and the current buffer distance is reduced).

Noise

HVO and MTW manage noise and vibration in accordance with site specific Noise Management Plans (NMP) and Blast Management Plans, including real time monitoring, attended monitoring and complaints handling system for noise. The most recent HVO Independent Environmental Audit (ERM, 2016) identified two exceedances that were considered non-compliant with the project approval criteria. Further, three blast events returned airblast overpressure results greater than the 0% allowable criterion of 120.0dB (L). Incidents reports were prepared and submitted to regulators. It is understood there have been no regulatory action by the regulator. The most recent MTW Independent Environmental Audit (Horn, 2016) identified an exceedance of blasting criteria associated with one airblast overpressure result greater than the 0% allowable criterion of 120.0dB(L). The report also noted that MTW generally has a history of noise complaints totalling approximately 85% of all complaints during the audit period, suggesting noise is a significant concern for the surrounding community. There were some major exceedances of noise criteria recorded during routine compliance monitoring during 2011 - 2013 which were addressed in accordance with proper procedure at the time. It is reported that independent noise monitoring conducted in 2011 (SKM) and 2015 (WMPL) found general compliance with noise criteria and no formal noise criteria exceedances have occurred during routine attended compliance monitoring since March 2013. Noise complaints for 2015 were considerably less than for the previous three years. Noise requires continued focus as the mining at

the Warkworth operation moves towards Bulga village. This is well noted by the Company with plans to address this concern in place.

Water

The most recent HVO Independent Environmental Audit (ERM, 2016) stated that there are four surface water discharge points identified in the EPL 640. Only one licensed discharge occurred during the audit period from Points 4 and 8 and that the discharge met the relevant water quality criteria and was within the allowable volume/mass limits set by the EPL. The most recent MTW Independent Environmental Audit (Horn, 2016) states that during the audit period there were a number of discharges from the MTW complex that were outside the discharge criteria and that MTW was investigating options to reduce the turnaround for laboratory analysis to facilitate a more robust monitoring protocol. It is understood actions have been implemented to address these concerns

Emission discharges are unlikely to represent a material risk based on the documentation reviewed along with the implemented procedures.

Land Tenure and Permitting

HVO and MTW operate under a range of current Mining Leases: HVO: MLs 1406, 1428, 1465, 1474, 1482, 1500, 1526, 1560, 1589, 1622, 1634, 1682, 1704, 1705, 1706, 1707, 1732, 1734, 1748, 1753; MTW: MLs 1412, 1590, 1751 and 1752

The HVO mine is permitted under two planning approvals, HVO North development consent DA 450-10-2003 and HVO South Project Approval PA 06-0261. HVO North has been subject to seven modifications and HVOS has been subject to five modifications to date. The HVO North is permitted to extract up to 22Mtpa of ROM coal until 2025 and HVO South is permitted to extract up to 20Mtpa of ROM coal until 2030. HVO operates under one Environment Protection Licence (EPL) 640. Hunter Valley Operations are subject to one EPBC Act Controlled Action Approval 2016/7640. An EPBC Act referral (2016/7641) for water related impacts at HVOS was determined to be 'not a controlled action'.

The MTW operations are permitted under two planning approvals, Mt Thorley SSD 6465 was approved 26 November 2015 for a period of 21 years, with an annual extraction rate of up to 10Mtpa ROM coal. Warkworth SSD 6464 was approved 26 November 2015 (after various appeals and public objection) for a period of 21 years with an annual production rate of 18Mtpa ROM coal. Three Environment Protection Licences (EPLs) apply: EPL 1376 (Warkworth), EPL 24 (Mount Thorley Loading Area) and EPL 1976 (Mount Thorley Operations). Warkworth operations are also subject to two EPBC Act Controlled Action Approvals (EPBC 2002/629 and EPBC 2009/5081).

The assets also operate under a number of other approvals, including for the storage of explosives, storage of dangerous goods and water licences, as well as under a number of operational and management plans approved by relevant regulators.

One approval in relation to the Warkworth Mine expansion is understood to be outstanding at the time of writing, being local council approval for the closure of Wallaby Scrub Road to facilitate the West pit westward advance, RPM has advised that agreement has now been established between the local council and MTW in relation to the closure of Wallaby Scrub Road. It is understood that finalisation of the agreement is pending monetary negotiations and it is expected to be completed well in advance of the required mining activities. Based on this, it is considered unlikely to be a material issue.

Operations EHS Performance

Environmental Performance

An Independent Environmental Audit for HVO in December 2016 (ERM 2016) demonstrated a high degree of compliance with respect to statutory requirements and internal management plans, reporting out of 363 instruments, 14 non-conformances (2 high, 7 medium and 5 low) and 9 administrative non-conformances. An independent review of MTW in May 2016 (covering the period 11 November 2010 to 22 January 2016) (Horn, 2016), reported 41 non compliances (none being high risks and some being administrative only). The key identified non-compliances were associated with noise/blasting, dust and water related issues. MTW have progressed in the areas of noise and dust management through the audit period though these are still areas of concern with the community (data from complaints). As the mining operation moves towards

Bulga village, attention to key elements in the management of noise and dust will ensure ongoing improvement in environmental performance. This is well noted by the Company with limitations on production as well as noise muffling on mobile equipment being including the LOM plan to mitigate any potential risk.

Environment Protection Authority (EPA) compliance audits were undertaken at HVO and MTW (EPA, March 2017). The sites were audited as part of a joint Department of Planning and Environment (DPE), Department of Industry - Resources Regulator (DIRR) and EPA compliance audit program focusing on the management of tailings, wastewater holding and sedimentation dams ('mine dams') at NSW mines. For HVO, the audit identified 61 compliant findings, two non-compliant (low environmental impact / environmental harm rating), five administrative non-compliance and three undetermined. For MTW the audit identified 57 compliant findings, five non-compliant (low environmental impact / environmental harm rating), 17 administrative non-compliance and one undetermined. An Action Plan was included in the audit findings for each operation, requiring HVO and MTW to implement measures with respect to controlling stormwater run-on to the tailing dam, maintenance of plant and equipment at the wastewater holding dams, as well as address the administrative and reporting matter. It is understood the issues have been addressed and therefore do not pose a material risk.

EPA compliance audits were also undertaken at HVO and MTW in 2014 as part of EPA compliance audit program on coal train loading and unloading facilities with a focus on management methods and procedures in place to prevent or minimise coal lost (in the form of leaks, spills and dust emissions) during rail transport. The audits identified a number of non-compliances and provided Action Plans and Pollution reduction Program conditions on the EPLs, which have since been closed out and no longer remain as conditions on the EPLs. .

Noise impacts on surrounding residents have been a key driver of complaints from the community over recent years, particularly at MTW. A program to progressively reduce noise impacts from mining at the Assets has been implemented over recent years, consisting of enhanced sound attenuation for mobile plant combined with enhanced predictive noise monitoring and real time telemetry of data, combined with progressive shutting down of noisy plant. The MTW 2016 AEMR indicates work was completed in attenuating 100% of MTW's Heavy Mobile Equipment fleet. The AEMR also reported no non compliances against consented noise limits and that there was a 62% reduction in the number of attended noise measurements which exceedance the trigger for action compared to 2015.

There were a number of surface water related incidents between 2013 and 2017. These incidents generally involved unauthorised or low quality water discharges into the environment, either as a result of overflows from water storages during high rainfall events or failures of plant and infrastructure. It is understood that one incident that occurred in October 2014 resulted in MTW entering into an enforceable undertaking with the EPA to improve water management practices on site. Further, a Clean Up Notice from the EPA issued January 2016 followed by a Prevention Notice dated 1 February 2016 was issued to MTW in relation to a separate water-related incident that occurred in January 2016 (partial dam wall failure resulting in release of water from the premises). The EPA subsequently prosecuted in the NSW Land and Environment (L&E) Court, with the Court handing down a fine of AUD50,000 to Warkworth Mining Limited in August 2017. .

Three penalty notices for non-compliance with requirements of HVO's EPL 640 have been issued by the EPA during 2017 and 2018. A Penalty Notice was issued 28 February 2017 for contravention of a licence condition (date of offence 4 November 2016). A Penalty notice was issued 18 August 2017 for pollution of waters (date of offence 30 March 2017). A Penalty notice was issued 2 May 2018 for the contravention of a licence condition (date of offence 17 January 2018). The latest penalty notice was related to exceedances of air blast overpressure at two monitoring points and resulted in an AUD15,000 infringement being issued. The above infringements are not material to the assets nor impact the LOM plan.

Blasting over-pressure incidents have occurred on the Assets, as have blast fume incidents. Whilst these incidents are generally infrequent and with procedures in place to manage any potential impact there have been some exceedances of criteria resulting in penalty notices. These however are unlikely to be material. As noted previously blasting is monitored and non-compliance is reported.

Current air, noise and water management and compliance of the Assets are not considered likely to pose an ongoing material risk, given the efficacy of the environmental management procedures and processes currently in place.

H&S Performance

HVO

The key comparable statistic of TRIFA is running at 6 is marginally lower than the NSW coal mining open cut industry average (2015/16) of 6.6. There was no safety and health management system audit or system documentation available for review. There were no risk assessments provided for this operation. With little data available the assessment of materiality could not be completed.

MTW

The key comparable statistic of TRIFA is running at 7.2 is marginally higher than the NSW coal mining open cut industry average (2015/16) of 6.6. The MTW risk register provided dated September 2017 was a broad risk register covering all the classic hazards (safety and health) in Open cut mining. There was no indication of who was involved or closure of outstanding actions. There was no safety and health management system audit or system documentation available for review. With limited data available the assessment of materiality did not indicate an issue.

While limited information was provided it was noted no material issues or concerns or occurrences have occurred under the current or previous owners in the past 3 years.

Water Management

HVO

The site is subject to the conditions of EPL 640 and includes the following relating to water management:

- Discharge points and monitoring locations;
- Concentration limits and sampling frequency; and
- Volume limits and monitoring for certain discharge points.

A Water Management Plan has been prepared by a NSW DP&E approved, suitably qualified expert to meet conditions of consent relating to water management. The WMP was approved on 19 May 2014. Water management at the mine includes clean water diversion, dewatering bores, sediment basins and a network of infrastructure, including dams, pipelines, channels and contour banks that have been established to enable the transfer of water around the site.

Groundwater and surface water access licences for take of surface and groundwater water exist for the site. With take occurring in 2016, in volumes below the allowable limits. The water balance found that HVO is typically a net generator of water (i.e. the site runs at a surplus).

As outlined in the environmental performance - water section above, there has been penalty notices issued by the EPA though no environmental harm resulted, this demonstrates previous issues with water management on-site. Previous issues have the potential to compound fines resulting from any future incidents, however this is unlikely to be of material significance unless a catastrophic incident.

No issue of material significance was identified relating to current water management practices from review of the documents outlined.

MTW

The site is subject to the conditions of EPL 24, EPL 1976, and EPL 1376 including the following relating to water management:

- Locations of monitoring and discharge points (EPL 1976 and 1376);
- Concentration and discharge volume limits (EPL 1976 and 1376);

A Water Management Plan has been prepared by a NSW DP&E approved, suitably qualified expert to meet conditions of consent relating to water management. The WMP was approved in January 2016. Water management includes clean water diversion, sedimentation ponds and a network of infrastructure (i.e. dams, pipelines, contour banks) to control the movement of water around site.

The water balance simulation modelling identified that there is a 50% chance that between 1,500 to 2,000 ML/year of external water would be required. The current allocation is 1,012 ML/year (at 100% Available Water Determination). It is likely that additional water licenses will need to be sought and purchased over the life of the project to meet external raw water demands; though this is unlikely to be of material significance.

Flood management measures are incorporated into the site and includes a flood levee. The 100 year ARI design flood event peaks at approximately 3.5 m below the crest levee. The levee was constructed to protect the mine from floods to the 500 year ARI design flood event, on this basis there is significant freeboard to mitigate flood impacts and thus alleviate any potential material issue.

Groundwater and surface water access licences are held to account for take of surface and groundwater. With take occurring in 2016, in volumes below the allowable limits. The 2016 Annual review identified one incident involving water that required notification to government agencies when a sediment dam had a partial embankment failure. The incident is resulted in an AUD50,000 fine from proceedings in the Land and Environment Court in 2017. While this is not considered material ongoing monitoring as site personnel are aware, is prudent. It is noted that site personnel are aware of these issues.

The 2016 Independent audit identified that events occurred in the period resulting in non-compliances relating to water discharges and quality criteria not being met. It is noted that overflows have occurred although the review could not confirm if the overflows where greater than design basin design criteria. It was also found that discharge events did not meet Total Suspended Solids (TSS) criteria, with laboratory results being received the day after discharge occurred, hence release occurred prior to water quality being confirmed. On-going management issues could result in fines from Government agencies, with fines compounding with each incident. Review of site management could potentially identify opportunities for improved management, such as developing a TSS-Turbidity correlation to allow for immediate, in the field water quality results prior to commencing discharge. RPM is aware that the HVO was only recently under the Company's control as such further review of system and procedures are taking place.

Issues reviewed are of concern however individually are not material and are being managed by site personnel.

Soils and Contamination

During previous discussions and reviews of the HVO/MTW site detailed that the site contains a range of potential sources of contamination, including bulk fuel storages, tailings disposal facilities, wastewater treatment plants and washdown bays, mechanical workshops and associated waste oil storages. The majority of which do not pose a material risk.

Review of the HVO contamination register (2015) indicates 12 sites listed as 'contaminated' are present within the HVO operational area. Another 89 sites are listed as having various likelihoods of contamination, some of which have been remediated to various extents. An equivalent register prepared for MTW indicates three contaminated sites at the mine and 81 other sites have the potential to be contaminated. A firefighting training area is located on the MTW mine. Whilst not listed on the register, this area has a high likelihood of being impacted by perfluorinated compounds, which are a contaminant associated with the use of Aqueous Fire Fighting Foams (AFFF). It is further noted that the use of AFFF containing perfluorinated compounds has been phased out. RPM notes that the identified and potential contaminated sites could be investigated and remediated progressively as new facilities are constructed to replace older infrastructure, or following cessation of mining in that location. Accordingly, potential contamination from the sources outlined above is not deemed likely to pose a material risk.

In line with similar operations in the region, a contamination risk is potentially posed by the current and historic tailings storage facilities. RPM is aware that due to the processing methods, heavy metals are stored in these facilities. These can lead to contamination if not contained appropriately. Data held on the National Pollutant Inventory database indicates the HVO mine deposited a total of 1,785 tonnes of potentially hazardous heavy metals (including lead, mercury, chromium, arsenic and cadmium) into on-site tailings storage facilities during the 2016-15 reporting period.

The MTW mine disposed of a total of 1,122 tonnes of heavy metals into tailings facilities over the same reporting period. It is therefore evident that a significant reservoir of potential contaminants is present within the tailings storage facilities at the Assets. RPM has not been provided detailed information to quantify the potential risk, however notes that no breaches have been filed against the Company or instances of contamination of the groundwater have been publically reported. It is understood that all reporting requirements have been met.

There is an inherent risk in having contaminated tailings present on-site. It is understood rehabilitation of these materials by encapsulation is planned, however the variables associated with successful rehabilitation are many and existing budgets available can become insufficient if rehabilitation failures occur. ERM has not considered material risk of contamination from tailings and rehabilitation failure, however it is understood that ongoing monitoring of these risks are undertaken by the asset to ensure they do not become material.

Ecology

HVO

The HVO South mine holds 140 ha of offsets in the Goulburn River Biodiversity Area, triggered by approval 06_0261. EPBC 2016/7640 approval (last modified in August 2017), also requires additional offsets including Central Hunter Valley Eucalypt Forest (CHVEF) - 61ha, Swift Parrot (Lathamus discolor) foraging habitat – 68.1ha, Regent Honeyeater (Anthochaera phrygia) breeding and foraging habitat – 68.4ha and Green and Golden Bell Frog (Litoria aurea) breeding (2.6ha) and foraging habitat (102.7ha).

The approved Offset Strategy as reported EPBC 2016/7640 Annual Compliance Report (2017) includes:

- Wandewoi Biodiversity Area BA – To offset approximately 63% of the action's impacts on Central Hunter Valley Eucalypt Forest (CHVEF) and 100% of the action's impacts on the Swift Parrot.
- Mitchelhill BA - To offset the residual 37% of the action's impacts on CHVEF and 53.9% of the Regent Honeyeater impacts.
- Condon View BA - To offset the remaining 46.1% of the Regent Honeyeater impacts.
- Crescent Head BA - To offset 99.25% of the action's impacts on the Green and Golden Bell Frog.
- The residual 0.75% offset for the Green and Golden Bell Frog will be provided through other compensatory measures, which are likely to comprise contribution to a research program.

The EPBC 2016/7640 Annual Compliance Report (2017) has not reported any non-compliance although it is noted that the offset sites at Mitchelhill BA, Condon View BA, and Crescent Head BA are to be secured in perpetuity, with legally binding agreements in place by 23 October 2018. Additionally, the Wandewoi BA is required to be secured in perpetuity by 10 October 2019.

Ongoing costs of note are associated with the management and maintenance of the biodiversity areas and the rehabilitation of degraded vegetation communities in the BAs. These costs have not been reviewed by ERM and potential material risk cannot be confirmed although it is unlikely to reach the material threshold of AUD10M in any given year.

MTW

The EPBC 2002/629 approval (last modified in November 2016) requires MTW to offset the impact upon Matters of National Environmental Significance (MNES) by protecting and managing no less than 1,586 hectares (ha) of habitat for the Regent Honeyeater (Anthochaera phrygia) and Swift Parrot (Lathamus discolor). At least 1,586ha of the Goulburn River and Bowditch Biodiversity Areas (BAs) were to be secured as an Offset Area, with a legally binding mechanism for enduring protection by 17 February 2018. The EPBC 2009/5081 approval (also last modified in November 2016) requires WML to offset the MNES by protecting and managing a total of no less than 2,626 hectares (ha), of habitat for the Regent Honeyeater and Swift Parrot, with a legally binding mechanism for enduring protection also by 17 February 2018. Yancoal have requested an extension of the due dates for the provision of a legally binding mechanism to secure the offset areas associated with EPBC 2002/629 and EPC 2009/5081 to 15 February 2019. This revised date will align with that specified in the NSW Planning approval SSD 6464 for legal protection of these offset areas

The Biodiversity Management Plan and Biodiversity Offset Strategy for MTW includes direct offset and indirect compensation measures, including:

- Retirement of species and ecosystem credits within 3 years of the date of commencement of the action.
- Retirement of rehabilitation offsets credits, within 10 years after completion of mining operations.
- Direct land based offsets within designated Regional Biodiversity Areas (Goulburn River, Seven Oaks, Bowditch, Putty, Condon View and North Rothbury BAs) and Local Biodiversity Areas (Southern Biodiversity Area including the Putty Road Offset Area and Northern Biodiversity Area).
- Performance criteria for regeneration of Warkworth Sands Woodland to ensure successful regeneration in the Northern Biodiversity Area within 15 years after commencement of the action. Schedule 3 of NSW approval PA 06_0261 requires the lodgement of a Conservation and Biodiversity Offset Implementation Bond of AUD1 million (indexed to inflation) to provide financial security that the Warkworth Sands EEC would be rehabilitated within the Northern Biodiversity Area. This bond would revert to the state in the event rehabilitation fails to meet performance targets within a 15 year period.
- Development of an Integrated Management Plan for the Warkworth Sands Woodland EEC; and

- A one off AUD1 million contribution to the Office of Environment and Heritage (OEH's) 'Saving Our Species – Regent Honeyeater' conservation program.

The Biodiversity Management Plan for MTW (RTCA, 2016) reports that the MTW mine holds a total of 6,380 ha of offsets under both state and federal project approvals. Each with different requirements under the relevant permits which requires greater diligence in their management to ensure compliance. The Regional Biodiversity Areas Annual Report (2017) reports that monitoring results indicate that the vegetation and habitat health are being maintained in comparison to the baseline data. The Local Biodiversity Areas Annual Report (2017) identified that trespassing and illegal tree clearing and timber getting have been recorded within the Southern Biodiversity Area. Yancoal has undertaken appropriate actions to prevent a continuation of this activity: Offsets are believed to have been addressed or are in an advanced state of resolution. As such, no material risk is believed to be presented by offsets required by the current MTW approvals.

Rehabilitation and Mine Closure Liability

Rehabilitation is informed by the respective Mine Operations Plans (the HVO North and South MOPs and the MTW MOP, prepared in 2016) and the Mine Closure Plans for the Assets, prepared in 2014. Review of the 2016 MOPs indicates these are comprehensive documents that identify mined land suitable for rehabilitation during the MOP period and provide high quality information to support the rehabilitation and revegetation process.

Rehabilitation is reported to be progressing across the site at a rate generally consistent to that specified within the MOPs. The 2016 HVO Annual Environment Management Report (AEMR) reports a total of 84.9 ha rehabilitation was completed during 2016 against a MOP target of 82.6 ha. Total disturbance undertaken was 120.2 ha, 28.9ha lower than the MOP projection of 149.1 ha. This represents 80% (304 ha) of the area proposed for rehabilitation during the 2013 MOP period. Capping of the Interim Tailings Storage Facility continued during 2016 and is due for completion in 2017. At MTW 102% (180 ha) of land proposed was rehabilitated during the 2013 MOP period. Capping and rehabilitation of Tailings Dam 1 at MTW was undertaken in 2015. A site inspection indicates this landform has been designed to gently shed surface water and is now surfaced with a thick cover of pasture grasses. The 2016 MOPs propose a total of 616 ha of rehabilitation at HVO between 2015 and 2018, compared to 730 ha of new disturbance. At MTW 681 ha of rehabilitation is proposed during the MOP period, which compares to a total of 440 ha of new disturbance.

The adequacy of the woodland rehabilitation undertaken is the subject of ongoing monitoring and comparison with nearby reference sites. Niche (2016) report the findings from rehabilitation monitoring undertaken at sites in which the intended post-mining vegetation community is Central Hunter Grey Box – Ironbark Woodland and Central Hunter Ironbark-Spotted Gum-Grey Box Forest. The results of this study indicate that the monitoring sites have as yet not reached parity with the reference site benchmarks. Three sites of the 20 monitoring sites scored 50% or higher conformance with the 10 benchmark monitoring parameters. The majority of monitoring sites (85%) recorded a degree of divergence from the reference site benchmarks. The soil testing that has been undertaken during rehabilitation monitoring and presented in Appendix 5 of the 2016 AER indicates that many of the rehabilitation sites have soil limitations when viewed in the context of agricultural soil requirements. Most of the rehabilitation to be undertaken at MTW in the future is aimed at re-establishing native vegetation communities so the soil limitations need to be assessed with regards to native vegetation establishment rather than agricultural outcomes.

A grazing trial commenced at HVO in 2014 to document the suitability of rehabilitated pastures for grazing stock. Results reported in the HVO 2015 AEMR indicate cattle grazed on rehabilitated land gained weight faster than those cattle grazed on reference sites. These findings are supportive of the view that rehabilitation of pastures on the site has been undertaken to a suitable standard. The current ACARP funded grazing trial (C23053 Study of Sustainability and Profitability of Grazing on Mine Rehabilitated Land in the Upper Hunter) concluded during June 2017.

No issue of material significance was identified relating to current rehabilitation practices from review of the documents outlined.

MOOLARBEN

HSE and Social Setting

Moolarben is an existing open cut and underground coal mine located approximately 40 km northeast of Mudgee in the Western Coalfields of NSW in the vicinity of the Ulan and Wilpinjong mines and within the

Moolarben Creek Valley, in the headwaters of the Goulburn River catchment. The Goulburn River National Park is to the northeast of the Moolarben and the Munghorn Gap Nature Reserve is to the south. Ulan village to the west comprises residential dwellings, a small rural primary school, one church, commercial premises and a hotel. All of the residences and the majority of vacant freehold land in the village are mine owned. A rural residential development is located approximately 4km to the southwest of the Moolarben. A small number of farms and scattered homesteads occupy the remainder of the surrounding freehold land.

The Company is proactively engaged in the local communities through a range of mechanisms, including biannual newspaper advertorials, quarterly letters to neighbours, local government briefings, community consultation committees and financial sponsorship and support. In total, Moolarben provided AUD146,799 in community donations during 2017 to 45 community groups and events through its Community Support Program and other programs. Complaints received from local community members are recorded and investigated by the Company. During 2017, a total of 119 complaints were received by 17 complainants. All complaints are investigated and included in the complaints register on the Moolarben Coal website (www.moolarbencoal.com.au). Noise remained the primary issue of concern (96% of complaints). A comparison of complaints to previous years indicates an ongoing decrease in the total number of complaints, as well as reduction in noise related complaints. Use of real-time feedback within the mining operation has facilitated proactive and reactive responses. Ongoing community and stakeholder liaison and consultation has continued.

Heritage Values

Moolarben has developed an Aboriginal Heritage Database which includes all previously recorded Aboriginal objects and holds all information on Aboriginal archaeological resources relevant for the entire Moolarben - 454 sites have been reported in the Heritage Management Plan (HMP). The Historic Heritage Sites Database includes 25 sites of known and potential historical (non-Aboriginal) heritage significance (local). Construction/development activities are undertaken in accordance with the HMP (2017). As a result of previous assessments and archaeological salvage works, approximately 270 Aboriginal heritage sites and 13 historic heritage sites have already been managed (e.g. salvaged) and/or require no further management.

As outlined within the HMP, 85 sites will be protected in perpetuity as part of designated heritage conservation areas (Murragamba Creek Management Area, Powers Conservation Area and Red Hills Conservation Area) in accordance with the Stage 2 Project Approval (08_0135). In addition, Moolarben have identified two additional management areas – the Underground 2 Rock Shelter Management Area and Bora Creek Management Area. The long-term management and security of these areas has not been confirmed although it is noted that all five of these Management Areas are clearly identified and protected within the current Life of Mine Plan and are located outside of approved mining activities. As such, they are not considered to present a material risk.

Native Title Claims

NC2017/001 (Warrabinga-Wiradjuri #7) was registered on 01 September 2017. Native Title has not been extinguished for some areas (including crown land and water ways) and Native Title may still exist. The majority of the Assets holdings are however not subject to native title and future material risk associated with currently approved projects is not anticipated as a result of Native Title.

An Ancillary Deed of Agreement is also maintained between Moolarben and the North-Eastern Wiradjuri People of the Bathurst/Lithgow/Mudgee Area. The Deed (Government Party Deed) represents an agreement for the purposes of section 31(1) (b) of the Native Title Act and was executed on 7 July 2008. The Deed includes obligations for Moolarben and the North-Eastern Wiradjuri People, such as the funding of apprenticeships and scholarships and the formation of an Aboriginal Cultural Liaison Sub-Committee and an Implementation Committee. [ERM have not reviewed this agreement and cannot comment on any ongoing commitments or risks].

No issues of material significance were identified relating to current heritage management practices from review of the documents outlined. Heritage related risk and regulatory obligations in respect to cultural heritage values are understood to have been satisfactorily addressed. Future material risk associated with currently approved projects is not anticipated.

RPMGLOBAL

Emission Discharges

Similar to other open cut coal mines in the region, air emissions at Moolarben are predominantly a combination of windblown dust and direct emissions from vehicles. Air quality is managed in accordance with an Air Quality Management Plan, approved by DP&E and includes a combination of real time and supplementary dust monitoring at locations representative of sensitive receptors. Moolarben has previously undertaken studies into best practice control implementation for wheel generated dust and for disturbing and handling overburden in adverse weather conditions in accordance with regulatory requirements of the EPA (now all complete). Dust control measures include a real time monitoring and reporting system, paired with a policy of relocating / pausing operations in response to elevated dust emissions. Dust emissions from roadways are minimised through regular watering by a water cart fleet, while emissions from other exposed surfaces are reduced by progressive clearing and rehabilitation. The most recent Independent Environmental Audit (Trevor Brown and Associates, 2016) concluded that the implementation of the Air Quality Management Plan addresses management of operations and monitoring of air quality for the Moolarben activities in accordance with best management practices outlined in the Air Quality Management Plan and that air quality management at Moolarben are in compliance with approval and licence requirements.

Moolarben is licensed to discharge water in accordance with its Environmental Protection Licence EPL 12932 subject to various water quality and rainfall criteria. However, no water discharges occurred from Moolarben during the 2017 reporting period. Further, the most recent Independent Environmental Audit (Trevor Brown and Associates, 2016) concluded that the implementation of the Water Management Plan and sub-plans prepared for the Moolarben project and approved by DP&E on 31 July 2015, demonstrate Moolarben is managing surface water generally in accordance with Project Approval, EPL and bore licence requirements. The audit report concluded that upgrades to the surface water management system, the Water Sharing Agreement with Ulan Coal and no licensed discharges from the site during January 2013 to December 2015, have demonstrated a high level of performance of water management on the site.

Moolarben manages noise and vibration in accordance with the Noise Management Plan (NMP) and Blast Management Plan, including real time monitoring, attended monitoring and complaints handling system for noise. The most recent Independent Environmental Audit (Trevor Brown and Associates, 2016) concluded that Moolarben is currently meeting its obligations under all the Project Approval noise and blast conditions, Statements of Commitment and EPL 12932 conditions. The complaints response procedure is consistent with best practice and with the use of the Mining and Production Environmental Assistants providing real time investigation and advice to the mine operations personnel on noise emissions from the mine activities, is considered to exceed the procedures/protocols implemented at other extractive industry projects in NSW.

No issues of material significance were identified relating to emission discharges from review of the documents outlined.

Land Tenure and Permitting

Moolarben operates under a number of mining leases: ML1605 (expires 20/12/2028), ML1606 (expires 20/12/2028, ML1628 (expires 23/9/2034, ML 1691 (expires 23/9/2034 and ML 1715 (expires 31/8/2036).

Mining operations at the Moolarben are currently approved until 31 December 2038 and are carried out under NSW Project Approval (05_0117) (Moolarben Project Stage 1) (as modified) and NSW Project Approval (08_0135) (Moolarben Coal Project Stage 2) (as modified). Additional approvals under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 apply to mining operations, including Stage 1 mining operations Approval Decision (EPBC 2007/3297) granted 24 October 2007 (as varied) and EPBC 2013/6926) granted 13 November 2014. Stage 2 mining operations are also undertaken in accordance with Approval Decision EPBC 2008/4444) granted 18 May 2015. There are pending requests to modify both the Stage 1 and Stage 2 Project Approvals (05_0117 and 08_0135 respectively), as well as an additional EPBC Controlled Action application associated with the Stage 1 and Stage 2 extension project however it is understood that these are outside the current Life of Mine Plan (LOM) and have not been considered further.

Environment Protection Licence 12932 applies to the Site. Moolarben also operates under a number of other approvals, including for the storage of explosives, storage of dangerous goods and water licences, as well as under a number of operational and management plans approved by relevant regulators.

No issues of material significance were identified relating to permitting from review of the documents outlined.

RPMGLOBAL

OPERATIONAL HSE PERFORMANCE

Environmental Performance

Moolarben has exhibited a high degree of environmental compliance over recent years. An Independent Environmental Audit (IEA) dated April 2016 demonstrated a high degree of compliance with respect to statutory requirements and internal management plans (Trevor Brown and Associates, 2016). The next Independent Audit will be required by December 2018. Minor non compliances with the Project Approval conditions more recently in 2017 related to blasting and stockpiling and resulted in Penalty Notices being issued. These have been adequately addressed through procedural review and implementation of corrective measures by the Company and are not material. Various non compliances with conditions of EPL 12932 were reported from 2008 – 2016. These were largely administrative non compliances and / or matters dealt with via pollution studies and reduction program attached to the EPL. Previous pollution reduction programs attached to the licence relating to particulate matter management and water management have been completed. There are no current pollution studies and reduction programs attached to the licence. Historic non compliances and regulatory action related to water management and off site discharges at the site were addressed at the time (2009/2010) and there have been no ongoing reoccurrences.

Current site compliance is not considered to present a material risk based on the documentation reviewed.
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H&S Performance

Moolarben Open Cut

The key comparable statistic for Moolaraban OC, TRIFA is running at 3.9 which is below the NSW coal mining open cut industry (2015/16) average of 6.6.

The Broad Brush Risk Assessment report provided was April 2016 (although an annual review is suggested) with 1 extreme risk and 26 high risks. Although a wide range of hazards were considered the controls noted referred to general control systems with no detail. Some of the hazards may have been assessed with a lower consequence than history would indicate (explosives consequence assessed as a single fatality) but overall considered reasonable.

The SHMS Compliance and Effectiveness Audit conducted in October 2017 was based on the NSW Department of Primary Industries Mine Safety Operations Branch Coal Operation Health and Safety Management System checklist. There was one major non-compliance/effectiveness identified with a deficiency with their management of mining induced seismic activity. It is assumed that with the closure of the action from the most recent safety audit there would be no material risks.

Moolarben Underground

The SHMS Compliance and Effectiveness Audit conducted in October 2017 by Aussafe Consulting was based on the NSW Department of Primary Industries Mine Safety Operations Branch Coal Operation Health and Safety Management System checklist. The audit commented that the HSMS had not long been developed therefore some of the system requirements were not readily available. Some major non-conformances identified were primarily system based but included the following:

- audit schedules to be developed, ensuring audits are conducted to schedule;
- audit action close out;
- inconsistent application of change management system;
- develop an underground mine risk register including health risks; and
- updating of procedures after significant incidents.

There is no Broad Base Risk Assessment (BBRA) for Moolarben UG. Being in a transition state for the HSM systems is a concern with the audit indicating some significant shortcomings. The key comparable statistic of TRIFA is running at 22.8 is below the NSW coal mining underground industry (2015/16) average of 30.4. However, the fact that the lagging indicator of TRIFA is lower than average does not indicate a robust system. The HSMS audit indicated that a detailed safety and health risk assessment was not readily available for the site and therefore confidence in their identification of hazards with appropriate controls is limited. Based on the limited information available for review and in light of the outcomes of the 2017 SHMS

Compliance and Effectiveness Audit, these shortcomings present a risk, however the mine has identified the weaknesses and it is understood they are addressing them, therefore the risk is unlikely to be material.

Water Management

Moolarben has an EPBC approval for Stage 2 (2008/4444) for the controlling provision: a water resource, in relation to coal seam gas development and large coal mining development. Condition of the approval is to supply data to government and adjacent mining stakeholders (to be provided in Water Management Plan) as monitored in accordance with state approval (08-0135). The site is subject to the conditions of EPL 12932 and includes discharge points and associated sampling requirements/discharge criteria, basin design details and effluent discharge conditions. No discharge occurred in 2016-2017. Realignment of Murragamba and Eastern Creek is approved to allow for the mining activities to occur.

A Water Management Plan (WAMP) has been prepared by NSW DP&E approved, suitably qualified experts to meet the federal and state conditions of consent relating to water management. The WAMP was approved in January 2016. Surface water management on the site includes clean water diversions, creek realignment, clean water dams and sediment basins. Groundwater and surface water access licences are held for take of surface and groundwater. Take occurring in 2017 and 2016 were well below the allowable limits. A review of the 2015-2017 annual compliance and independent audit 2015 reports identified stream gauge issues and proposed revision to trigger levels for surface and groundwater analytes. The 2015 independent audit report identified that the EPA issued a formal warning in relation to daily monitoring of treated effluent discharge volumes in 2013/2014 reporting period. The issue was resolved by a variation to the EPL removing the requirement to monitor daily discharge volumes for the locations in question and there has been no ongoing recurrence of these issues.

No issue of material significance was identified relating to current water management practices from review of the documents outlined.

Soils and Contamination

The Moolarben Mine Operations Plan (MOP) states that a land contamination assessment will be undertaken as the decommissioning strategy and closure plan are being developed. Areas that will need to be addressed in the land contamination assessment include:

- Areas impacted by carbonaceous material (coal spillage and coal storage areas);
- Workshops and fuel storage areas (where hydrocarbon spills may have occurred);
- Water treatment ponds and tailings dam locations.

The 2017 Annual Review did not identify any significant contamination events beyond what would be considered normal operations at a similar mining operation. Current industry standard management methods such as bunding of hydrocarbon storage areas, immediate rectification of spills, on-site effluent treatment and disposal are being implemented to prevent the creation of contamination issues beyond currently recognised areas of focus, as outlined above. The 2017 Annual Review identified that progressive rehabilitation is continuing at the site.

In line with similar operations in the region, a contamination risk is potentially posed by the current and historic tailings storage facilities. Due to the coal processing methods, heavy metals are stored in these facilities. These can lead to contamination if not contained appropriately. Data held on the National Pollutant Inventory database indicates the Moolarben site deposited a total of 528 tonnes of potentially hazardous heavy metals (including lead, mercury, chromium and arsenic) into on-site tailings storage facilities during the 2016-17 reporting period. Moolarben typically co-dispose coarse and fine rejects with overburden in the pit

ERM notes that no breaches have been filed against the Company or instances of contamination of the groundwater have been publically reported. There is an inherent risk in having contaminated tailings present on-site. As such it is understood rehabilitation of these materials by encapsulation is planned, however the variables associated with successful rehabilitation are many and existing budgets available can become insufficient if rehabilitation failures occur. Given the above, it is not considered a material risk of contamination tailings and rehabilitation failure, which is further supported with ongoing monitoring is undertaken to ensure they do not become material.

RPMGLOBAL

Ecology

Moolarben manages biodiversity in accordance with the requirements of three separate EPBC approvals and has secured (or in the process of securing) 19 separate Biodiversity Offset Areas covering over 5000 ha. Each of the approvals and offset areas have different requirements, which poses some risk (although not above the materiality threshold) with managing compliance and the status of each of these offset areas and any conservation agreements could not be confirmed by ERM. The relevant EPBC Approvals are:

- Moolarben Coal Project - Stage 1 (EPBC 2007/3297).
- Moolarben Coal Project - Stage 2 (EPBC 2008/4444)
- Moolarben Coal Project Stage 1 Optimisation Modification (EPBC 2013/6926)

Note: Moolarben Coal Project Stage 1 and Stage 2 extension (EPBC 2017/7974) was determined a controlled action on 24 August 2017 and is to be assessed under the Bilateral Agreement, however this project is outside of current LOM plan and not considered further.

The current Biodiversity Offset Management Plan (BOMP), Vegetation Clearance Protocol and Landscape Management Plan has been prepared to address the conditions of the EPBC 2013/6926 approval and is consistent with the management plans and protocols approved under EPBC 2007/3297. On 17 December 2014, DPE approved the plans and agreed that the use of a conservation covenant and restriction of use instrument would satisfy the relevant conditions of consent. Securing the Offset Areas by a legal instrument and providing protection in perpetuity is required within 24 months of the date of the EPBC approval. As highlighted in the 2017 AEMR, 5 of 7 required offsets under EPBC 2008/4444 were not secured in perpetuity within 24 months of the approval. Moolarben has sought extensions to the date by which the offset properties need to be secured.

Conditions of Project Approvals (08_0135) and (05_0117) also require Yancoal to determine and lodge Conservation Bonds with the NSW Department of Planning and Environment which covers the cost of implementing these Biodiversity Offset Strategies for Moolarben. The Conservation Bond cost was subject to Quantity Surveyor verification and endorsed by DP&E (as the consent authority). It is understood that the bonds totalling AUD3,819,982.50 were lodged with DP&E on 25-26 August 2016 however no documentation to that effect has been supplied for review.

Based on the information made available, a potential non-compliance risk associated with securing biodiversity offsets as per development consent conditions has been identified although this is unlikely to reach the materiality threshold of AUD10M.

Rehabilitation and Mine Closure Liability

Rehabilitation Management Plan

Moolarben has a Rehabilitation Management Plan (RMP) dated August 2016 and executed 3 November 2016. Section 2.0 of the RMP outlines the statutory requirements for the project rehabilitation. It is noted that the RMP includes the provisions of the commonwealth approvals associated with Stage 1 of the project and it is understood that the Rehabilitation and Offset management Plan relevant to Stage 1 is incorporated with the current Landscape Management Plan (LMP) and approved by the State government administering authority on 25 November 2013. The 2016 RMP has incorporated the 2013 LMP rehabilitation aspects.

The ML1628 and ML1691 Rehabilitation Cost Estimate (RCE) dated March 2018 noted area of disturbance of 317.84ha with progressive rehabilitation being 112ha. Current security held as at 17 November 2017 was for these ML's under the RCE is AUD5,344,000 with a calculated total security deposit as AUD7,694,218.86.

The RCE for ML1605, ML1606 and ML1715 dated March 2018 has an area of disturbance of 1156 ha and progressive rehabilitation of 253ha with no rehabilitation completed. The securities held under these ML's as at 17 November 2017 were AUD30,596,000 with a calculated total security deposition as AUD41,493,577.10.

The two RCE incorporates costings for the use of a third party for the demolition and removal of infrastructure. It is noted that CMA Contracting Pty Ltd have provided a demolition cost estimate, dated March 2018, of AUD12,083,470.

It is noted that the progressive rehabilitated figures provided in the Annual Review conflict with those provided in the combined RCE's above. The progressive rehabilitation figures provided in the Moolarben

Annual Review of 226ha is not consistent with the progressive rehabilitation figures provided in RCE having a combined area of 365 ha (112ha + 253ha).

Moolarben Securities Register

The Moolarben Securities Register dated 11 May 2018 indicates a total of AUD41,494,000 for ML1605, ML1606 and ML1715 and AUD7,694,000 for ML1628 and ML1691. Therefore the securities held for the combined ML's is AUD49,188,000. This figure is consistent with the RCE combined calculated total security deposition of AUD49,187,795.74 (AUD7,694,218.86 + AUD41,493,577.10).

Environmental Rehabilitation Budget Allocation

The rehabilitation budget for 2018 was provided at AUD659,000 with an additional bulk shaping and final landform costs of AUD2,000,000 included in the mining budget.

Mining Operations Plan

The Mining Operations Plan (MOP) was sourced from the Moolarben Coal website: http://www.moolarbencoal.com.au/icms_docs/273448_mining-operations-plan.pdf for the assessment.

From a review of the information provided in Section 3.3 of the MOP, Specific Risks Relating to Rehabilitation, there are no material risks associated with the rehabilitation from a soil resource management perspective.

This MOP was executed 6 April 2018 and covers the Period January 2017 to January 2019. Table 21 Section 7.3 outlines the summary of rehabilitation proposed during the MOP Term. The active rehabilitation phase as at 2017 has been identified as 268ha which appears to be inconsistent with the figures provided in Moolarben Annual Review and RCE's.

The MOP also provides for a further 182ha of progressive rehabilitation to be active by the end of the term of the MOP, January 2019. No figures for the current 2018 period have been provided and therefore an accurate indicator of progressive rehabilitation performance against allocated OPEX budgets cannot be determined.

ASHTON

EHS and Social Setting

Ashton is an approved open cut and underground operation located near the village of Camberwell, approximately 14km northwest of Singleton. The North East open cut (NEOC) is located west of Camberwell and Glennies Creek and ceased operations in 2011. The underground mine is located south of the north east open cut and New England Highway and is bounded to the west by the Ravensworth Underground Mine (RUM), to the south by the Hunter River and to the east by Glennies Creek. The South East Open Cut Project is approved (pending land purchase) however as yet undeveloped open cut mine located to the south of Camberwell and east of the underground mine and Glennies Creek.

Ashton receives minimal community complaints, having received two complaints in 2017, one in 2016 and nil complaints in 2015, all in relation to noise (subsequent investigations concluded that the noise was unlikely to have been generated from Ashton's operations).

Heritage Values

Within the Ashton Project Area there are 54 recorded Aboriginals heritage sites, three of which have been identified as having high scientific and cultural significance. A large number of stone artefacts were recovered from the Oxbow site demonstrating historic long term Aboriginal occupancy of the area. The salvage of these sites is carried out under the approved Aboriginal Heritage Impact Permits (AHIPs). The current AHIP's held for the Ashton are:

- AHIP #1130976 granted by the Land and Environment Court ([2011] NSWLEC 1249) in August 2011, encompassing the western underground longwall panels LW5, LW6A, LW6B, LW7A, LW7B and LW8 and the Bowmans Creek diversion. LW 205 in the ULLD seam is also within this area; and

- AHIP #1131017 issued on 23 December 2011, for the eastern underground longwall panels: LW 1 – 4. This AHIP also covers the area that will be subsided by LW 201 – 204 in the ULLD Seam.

While five heritage related issues have been raised within the courts these were all 5 to 6 years ago with not subsequent issues raised.

Ashton have comprehensive policies, standards and protocols in place to guide Aboriginal Cultural Heritage management and have also established an Aboriginal Community Consultation Forum chaired by an independent facilitator and is made up of representatives from Ashton, consulting archaeologists and members of Ashton's 34 Registered Aboriginal Parties (RAPs). Aboriginal heritage related risk, regulatory obligations and all court decisions are understood to have been satisfactorily addressed and future material risk associated with currently approved projects is not anticipated.

Native Title Claims

As of 28 May 2018, two active Native Title Claim Applications are relevant to the Ashton Coal Project.

- NC2013/006 (Scott Franks and Anor on behalf of the Plains Clan of the Wonnarua People) was registered on 16 January 2015.
- NC2017/007 (Wonnarua Traditional Owners #2). This application was lodged on 2 December 2017 and is currently identified for registration decision under section 190A of the Native Title Act 1993. No determinations of native title have been made for this application and it is unclear what, if any material risk this may pose to future development proposals.

There is no material risk associated with these Native Title Claim Applications.

Native Title has not been extinguished for some areas (including crown land and water ways) and Native Title may still exist within the footprint of the South East Open Cut. The South East Open Cute (SEOC) has yet to commence and is understood is not planned to commence within the next 5 years. In 1876, land at Camberwell was devoted to temporary commonage. In 2010, the land was reserved for rural services and revoked as a common. A licence was granted to Ashton over the land for access, grazing and site investigation. It is understood that Yancoal have sought legal advice to clarify the existence, validity and extent of Native Title and Aboriginal Land Rights Claims within and surrounding the SEOC. It is reported that Crown Lands will retain carriage of the resolution of these claims (along with other claims over numerous lots in the Hunter Valley) and the key risks identified as reported in the LOM Plan is the timing and cost impacts to process and resolve these matters. ERM has not reviewed or been provided copies of any legal advice regarding Native Title and Aboriginal Land Rights Claims although it is unlikely to exceed the material threshold of AUD10M. The timing and cost impacts may present a risk to validity of the Upside Case as presented on the LOM Plan.

The remainder of the Ashton Project Area is either Ashton owned or freehold land and is not subject to native title.

Emission Discharges

Air Emissions:

The most recent Ashton Independent Environmental Audit (Horn, 2016) concluded that the site exceeded TSP annual average criteria at the Camberwell Village and deposited dust criteria at three onsite gauges in 2013. These were rated as medium risks at the time with no high risks identified. Current air emissions from the Asset is not considered likely to pose a regulatory risk, given no open cut mining is currently being conducted and the efficacy of the dust management procedures and processes currently in place.

Noise:

Ashton manages noise and vibration in accordance with site specific Noise Management Plan (NMP) and Blast Management Plan, including real time monitoring, attended monitoring and complaints handling system for noise. The most recent Ashton Independent Environmental Audit (Horn, 2016) states that Noise complaints reduced significantly from the previous audit period and that there had been no sustained significant exceedances of noise criteria for the site in the audit period. The 2017 AEMR reported that noise

monitoring results during the reporting period follow the trends of the past few years, where Ashton Coal's operations are largely inaudible in the surrounding community and minimal noise complaints have occurred.

Water:

The 2016 Independent Environmental Audit (Horn, 2016) identified that there were some issues relating to water management, specifically the lack of containment for potentially saline water leaving site from the eastern emplacement. There was a small catchment on the northern side of the emplacement that was not captured on site and there was evidence of a saline seep from the emplacement at that point. However, the catchment was well vegetated and there was no risk of suspended solids leaving site.

No issues of material significance were identified relating to emission discharges from review of the documents outlined.

Land Tenure and Permitting

Current mining operations are conducted in accordance with the requirements of the conditions of Mining Lease (ML) 1529 (expires 11/11/2021), ML 1533 (expires 25/2/2024), ML 1623 (expires 30/10/2029 and ML 1696 (expires 16/5/2035), granted under the Mining Act 1992. The Ashton MLs exist with freehold land owned by Ashton and other mining companies, power station, RMS and Singleton Council. Various Crown Land permits apply the site.

Mining operations at Ashton are currently approved under DA 309-11-2001-I (as modified). The consent allows Ashton to extract up to 5.45Mtpa of ROM coal from the existing operation (not including the SEOC) with the operational mine life to operate until 11 February 2024, or a period of 12 years following the recommencement of open cut mining operations at the SEOC, whichever is longer.

On 4 October 2012, approval was granted for the Ashton SEOC project (MP 08_0182), however it was subsequently appealed. In 2014, the NSW Land and Environment Court upheld the approval, subject to further conditions. The revised development consent was issued to Ashton in April 2015. The SEOC has yet to commence (and is understood will not commence within 5 years). Under the NSW Environmental Planning and Assessment Act 1979, a development consent lapses five years after the date that approval is granted unless the project has physically commenced on or before that day. Based on the date L&E Court approval dated 17 April 2015, the development consent will lapse on 17 April 2020 if the project has not achieved physical commencement. This is considered a low risk as Ashton has time in which to undertake works to trigger physical commencement to ensure the validity of the approval. The Ashton SEOC Project was deemed to not be a controlled action and thus approval under the Commonwealth Environmental Protection and Conservation Act (EPBC Act) was not required.

Environment Protection Licence 11879 applies to the Site. There is a licence variation application pending for EPL 11879. Ashton also operates under a number of other approvals, including for the storage of explosives, storage of dangerous goods and water licences, as well as under a number of operational and management plans approved by relevant regulators.

Current site permitting is not considered to present a material risk based on the documentation reviewed.

OPERATIONAL EHS PERFORMANCE

Environmental Performance

An independent review of Ashton completed in December 2016 (Horn, 2016), reported 27 non compliances (14 of which were administrative and the remaining low and medium risks). No high risks were identified in the audit. The key identified non-compliances were associated with noise/blasting, dust and water related issues. The Ashton Annual Review report 2017 (covering the period 1 January 2017 – 31 December 2017) states that all actions from the independent audit report have been completed except for one relating to storm water runoff on the north-east open cut, where an options analysis was completed during 2017, followed by peer review in early 2018 and ongoing consultation with the EPA.

A Penalty Notice was issued to Ashton by DPE in February 2017 relating to non-compliance with a condition of Project Approval DA 309-11-2003i relating to failure to maintain and publish a community complaints

register on its website and update on a monthly basis and failure to provide a 24 hrs Community Compliant line. Ashton was fined AUD15,000 however the issue is now resolved and the operations are now in compliance with the condition.

Reported non compliances against EPL 11879 during 2015 and 2016 are largely administrative non compliances which have not resulted in any penalty notices nor prosecutions. Current site compliance is not considered to present a material risk to the project based on the documentation reviewed

H&S Performance

The last Broad Brush Risk Assessment was completed in December 2017 and appears comprehensive. The process employed demonstrates adequate controls are in place. Since the previous risk assessment a number of hazards have been assessed as higher risks. The group recorded as conducting the assessment shows depth of experience and covered management to the workers in the field.

The SHMS Compliance and Effectiveness audit completed by Aussafe Consulting in August 2017, using criteria based on the NSW Department of Primary Industries Mine Safety Operations Branch Coal Operation Health and Safety Management System checklist identified no major non-conformances and a number of lesser non compliances including two from the 2015 audit.

The key comparable statistic of TRIFA running at 33 is marginally above the NSW coal mining underground industry (2015/16) average 30.4. Overall no material issues were identified.

Water Management

The site is subject to EPL 11879. The EPL outlines ambient surface water monitoring locations, parameters for analysis and frequency of sampling. No licenced discharge location are included. The EPL also outlines the requirement for the development of Storm water Management Plan for the development. Bowmans Creek was diverted to allow for the operation of the project. Numerous Water Access Licences (WALs) exist for the site allowing extraction from the Hunter River and Glennies Creek. Review of the 2016 and 2017 Annual environmental reports identified that no exceedance of allowable take was observed.

A Water Management Plan (WAMP) was prepared for the site and was approved by NSW Department of Planning and Environment (DPE) in March 2018. Water management at the site includes groundwater dewatering bores, surface water and process water holding ponds, disturbed catchment catch drains, upslope diversion, contour drains and settlement basins. The WAMP states that do discharge of surface water occurs from the site as it is stored and managed for site use, also stating that no spills were recorded from the site storages from August 2010 through to January 2017. The 2015, 2016 and 2017 annual environment report identified that no compensatory water needed to be required to private landholders during the reporting periods.

The water supply reliability states that reliability for water that is extracted under the WALs is under 50%. The water balance would predict the likelihood of a water supply deficiency during drought conditions and the site would seek alternative supply sources (such as purchasing additional WALs on the open market). The cost of obtaining such licences will unlikely be of material significance.

The 2015 and 2017 annual environmental reviews identified no incidents or non-compliances in relation to surface and groundwater management. The 2016 independent audit identified two administrative non-compliances related to consultation during the preparation of the management plan and the impracticality of the process to be implemented if a surface water assessment criteria is exceeded. The 2016 audit identified a non-compliance in relation to on-site management of water (and associated sampling) from a rehabilitated area adjacent to the rail line.

No issue of material significance was identified relating to current water management practices from review of the documents outlined.

Soils and Contamination

The 2017 Ashton MOP identifies that there are no areas of contaminated land within the site boundaries. The MOP also states that Acid mine drainage is not considered to be a risk at the site. However groundwater seepage and drainage from emplaced materials will be periodically tested for signs of acid

rock drainage. Hydrocarbons and chemicals are stored in accordance with industry standards to prevent unintentional release and contamination. No issue relating to contamination was raised in the 2016 Independent audit. The 2017 annual review identified a non-compliance in that a drum containing a hydrocarbon material was not fully bunded, though was rectified in the presence of the auditor.

In line with similar operations in the region, a contamination risk is potentially posed by the current and historic tailings storage facilities. Due to the coal processing methods, heavy metals are stored in these facilities. These can lead to contamination if not contained appropriately. Data held on the National Pollutant Inventory database indicates the Ashton mine deposited a total of 43 tonnes of potentially hazardous heavy metals (including lead, mercury, chromium and arsenic) into on-site tailings storage facilities during the 2016-17 reporting period.

ERM notes that no breaches have been filed against Ashton or instances of contamination of the groundwater have been publically reported.

There is an inherent risk in having contaminated tailings present on-site. It is understood rehabilitation of these materials by encapsulation is planned, however the variables associated with successful rehabilitation are many and existing budgets available can become insufficient if rehabilitation failures occur. ERM has not considered material risk of contamination tailings and rehabilitation failure, however it is understood that ongoing monitoring of these risks are undertaken by the asset to ensure they do not become material.

Ecology

The Upper Hunter region is home to a range of threatened species and Endangered Ecological Communities (EECs), which are subject to regulation under NSW and Commonwealth biodiversity legislation. At Ashton, the site progression from open cut to underground has reduced the potential for impact to ecological values.

To offset the ecological and archaeological impacts of the project and provide for the conservation of an important archaeological area, Ashton entered into a Conservation Agreement over part of Lot 3 DP 1114623 on 16 September 2010. This conservation area contains vulnerable threatened fauna (Grey Crowned Babbler, Hooded Robin and Speckled Warbler) and areas of significant cultural Aboriginal heritage value. This conservation agreement also recognises that the original development consent (dated 2002) permits mining of coal by longwall methods in four seams beneath the conservation area. Ongoing management and monitoring are being undertaken in accordance with the Voluntary Conservation Area Plan of Management (2012) to the conditions of AHIP #1131017, Flora and Fauna Management Plan (2017) and the Cultural Heritage Management Plan (2017). Future material risk associated with this agreement is not anticipated.

In accordance with development consent, Ashton has conducted bi-annual monitoring within this Voluntary Conservation Area since 2005 and Bowmans Creek since 2007. Monitoring will continue until the completion of underground mining within the extraction area and up to five years after secondary extraction is complete. As reported in the Independent Audit (2016) and the Annual Environment Management Report (AEMR) (2017), monitoring shows that terrestrial fauna species diversity remains consistent and reports no reduction in biodiversity values for the site, with the Bowmans Creek Diversion increasing aquatic biodiversity as rehabilitation associated with the diversion progresses.

In summary, biodiversity related risk and regulatory obligations in respect to biodiversity impacts at Ashton are understood to have been satisfactorily addressed. Future material risk associated with currently approved projects is not anticipated.

Rehabilitation and Mine Closure Liability

The rate of rehabilitation across the mine is generally proceeding in line with expectations (as detailed in the MOPs) and is broadly keeping pace with new disturbance. Overall 80% of the land has been rehabilitated, however none has been relinquished. Rehabilitation and closure risks are managed through the MOP and in accordance with the requirements of Ashton's DA 309-11-2001-i. Three issues relating to mine closure liability have been noted by ERM and these are already known to Yancoal. These relate to: rehabilitation of subsidence, rehabilitation of final void dimensions and risks associated with a new Rehabilitation Cost Estimate method introduced by the NSW Government on 1 January 2018.

- Ashton's DA 309-11-2001-i requires subsidence troughs on alluvial land adjacent to Bowmans Creek to be rehabilitated to provide a free draining surface. Up to 8m subsidence troughs are predicted, which will result in the ponding of water above mined land. ERM's review of the Ashton Rehabilitation Cost Calculation (Doc 01.03.04.02.39) provides AUD66,165 for (minor) earthworks to rehabilitate 51.8 ha of subsidence areas. In lieu of the requirement to provide free draining land, the rehabilitation budget for this domain is likely to be insufficient.
- The Environmental Assessment for the SEOC and modification to the Ashton Mine development consent detailed the final NEOC void dimensions. The DA requires mining to be carried out in accordance with these dimensions. ERM understands that the final void dimensions may not be achievable if the SEOC does not proceed, in particular the base of the void will be 20-30m below the required elevation. Changes to the final void dimensions may require approval and until such approval is obtained there is a potential risk that the assets will not meet rehabilitation and relinquishment requirements.
- Yancoal is understood to be addressing both rehabilitation matters and has formally extended the term of the current MOP to July 2018 to allow time to address these matters for approval in the subsequent MOP. The progress of this work has not been viewed by ERM at the time of writing, however it is expected that both matters will be able to be resolved for approval.

Stratford and Duralie

EHS and Social Setting

The Stratford operations currently consist of the Bowens Road North Open Cut (BRN) and Roseville West Open Cut (Roseville) pits with a CHPP and associated raw and product coal handling and rail loading and unloading facilities. Various other pits have been mined in the past. The Duralie Open Cut Coal Mine, is located about 20 km south of the Stratford mine. The Bucketts Way is the main road through the Gloucester Valley which connects to the Pacific Highway, approximately 12 km north of Raymond Terrace, to Gloucester over approximately 80 km through a number of small villages including Stroud, Craven and Stratford. The Stratford operation is located on the eastern side of the Bucketts Way, near the villages of Stratford and Craven.

The mines are situated within the Gloucester Valley and are surrounded by a range of agricultural land uses and native bushland and small hamlets. The closest residential receiver is located 500m north of the Duralie project area boundary. In addition, there are in the order of 150 privately owned residences within a 6 km radius of the mine.

Heritage Values

There are no Native Title determinations, claims or Indigenous Land Use Agreements at either Stratford or Duralie.

Stratford Mine Complex (SMC)

Heritage assessments at Stratford have recorded a total of 15 Aboriginal heritage sites, two Potential Archaeological Deposits (PADs) and a potential cultural area. In accordance with the requirements of the Stratford Extension Project Development Consent SSD-4966 (refer below), the approved Heritage Management Plan (2018) guides the management of Aboriginal cultural heritage sites impacted by the initial activities. The Initial Stage of the Stratford Extension Project would result in partial loss of value to five known sites. As per the letter from DP&E (dated 30 November 2017), Aboriginal cultural heritage sites impacted by later activities will be considered in a later revision of the HMP.

As detailed in the Stratford Extension Project (SEP) Environmental Impact Statement (EIS), five items identified in the site survey were assessed as having local heritage significance, including the Stratford Timber Railway (cutting and routes 1 and 2), the Glen Timber Railway, the Stratford Cemetery and the Craven Village. These items are all located outside of the SMC disturbance area and present no material or statutory risk.

Duralie Open Cut Coal Mine (Duralie OC)

The Heritage Management Plan describes eleven (11) Aboriginal heritage artefacts and two (2) Aboriginal sites in the Duralie development area and provides management for the Aboriginal heritage sites. Under the approved extension of Duralie, three (3) of these known Aboriginal heritage sites have been directly impacted (as approved). In accordance with the Heritage Management Plan topsoil disturbance during earthworks, construction and operation of the mine has been monitored utilising officers of the Karuah Local Aboriginal Land Council (KLALC). Following the completion of rehabilitation, salvaged artefacts that have been relocated into the care of the KLALC may be replaced back onto the rehabilitated landform in consultation with the Aboriginal community and OEH. The only European heritage building within the vicinity of the Duralie mine is the former Weismantels Inn. Photographic and archival recording of the Former Weismantels Inn in accordance with the DP&E's Heritage Branch guidelines was undertaken in June 2011 and impacts to the have been reported within the annual reports.

In summary, heritage related risk and regulatory obligations in respect to cultural heritage vales at the Gloucester Basin Assets are understood to have been satisfactorily addressed. Future material risk associated with currently approved projects is not anticipated.

Emission Discharges

Stratford

Stratford operates under the development consent for the Stratford Extension Project. The development consent for Stratford requires preparation of a series of management plans. Some of these management plans have been combined to address the requirements for both Stratford and Bowens Road North consents.

Air Emissions

Similar to other open cut coal mines in the region, air emissions at the Stratford are predominantly a combination of windblown dust and direct emissions from vehicles. Air quality is managed in accordance with an Air Quality Management Plan and includes a combination of real time and supplementary dust monitoring at locations representative of sensitive receptors. Dust emissions from roadways are minimised through regular watering by a water cart fleet, while emissions from other exposed surfaces are reduced by progressive clearing and rehabilitation. At the CHPP, potential dust emission sources are controlled by automated water sprays at a number of locations. The product coal stockpile sprays are located on the overhead conveyor system. A wind speed/direction device provides information to a computer located in the coal preparation plant control room that can electrically activate spray valves. The valves open and close in a programmed cycle that alternatively activates sprinkler heads above the stockpile. The dust suppression system operates when the wind speed exceeds 5m/s for >30 seconds.

The most recent Independent Environmental Audit (Hanson Bailey, 2018) concluded that the dust emissions were generally well managed with the exception of excessive visible dust seen on the ROM pad near a working loader. SCPL advised at the time that water carts are usually active in this area however, were not at the time of the site visit. There were no exceedances of air quality criteria under the consents in the audit period.

Water Discharge

Stratford is licensed to discharge water in accordance with its EPLs subject to various water quality and rainfall criteria. However, no water discharges occurred from Stratford during the 2017 reporting period. The most recent Independent Environmental Audit (Hanson Bailey, 2018) concluded that the implementation of the Water Management Plan and sub-plans demonstrate that Stratford is managing surface water generally in accordance with its development consent, EPLs and water licence requirements.

Noise Emissions

Stratford manages noise and vibration in accordance with the Noise Management Plan and Blast Management Plan and the EPLs, including real time monitoring, attended monitoring and complaints handling system for noise. The most recent Independent Environmental Audit (Hanson Bailey, 2018)

concluded that noise is generally well managed, however coal mining did not occur at Stratford in the audit period. There were no exceedances of noise criteria within the audit period. The main sources of noise during the audit period were from the CHPP and a stockpile dozer (which no longer operates in the area associated with the noise complaints). Operations have since recommenced and noise will require careful management to ensure impacts to sensitive receivers in the area remain within predictions. This is understood to be underway by the Company.

Duralie OC

Air Emissions

Air emissions at the Duralie are predominantly a combination of windblown dust and direct emissions from off-road diesel vehicles. Air quality is managed in accordance with an Air Quality Management Plan and includes a combination of real time and supplementary dust monitoring at locations representative of sensitive receptors. Dust suppression is undertaken using a range of best practice dust control measures. Dust emissions from roadways are minimised through regular watering by a water cart fleet, while emissions from other exposed surfaces are reduced by progressive clearing and rehabilitation. A number of Pollution Reduction Programs (PRP) required under EPL 11701 have previously been completed, including 'Coal Mine Wind Erosion of Exposed Land Assessment' August 2016. Results are available on the Duralie OC website.

On 11 April 2017, a dust incident was reported to the EPA. The dust had resulted from an area of very fine overburden which was being rehandled in the Weismantel pit. Dust emissions were reported internally and control measures implemented in accordance with the Air Quality Management Plan. As the dust emissions were not able to be controlled the activity was ceased. Additional controls were implemented and a written report provided to the EPA. In 2017, fourteen air quality related complaints were received (13 related to odours and one to visible dust). All complaints were responded to promptly and details of the complaint responses and outcomes recorded with no infringement notices.

Water Discharge

Duralie OC is licensed to discharge water in accordance with its EPLs subject to various water quality and rainfall criteria. However, no water discharges occurred from the mine during the 2017 reporting period. A review of the most recent Annual Reviews indicates that the implementation of the Water Management Plan and sub-plans demonstrate that surface water is being managed generally in accordance with development consents, EPLs and bore licence requirements.

Noise Emissions

Duralie OC manages noise and vibration in accordance with the Noise Management Plan and Blast Management Plan and the EPL, including real time monitoring, attended monitoring and complaints handling system for noise. A review of the most recent Annual Reviews indicates that noise is generally well managed. In the last two years, there were two blast related incidents reported to the EPA regarding a blast after the approved time which was not monitored and a blast vibration complaint. Written reports were provided to the EPA and DP&E and no further action was required.

Land Tenure and Permitting

Stratford Mine Complex

Mining operations have been conducted in accordance with the requirements of the conditions of Mining Lease (ML) 1360 (expires 21/12/2036), ML1409 (expired 6/1/2018, renewal pending), ML1447 ((expires 31/3/2020), ML1521 (expires 23/9/2023), ML1528 (expires 19/1/2024), ML1538 (expires 24/6/2024), ML1577 (expires 28/2/2027) and ML1733 (expires 8/4/2037), granted under the Mining Act 1992. Security bonds have been registered for the mining operations. The Stratford MLs exist within freehold land owned by Yancoal.

Operations at Stratford (excluding Bowens Road North) were originally approved under DA 73/94 in January 1995. DA 73/94 was relinquished in July 2000 and operations commenced under DA 23-98/99 (approved in February 1999). Mining operations ceased at Roseville West pit in December 2013 and Bowens Road

North in June 2014 however have since recommenced under SSD-4966 for the Stratford Extension Project in May 2018. The CHPP continues to receive coal from Duralie (as reported in Hanson Bailey, Independent Environmental Audit Report, February 2018).

Development consent for the Stratford Extension Project (SEP) (SSD-4966) was granted by the NSW Planning Assessment Commission (PAC) on 29 May 2015 to extract up to 21.5 million tonnes (Mt) of run of mine (RM), with mining operations permitted until 31 December 2025. The SEP provides for the continuation and extension of operations at Stratford including the mining of three new open cut areas. The approval consolidated Stratford and .Bowens Road North operations under a single development consent. A Mining Operations Plan (MOP) has been prepared for the period March 2018 – March 2021. Based on the MOP, SSD-4966 will be physically commenced within five years of the consent being granted (and based on the MOP, there is no material risk associated with the consent lapsing). In addition, a Commonwealth approval (EPBC 2011/6176) was granted on 29 January 2016 for the extension to open cut coal mining and processing activities at the Stratford of an additional 300 hectares and includes controlling provision: water resources. This approval expires on 30 November 2030.

EPL 5161 applies to Stratford (excluding Bowen Road North) (and being the area to which ML 1360 applies). EPL 11745 applies to Bowens Road North (an application to surrender EPL 11745, dated 11 January 2018, is pending). Stratford also operates under a number of other approvals, including for the storage of explosives, storage of dangerous goods and water licences, as well as under a number of operational and management plans approved by relevant regulators.

Duralie

Mining operations have been conducted in accordance with the requirements of the conditions of Mining Lease (ML) 1646 (expires 4/1/2032) and ML 1427 (expires 6/4/2019) granted under the Mining Act 1992. Security bonds have been registered for the mining operations. The Duralie OC MLs exist within freehold land owned by Duralie Coal Pty Ltd.

Current mining operations are undertaken in accordance with the Duralie Extension Project Approval (PA 08_0203) (as modified), approved in November 2010 for mining activities until 31 December 2021. In addition, a Commonwealth approval (EPBC 2010/5396) was granted on 22 December 2010 for the Duralie UG extension and includes conditions relating to water resources. EPBC approval expires on 31 December 2020 and would need to be extended to continue operations past this date. However, with Project Approval under PA 08_0203 to expire 31 December 2021 (ie only one year later) and with current Mine Closure Planning in preparation of the Mine Closure Plan to be submitted prior to 31 December 2019 (as reported in Hansen Bailey, 2018), the need to extend EPBC approval is unlikely and even if an extension was required, given the limited timeframe an extension would be required (ie for one additional year), the granting of such an extension is likely to be a low risk if there is ongoing compliance with the requirements of EPBC 2010/5396.

EPL 11701 applies to the Duralie Mine. Duralie OC also operates under a number of other approvals, including for the storage of explosives, storage of dangerous goods and water licences, as well as under a number of operational and management plans approved by relevant regulators.

Stratford Extension Project

No issues of material significance were identified relating to permitting from review of the documents outlined.

OPERATIONAL EHS PERFORMANCE

Environmental Performance

Stratford Mine Complex

Stratford has exhibited a high degree of environmental compliance over recent years (2014-2017). An Independent Environmental Audit dated February 2018 covering the period 2014 – 2017 concluded that a good standard of environmental management is generally being applied to the minor recovery operations and rehabilitation activities (Hanson Bailey, 2018). Implementation of site rehabilitation is progressing

generally in accordance with supporting documents of the Development Consent and MOP. Some minor inconsistencies were noted between the MOP figure and the Development Consent which requires updating in the MOP. Further planning and assessment is required in consultation with relevant regulators to demonstrate that the long-term closure scenario of the final voids overtopping to natural drainage can be successfully implemented.

Two minor non-compliances with the Development Consent conditions for the Stratford (excluding Bowen Road North) related to dust emissions and air quality monitoring. These have been adequately addressed through procedural review and implementation. Three non-compliances with conditions of EPL 5161 were reported - two were administrative non-compliances and one minor in relation to dust emissions. These do not present a material risk.

At Bowens Road North, only administrative non-compliances with the Development Consent conditions were identified, which have been adequately addressed through procedural review and implementation. No non-compliances with conditions of EPL 11745 were reported. Both these have since been surrendered and no longer apply.

Community concerns are being well managed and recorded within a complaints register. As operations have largely ceased, the number of complaints received in the audit period was low. Seven complaints were received in 2015 for noise issues, primarily in relation to a stockpile dozer. No complaints were received in 2016 for the operation and only two complaints were received in 2017.

Current site compliance is not considered to present a material risk based on the documentation reviewed.

Duralie

An Independent Environmental Audit dated February 2018 covering the period November 2014 – December 2017 concluded that a good standard of environmental management is generally being applied to the operations and rehabilitation activities (Hanson Bailey, 2018). The audit identified seven non-compliances against conditions of development consent and other licenses and approvals. The seven non-compliances comprised five issues. Five non compliances were ranked as low risk and two ranked as administrative non-compliances. Annual Reviews undertaken since 2014 indicate that the Duralie has exhibited a high degree of environmental compliance during its continued operations. Five minor non-compliances with the Project Approval conditions related to dust and odour emissions, air quality monitoring, water discharge and unrolled burning. These have been adequately addressed through procedural review and implementation. No non-compliances with conditions of EPL 11701 were reported.

Community concerns are being well managed and recorded within a complaints register. Hanson Bailey (2018) reported forty one complaints were received in 2015 primarily related to noise, nineteen complaints were received in 2016 primarily for air and odour issues and six complaints were received in 2017, primarily related to odour.

Current site compliance is not considered to present a material risk based on the documentation reviewed.

H&S Performance

The key comparable statistic of TRIFA is running at 20.68 which is significantly higher than the NSW coal mining open cut industry average (2015/2016) of 6.6.

A SHMS Compliance and Effectiveness Audit was completed by Aussafe in June 2017 with criteria based on the NSW Department of Primary Industries Mine Safety Operations Branch Coal Operation Health and Safety Management System checklist. No major non-compliances/effectiveness were identified. Minor issues identified were in the areas of obligation to HSMS, audit/inspection, contractor management, change management, hazardous chemicals, occupational health and accident/incident management.

No risk assessments were available for the assets but the SHMS covers the normal range of hazards. Although the lag indicator is high the site audit could indicate focus is required. With limited data available the assessment of materiality did not indicate an issue.

Water Management

Stratford Mining Complex

The site is subject to the conditions of EPL 5161, which includes the following related to water management:

- Storm water discharge points and monitoring locations;
- Discharge water sampling parameters and sampling frequency;
- Groundwater monitoring locations;
- Mine wastewater irrigation conditions;
- Special condition relating to drought release of mine wastewater.

A Water Management Plan (WAMP) was prepared by NSW DP&E approved, suitably qualified experts to meet the federal and state conditions of consent relating to water management. The WMP was approved in September 2017. Surface water management on the site includes upslope temporary and permanent clean water diversions, water storage within open pits, irrigation onto rehabilitated areas and sediment basins.

Water access licences are held for the site though were not sighted, however it is understood to be in compliance.

The water supply model for the site indicated that the site runs at a surplus, with a supply reliability of greater than 99%, even in limited precipitation modelling. Modelling was also undertaken to determine the potential for an overflow from water storages on-site. The modelling indicated that the spill risk from the contained storages being less than one percent across all modelled climate scenarios. The surface water management plan identified that as of 2010 there has been no significant acid mine drainage issues.

Review of the 2017 and 2016 Annual Compliance reviews identified:

- No water discharges in 2016 and 2017 (though one overflow in 2017 that was monitored as required);
- Water take from water access licences was less than the entitlement;
- One water related complaint in the 2012/13 reporting period;
- No significant or measurable change in water table level or quality that could be attributed to the mines activities; and
- No water related non-compliances.

The most recent environmental audit (Hansen Bailey, February 2018) identified two administrative non-compliances. The first due to no evidence being provided that the site water balance was being updated on a six-monthly basis, with the site water balance was being undertaken on an annual basis. The second was due to a sampling event not being undertaken due to no flow events at the sampling locations.

No issue of material significance was identified relating to current water management practices from review of the documents outlined.

Duralie

Duralie OC has an EPBC approval (2010/5396) that includes conditions relating to water resources. The site is subject to the conditions of EPL 11701 and includes the following related to water management:

- Storm water discharge points and monitoring locations;
- ambient and discharge water sampling parameters and sampling frequency;
- Surface water quality concentration limits
- Effluent irrigation conditions;

The EPL does not provide sediment basin design criteria. The WAMP outlines that basins will be constructed in accordance with the Landcom (2004) Managing Urban Storm water: Soils and Construction.

No defined criteria are pre-established. This is not considered a material issue. Coal Shaft Creek has been diverted to allow for the operation of the mine. This diversion and other water management structures on-site have been undertaken in accordance with the Water Supply Works Approval (20WA202053). A Water Management Plan (WAMP) was prepared by NSW DP&E approved, suitably qualified experts to meet the federal and state conditions of consent relating to water management. The WAMP was approved in July 2016, though a revised version following DP&E on annual review awaits approval. Surface water management on the site includes upslope clean water diversions, a main water dam with two auxiliary dams, irrigation of excess water, in-pit water storage, sewage treatment plant and system for disposal of effluent and sediment basins. To manage captured water on-site the pumps are used to transfer water between the Main Water Dam and Auxiliary Dam water storages and the open pits to minimise the disruption to mining and to maintain storm runoff storage capacity needed to achieve a negligible risk of uncontrolled release of mining-related water off-site.

A groundwater extraction licence (20BL168404) applies to the site. No surface water access licences are held by the site for surface water extraction.

The water balance simulation modelling identified that there was a negligible risk (<0.1%) of uncontrolled release of mining related water from site dams, with no overflow from the main water dam in the 1,000 climatic sequences simulated. The modelling notes that there is a potential risk to mining operation due to water being transferred to the open pits to prevent exceedance of the management systems capacity. Hence the material risk to the environment is low, though risk to expense from disrupted mining operations may occur, with the modelling stating the risk was determined to be economically and operationally acceptable. The water balance simulation model also indicates that there is a low probability (<0.1%) of non-potable water shortfall occurring over the remaining mine life, with no shortages being simulated in any of the 1,000 climatic sequences.

Auditor review of the 2014 independent audit and the 2015, 2016 and 2017 Annual Compliance reviews identified:

- No non-compliances related to ground or surface water management in the 2014 audit, 2015 and 2017 annual compliance reports;
- A low risk non-compliance in the form of rainfall runoff discharge from the irrigation area during the 2016 reporting period. A written report was submitted to the EPA and DP&E, with the EPA confirming that no further action was required.
- Two complaints related to water in 10/11 reporting period and one in the 11/12 reporting period.

No issue of material significance was identified relating to current water management practices from review of the documents outlined.

Soils and Contamination

Stratford Mining Complex

The 2018 Stratford MOP identifies that the site has a bioremediation area for the treatment of hydrocarbon contaminated soil and waste rock. The MOP outlines that sewage is treated on-site and released via transpiration trench. The MOP states that a land contamination assessment will be undertaken as the development of the decommissioning strategy and closure plan are being developed. Areas that will need to be addressed in the land contamination assessment include:

- Areas impacted by carbonaceous material (coal spillage and coal storage areas);
- Workshops and fuel storage areas (where hydrocarbon spills may have occurred);
- Water treatment ponds and tailings dam locations.

The sediments within the return water dam will also require characterisation and remediation. The above are considered consistent with typical mine sites.

Duralie

The Annual Review 2017 identified that the site has a bioremediation area for the biological degradation and treatment of hydrocarbon contaminated soils. The report also identified that the overburden dump is being progressively rehabilitated to the final landform, minimising disturbed land and the generation of contaminated water requiring treatment. The site has a fuel tank farm containing two double skinned 100,000L storage tanks. Runoff from these locations are managed by being conveyed across the concrete containment to an oil water separator. Industry standard hydrocarbon storage and management methods are applied in in the workshop. Effluent is treated via aerated waste water treatment system and the treated effluent is irrigated on-site.

The independent environmental audit of 2014 identified that the current practice of irrigating on the site appeared to be sustainable and that predicted irrigation water salinities would not cause soil structural degradation or plant growth issues in irrigation areas.

The MOP identified a key risk for mining closure and rehabilitation as the rehabilitation of PAF waste emplacements causing mine drainage contamination of surface and groundwater and long term contamination from mine water stored in prescribed dams and acid mine drainage contamination of groundwater. Risk reduction strategies were proposed to address these risks. The Duralie Coal Mine MOP states that a land contamination assessment will be undertaken as the development of the decommissioning strategy and closure plan are being developed. Areas that will need to be addressed in the land contamination assessment ae the same as at Stratford.

Ecology

Stratford Mining Complex

A review of the ecological conditions provided throughout DA 39-02-01 (Bowens Road North) was undertaken by Cumberland Ecology (as commissioned by Hansen Bailey Environmental Consultants) as part of the 2017 Independent Environmental Audit of the Stratford. No development consent conditions for ecology were required to be assessed for Stratford (Stratford DA 23-98/99) and Stratford Coal Extension (SSD-4966) and this project has therefore not been considered further within this assessment.

The ecological audit indicated that the majority of the relevant biodiversity conditions have been or are being addressed and that various management plans and reporting were largely adequate in addressing requirements of conditions of consent.

No issues of material significance were identified relating to compliance with ecological conditions from review of the documents outlined.

Duralie OC

The Biodiversity Management Plan was approved by the DP&E (formerly DP&I) on the 29 March 2012 and by the Commonwealth under the EPBC approval on 28 August 2012. The BMP has been subject to various revisions, the most recent as reported in Hansen Bailey (February 2018) having occurred in 2017. The Independent Environmental Audit covering the period November 2014 – December 2017 (Hansen Bailey, February 2018) stated that the biodiversity offset areas were performing well, with one low risk non-compliance related to approval of the revised BMP by DP&E. No issues of material significance were identified relating to compliance with ecological conditions from review of the documents outlined.

Mine Rehabilitation and Mine Closure Liability

Stratford Mining Complex

The Independent Environmental Audit completed by Hansen Bailey (February 2018) covering the period November 2014 – December 2017 concluded that areas of rehabilitation were in accordance with the planning staging of areas approved in the relevant Mining operation Plan and that rehabilitation types, areas and success were consistent with the what was proposed in the EIS applying to the site. .

No issues of material significance were identified relating to compliance with specific mining rehabilitation practices from review of the documents outlined.

Duralie

The Independent Environmental Audit (Hansen Bailey, February 2018) for the period November 2014 – December 2017 found the operations to be compliant with development consent conditions relating to rehabilitation and that progressive rehabilitation of the site was being undertaken including active final shaping in preparation for rehabilitation.

Yancoal has advised that for 2018, there is an environment budget of AUD2.4 million for Stratford / Duralie, with an additional AUD500,000 for rehabilitation (excluding bulk shaping and final landform costs of AUD2 million, which are included in the mining budget to cover these works. Based on the reported progress and success to date of rehabilitation (as reported by Hansen Bailey in the Independent Environmental Audits for each asset (February 2018), no issues of material significance were identified relating to compliance with specific mining rehabilitation practices from review of the documents outlined.

AUSTAR

EHS and Social Setting

Austar is an amalgamation of four former mines (Ellalong, Pelton, Cessnock No. 1 and Bellbird South collieries). It is located approximately 10 km south of Cessnock in the Lower Hunter Valley. There is a long history of underground mining at the site. The dominant land uses in the vicinity of the mine include Werakata State conservation area, old mine workings, active mines and rural properties. There are also a number of small residential areas in the vicinity of the mine including Ellalong, Paxton, Millfield and Kitchener. Natural features in the vicinity of the site include Quorrobolong Creek, Sandy Creek and Cony Creek. Topography of the site is undulating hills and alluvial flats.

Heritage Values

Austar includes lands within the boundaries of one active registered native title claim - NC2013/006 (Scott Franks and Anor on behalf of the Plains Clan of the Wonnarua People). A second claim, NCS2013/002 (Awabakal and Guringai People) was withdrawn in July 2017. It is noted that representatives of both claimant groups are registered Aboriginal parties for the most recent project works and have been invited to provide cultural information where relevant. As outlined within the MOP, all current and proposed mining activities occur within or below a combination of Austar and privately owned land, the Werakata State Conservation Area and Crown land. No evidence has been reviewed to suggest that native title has been extinguished within the Werakata State Conservation Area and Crown land. Assuming that Austar continues to consult with and provide notification of all future proposals, to the Plains Clan of the Wonnarua People, material risk associated with native title is not anticipated.

Aboriginal and non-Aboriginal heritage surveys have been undertaken at Austar to support the development approvals process. In consultation with Aboriginal stakeholders and representatives of the Department of Environment and Climate Change (DECC, now OEH), it was agreed mitigation measures may not successfully prevent the grinding groove site from cracking and that Austar would contribute AUD100,000 to an Aboriginal project or program to be decided by Aboriginal stakeholders as an offset for the potential impacts. Since 2013 it is reported in the Independent Audit that a total of AUD88,344 has been provided by Austar to support this initiative. Aboriginal Heritage monitoring to date and reported within the Independent Audit has not identified any impacts to artefact or grinding groove sites during the 2014-2017 audit period. Based on the data available for review, no material risk is anticipated to either Aboriginal or Non-Aboriginal (Historic) heritage values.

Emission Discharges

Air Emissions

Air quality has generally been a low level environmental and community risk for Austar due to limited sources of dust at site compared to open cut coal mines. Air quality is managed in accordance with an Air Quality and Greenhouse Gas Management Plan and includes high volume air sampling and continuous dust monitoring at locations representative of sensitive receptors. Air quality management controls (design and operational) have been successfully implemented with no exceedances of air quality criteria. No air quality complaints have been received, however a few combustion/odour complaints were made in 2016.

RPMGLOBAL

Water Discharge

Austar is licensed to discharge water in accordance with its EPL subject to various water quality and rainfall criteria. The most recent Independent Environmental Audit (SLR, 2018) notes that surface water is a key aspect for Austar, with erosion and sediment control and pumping of water across site requiring ongoing management. There have been incidents relating to water discharge and pipeline leakages and recommendations made to avoid further incidents. However, with the proper implementation of the Water Management Plan and sub-plans, Austar should be able to manage surface water in accordance with development consents, EPLs and water licence requirements.

Noise Emissions

Austar manages noise and vibration in accordance with the Noise and Vibration Management Plan and EPL, including attended and continuous unattended monitoring and complaints handling system for noise. The most recent Independent Environmental Audit (SLR, 2018) notes that noise is a significant risk for Austar due to the proximity of the site to the community, with some low level noise non - compliances relating to the low frequency modifying factor. Austar has been undertaking a voluntary noise pollution reduction program (PRP) for the CHPP site in consultation with the EPA over several years. As a result, there have been improvements in noise management at the site with a reduction in complaints during the last audit period compared to the two previous audit periods.

Land Tenure and Permitting

Mining operations have been conducted in accordance with the requirements of the conditions of Consolidated Mining Lease (CML) 2 ML 1666 and ML 1661. , ML 1157, ML 1283, ML 1345, ML 1388 and ML 1550, ML 1677 granted under the Mining Act 1992. Security bonds have been registered for the mining operations. The MLs exist within freehold land owned by Austar, private land owners and the Crown. Various other MPL, CCL and EL apply to the asset.

Two key approvals apply to the Austar: DA 29/95 applies to the Bellbird South and Project Approval for the Stage 3 Extension Project (PA 08_0111, as modified), granted in September 2009 for the extension to longwall mining until 31 December 2030. It is understood that since 2016, coal extraction from the Stage 3 mining area of PA 08_011 has been suspended with operations focused on the Bellbird South Longwalls B1 – B7 mining area of DA 29/95. Austar has not been referred under the EPBC Act.

Austar also operates under a number of other approvals, including for the storage of explosives, storage of dangerous goods and water licences, as well as under a number of operational and management plans approved by relevant regulators.

No issues of material significance were identified relating to permitting from review of the documents outlined.

OPERATIONAL EHS PERFORMANCE

Environmental Performance

Austar has exhibited a good standard of environmental management over recent years (2014-2017). An Independent Environmental Audit was conducted by SLR Consulting Australia Pty in November 2017. The audit conclusions indicated a generally high standard of compliance of the Austar Mine activities with the conditions of approval granted to the project under the Development Consent DA29/95, Project Approval 08_0111, EPL 416 and mining lease conditions.

Three minor and two moderate non-compliances with the Development Consent and Project Approval conditions related to meteorological data, noise emissions and water discharges. These have been adequately addressed through procedural review and implementation by Austar. Eight non-compliances with conditions of EPL 416 were reported - two were administrative non-compliances, three were minor in relation to monitoring of weather and water discharges and three were moderate in relation to water discharges.

Community concerns are being well managed and recorded within a complaints register. A total of 5 complaints were received in the 2016-2017 reporting period and 4 complaints in 2015-2016 reporting period. Complaints received were in relation to odour (from spontaneous combustion), vibration and surface water.

H&S Performance

Two fatalities occurred in April 15, 2014 at the Mine. This was investigated by the NSW Department of Industry, Resources and Energy, Mine Safety unit and there is an ongoing prosecution risk, however any regulatory penalty is unlikely to meet the materiality threshold. Reputational risk has already been realised. The investigation report made criticism of the risk assessment process as assumptions were made on geotechnical risks that were incorrect. A further significant coal burst event on 17 May 2018 has led to the NSW Resources Regulator prohibiting all underground longwall production activities at the Austar mine. It is understood the prohibition notice is to remain in place until a detailed geotechnical assessment is carried out and the Regulator is satisfied that that comprehensive risk controls can be implemented to protect workers against the threat of further and escalated outburst events.

The Broad-brush risk assessment (BBRA) reviewed indicated that Austar are in the process of conducting or reassessing lower level risk assessments that provide the detailed controls. It should be expected that the lower level detailed risk assessment would identify the effectiveness of the controls and assess the adequacy of the combination of controls to demonstrate ALARP. The BBRA cannot demonstrate either of these important factors. The Austar BBRA indicates that there are numerous risk assessments conducted at a level focused on that individual hazard. The lasts RA conducted in July 2017 did involve a broad spectrum of the workforce and appears to cover the wide range of risks expected of a facility but is effectively a collated risk assessment that does not demonstrate adequacy or effectiveness of the controls.

The safety management system was audited in 2017 with the SHMS Compliance and Effectiveness Audit report issued in July 2017 (Aussafe Consulting). The audit was based on the NSW Department of Primary Industries Mine Safety Operations Branch Coal Operation Health and Safety Management System checklist. Although there were no major non-conformances there were control ineffectiveness/minor non-conformances identified in the areas of Audit/inspection, change management, training/consultation, contractor safety performance/procurement, obligations of HSMS, fixed plant, hazardous chemicals, mobile plant and occupational health.

The key comparable statistic is TRIFA and the site is running at 30 which is marginally below the NSW coal mining underground industry average (2015/16) of 30.4.

Water Management

A pollution reduction program is imposed on the site EPL, requiring the CHPP Clean Water Drain be investigated and the cause of orange staining/residue be determined. It is understood that an investigation report was due to be submitted to the NSW EPA (regulatory body) in March 2018. Whilst this is an ongoing issue, it is unlikely to represent a material issue.

The site holds water licences for groundwater wells used for dewatering. The site also holds a water access licence for surface water extraction from the Upper Wollombi Brook Water Source. Groundwater inflow was within limits in Annual environmental management reports reviewed (2016 and 2017). No evidence was provided to confirm that surface water take was within allowable limits, however this is unlikely to be a material issue.

The site has a water management plan that was approved in May 2013, with the most recent update being prepared in April 2017. Water management at the site involves a reverse osmosis plant to treat water from surface and underground water storage areas prior to offsite discharge. Water is managed across the surface and groundwater storages to prevent discharges to only when EPL conditions allow.

The independent audit in 2017 identified incidents including:

- A discharge event on 21 and 22 April 2015 from LDP001. pH was outside of range (3.55) on 22 April 2015. EPA correspondence indicated that no regulatory action was going to be undertaken;
- Leak of mine water pipelines on 26 March 2015, 24 February 2017;

- Kitchener SIS Sediment Dam discharge on 6 January 2015 and 4 May 2015 (rainfall was greater than design capacity of the basin); and
- Orange staining in cleanwater drain on 7 June 2017.

An administrative non-compliance was also recorded in the 2017 independent report due to samples not being collected as creek conditions were dry. There have been discharges and pipeline leakages occurring at a frequency that suggest that the storm water management system could undergo improvements. On-going issues may continue to be a risk, however the incorporation of amelioration measures to improve management of basin capacities could likely be achieved for under the material threshold. The amelioration of leakages from pipelines may identify that new infrastructure is required, dependant on the extent of new infrastructure required, however any such upgrade works are unlikely to exceed the material threshold

Whilst there is an outstanding issues associated with the pollution reduction program relating to the CHPP Clean Water Drain, the asset is investigating the issue and liaising with relevant regulators. This issue, whilst ongoing, is unlikely to represent a material risk.

Soils and Contamination

The 2017 Annual Environmental Management Report (2017) identified that a phase one contamination assessment was undertaken on the site during the 2015-2016 reporting period and was awaiting finalisation. This report would guide further management dependant on extent of contamination identified. The 2017 AEMR details that the method of management for spills and hydrocarbon storage infrastructure is to clean-up spills immediately and remediated on-site/send off-site by an authorised waste contractor. The site operates a hydrocarbon remediation area, composed of three bunded cells on a redundant laydown area.

The colliery is managed in accordance with Australian Standards and EPA guidelines to minimise the likelihood/extent of hydrocarbon spills. The site has a workshop and equipment storage at the Pit top surface facilities area and includes fuel and oil containment and treatment systems. The Environmental Management Strategy for the site identifies that the Coal Handling and Preparation Plant and reject emplacement areas will have long term issues at the washery site from acid mine drainage, though rehabilitation is proposed in the MOP.

Tailings are discharged into the old Pelton underground mine workings and the return water is recovered by dewatering bores into the sites contaminated water management system for reuse or discharge under the EPL following treatment (AEMR 2017). In line with similar operations in the region, a contamination risk is potentially posed by the current and historic tailings storage facilities. Due to the processing methods, heavy metals are stored in these facilities. These can lead to contamination if not contained appropriately. Data held on the National Pollutant Inventory database indicates the Austar deposited a total of 86 tonnes of potentially hazardous heavy metals (including lead, mercury, chromium and arsenic) into on-site tailings storage facilities during the 2016-17 reporting period. On-going phase 1 investigations will identify the extent of any contaminated areas on the site.

There is an inherent risk in having contaminated tailings present on-site. It is understood rehabilitation of these materials by encapsulation is planned, however the variables associated with successful rehabilitation are many and existing budgets available can become insufficient if rehabilitation failures occur. ERM has not considered material risk of contamination tailings and rehabilitation failure, however it is understood that ongoing monitoring of these risks are undertaken by the asset to ensure they do not become material.

Ecology

Austar has not been referred under the EPBC Act. Targeted assessment to date has concluded that mining would not have any significant impacts on any of the identified threatened species, populations or EECs, or on any EPBC Act listed MNES and therefore referral to the Minister for Environment and Water Resources was not required. Based on the information available, the risk of not referring this project appears to be low.

A Biodiversity Offset Area was established as part of the approved Stage 3 project to offset impacts from clearing of approximately 10ha of the surface infrastructure site. After the Stage 3 project was approved, Austar transferred ownership of the Offset Area to the National Parks Estate as part of the Werakata State Conservation Area. As such, the Offset Area will be managed in perpetuity by the NSW National Parks and Wildlife Service. Based on this transfer of ownership to reserved lands, the long term management of the Offset Area does not present any material obligations.

In accordance with project approvals, Austar have implemented an ecological monitoring program of riparian vegetation over Stage 2 Longwall Panels A3 to A5a and prepared the Stage 3 Biodiversity Management Plan for Longwall panels A7 to A10. Routine surveys are continuing and to date, there is no evidence of any impacts on ecological features as a result of longwall mining at Austar. Biodiversity related risk and regulatory obligations in respect to biodiversity impacts are understood to have been satisfactorily addressed. Future material risk associated with currently approved projects is not anticipated at Austar.

Rehabilitation and Mine Closure Liability

The majority of rehabilitation to be undertaken will principally involve reshaping of disturbed areas once demolition works and rubbish removal has been completed and establishment of a stable vegetative cover in these areas. As outlined in the 2017 AEMR, Austar's project approval PA08_0111 is valid until 31 December 2030 and final rehabilitation remains as proposed in the current MOP although it is noted that site has currently rehabilitated less land than predicted in the MOP rehabilitation schedule. For 2017, 57.8 ha was planned to be rehabilitated but Annual Environmental Management Reports for the period 2015-2017 indicate that 2 ha of the site was rehabilitated in 2015 and approximately 4,000 cu.m of capping had been placed on the Aberdare Emplacement Area in 2016-2017. The MOP plans 88 ha of rehabilitation to be completed by year 2022. There is therefore a rehabilitation deficit of approximately 55 ha as of 2018. Significant works will be required to rehabilitate 55 ha by 2022. There is the potential for the site to not comply with the MOP rehabilitation requirements however this is not considered to be material to Austar.

It is understood that a significant sinkhole draining 360 ha of catchment appeared in the Aberdare Area 13 emplacement, despite this area having been previously rehabilitated. In addition to affecting underground works, this area will require remediation prior to relinquishment. ERM has not viewed any remediation plan or results of corrective / preventative actions, although such activities are stated to occur during the current MOP.

Given the current attention rehabilitation and closure is receiving from the NSW Government, including a reform of rehabilitation, any short comings in the site's rehabilitation are to be addressed within the current term of the MOP. As budgetary provisions for rehabilitation have not been provided, the materiality of this is not able to be ascertained however unlikely to meet the threshold.

DONALDSON, ABEL AND TASMAN

EHS and Social Setting

The dominant land uses above the mining area are agricultural, rural residential and a State forest. Two hard rock quarries, the Black Hill Quarry and the Stockrington Quarry, are also located within the mining footprint. The F3 Sydney-Newcastle freeway is located around 1 km east of the underground mining area. The Hunter Expressway is located about 1 km southwest of the mining area. The closest urban areas are Beresfield and Thornton, about 2 to 3 km north of the mine. The land upon which the surface infrastructure is located is understood to be private land owned by Donaldson Coal.

The Donaldson, Abel and Tasman mines (excluding the Tasman Underground Extension Project (Tasman UG Extension) which has not yet commenced) are all currently under Care and Maintenance. All three assets for Donaldson are referred to in the report.

Heritage Values

At Abel UG there are no sites of European Heritage although it is noted in the Part 3A assessment (2006) that land in the south-eastern section of the proposed Abel Underground area, near Pambalong Nature Reserve, associated with the former Richmond Vale Railway was listed by Cessnock City Council as having local Environmental Heritage'. Sixty-three (63) Aboriginal heritage sites and Potential Archaeological Deposits (PADs) are present within the Abel Project area, including 18 within the surface area north of John Renshaw Drive and 45 within the underground area south of John Renshaw Drive. At least two places that may be of traditional or historical cultural significance to Aboriginal people, however do not necessarily host physical remains, occur within the southern investigation area. These comprise an Aboriginal pathway along Black Hill Spur that probably extended from Hexham Swamp to Mount Sugarloaf and a ceremonial site known as 'the Doghole' in the vicinity of Stockrington and Long Gully. Ongoing management of heritage

values at Abel are guided by the signed Aboriginal Heritage Management Agreements between Donaldson Coal and Awabakal LALC (signed 19/01/09) and Mindaribba LALC (not dated). For the term of these agreements, Donaldson is required to pay a management fee of AUD40,000 per year to ALALC and AUD200,000 per year to MLALC.

At Donaldson, thirty-one (31) sites of Aboriginal Cultural Heritage have been identified on property owned by Donaldson Coal. No European heritage sites have been identified at the mine. In accordance with Conditions 84, 85 and 86 of the Development Consent, Donaldson Coal has prepared an Aboriginal Sites Management Plan for each year of operation at the mine (and has not required revision since 2005). In accordance with Condition 83 of the Development Consent, a 50 metre buffer along Four Mile Creek has been established as an Aboriginal Conservation Area (ACA).

As Tasman UG has ceased and no known items or cultural heritage values have been reported within the surface infrastructure or rehabilitation areas, no ongoing heritage monitoring or management measures are required. Within the Tasman UG Extension, Aboriginal cultural heritage will be managed by an Aboriginal Cultural Heritage Management Plan as required by the Development Consent to be prepared prior to commencement of construction activities. The project area also includes a culturally sensitive men's area, keepa pathways and burial caves. The Tasman UG Extension EIS and supporting Aboriginal Cultural Heritage Assessment (Kuskie 2012) commits that Donaldson Coal will facilitate and fund further documentation of Aboriginal cultural values by RAPS with cultural knowledge and traditional connection. The Development Consent requires that the Aboriginal Cultural Heritage Management Plan include appropriate payment and reporting mechanisms for the provision of up to AUD20,000 for an Aboriginal heritage educational documentation program for the Mount Sugarloaf area and for the provision of up to AUD10,000 to further investigate selected grinding groove sites in the underground mining domain.

In summary, heritage related risk and regulatory obligations at these mines are understood to have been satisfactorily addressed. Based on a review of available data, material risk associated with currently approved projects is not anticipated.

Native Title Claims

There are no active Registered Native Title claims within the Donaldson OC or Abel UG. There are no active Registered Native Title claims within the Tasman UG since NCS2013/002 (Awabakal and Guringai People) was withdrawn in July 2017. The Wonnarua People also made a Native Title Claim with respect to the existing Tasman UG Mining Lease (ML) 1555 (formerly MLA 186). This is recorded within the National Native Title Register (Tribunal File No. NC02/07, Federal Court File No. NSD6008/02). As reported within the Tasman UG Extension EIS, Response to Submissions Report (2012), an agreement was reached with the Wonnarua People with respect to this claim. ERM do not have any details regarding this agreement although we do note that this Native Title Claim was withdrawn in 2005.

Emission Discharges

The Donaldson, Abel UG and Tasman UG mines (excluding the Tasman UG Extension Project which has not yet commenced) are all currently under Care and Maintenance. Environmental monitoring activities continue during the care and maintenance period in accordance with the MOPs and requirements of MLs and project approval conditions, including ongoing surface water, groundwater, noise, flora and fauna and rehabilitation monitoring. Annual reviews for each mine site have not identified any material risks associated with current emission discharges.

Land Tenure and Permitting

Donaldson OC: Mining Lease 1461 applies to the Donaldson OC and expires on 20 December 2020. Approved operations at the mine operated under Development Consent 98/01173 (as modified) which approved mining operations to end December 2013. Mine operations were completed in April 2013, however in accordance with the requirements of the approval, ongoing compliance is required with respect to biological monitoring, bushland conservation and rehabilitation. The current Mining Operations Plan (MOP) for the period 16 May 2014 to 16 May 2021 was submitted to relevant regulators to cover the final rehabilitation of the Donaldson OC. This MOP was approved on the 16 May 2014. Environment Protection Licence 11080 applies to the mine. An application was made in April 2018 seeking to surrender the licence

as activities approved by the licence have ceased. Other licences apply to the site including bore licence and water supply works approval.

Abel UG: Abel mine activities occur under Mining Lease 1618 which expires on 15 May 2029 and Mining Lease 1653 which expires on 21 January 2032. Exploration licence 4597 applies to the Site and expires on 21 July 2019. Operations at the mine are approved under Development Consent 05_0136 (as modified) which approves mining operations to 2030 and permits Run of Mine (ROM) coal production of 6.1 million tonnes per annum (Mtpa). EPL 12856 applies to the site. Other licences that apply to the site including Water Licence 20BL171935 for groundwater interception, due to expire on 4 August 2018. The mine was placed in Care and Maintenance from 28 April 2016 and is managed in accordance with the MOP covering the period ending 1 May 2019. No mining activities are proposed during the term of the MOP. Environmental monitoring activities continue and are reported in the 2017 Annual Environmental Management Report (AEMR).

Tasman: Mining Lease 1555 applies to the Tasman UG, expiring on 6 October 2025. Construction and mining operations at the mine occurred between 2006 and 2013 under Development Consent 274-9-2002. Operations ceased in July 2013 and site rehabilitation was completed in September 2014. Since that time the mine has been under care and maintenance whilst the revegetated landform continues to develop. It is understood that Development Consent 274-9-2002 has been surrendered. Environment Protection Licence 12483 applied to the Tasman UG and was surrendered on 8 July 2015. Groundwater Bore Licence 20BL171792 also applied to the Tasman UG and has since expired as groundwater extraction ceased at the completion of mining operations.

The Tasman UG Extension Project received planning approval (SSD 4962) on the 18 March 2013 for an extension to the west of the previous underground operations Donaldson has physically commencement development at the site to enliven the development consent, however construction or mining is not planned to commence in the near term. There is no current Mining Lease covering the whole of the extension project area (ML 1555 covers a portion of the area only). It is understood that a Mining Lease application for this area has been made.

OPERATIONAL EHS PERFORMANCE

Environmental Performance

Donaldson OC: The most recent Independent Environmental Audit (Trevor Brown and Associates, 2015) covering the period 2011 – April 2013 confirmed a high degree of compliance and did not identify any non-compliance with the Project Approval at the completion of mine operations in April 2013, stating that all mining and associated operations were undertaken in accordance with the development consent, EPL and other statutory instruments as issued by the various government agencies. The 2017 Annual Review reported minor non-compliance with the development consent and water licence relating to reporting and documentation requirements that are of no material risk. Various non compliances with EPL 11080 are noted on the Public Register over the last few years, however these have either been identified as adequately addressed or formal warning issued. It is understood that these matters have been closed out and as such present no ongoing material risk.

Abel UG: The most recent Independent Environmental Audit (Trevor Brown and Associates, 2015) covering the period 2012 – 2015 confirmed a high degree of compliance with the Project Approval. The 2017 Annual Review reported minor non-compliance with the Project Approval and water licence relating to reporting and documentation requirements that are of no material risk.

Tasman UG: The most recent Independent Environmental Audit (Trevor Brown and Associates, 2015) covering the term of the Tasman mine between 2007 and 2013 confirmed a high degree of compliance and did not identify any non-compliance with the Project Approval. The report noted that the Tasman Mine developed under Development consent 274-9-2002 had essentially been completed with rehabilitation of the Tasman Mine site after closure of the underground mine and surface infrastructure areas having occurred generally in accordance with the rehabilitation targets set within the Mining Operations Plan. The 2017 Annual Review identified one administrative non-compliance with ML 1555. No other non-compliances were identified.

Current site compliance at the three operations are not considered to present a material risk to the projects.

RPMGLOBAL

H&S Performance

Donaldson OC: Although the site is non-operational, there are risks in care and maintenance. No risk assessments were provided for review so any special restrictions and concerns are difficult to identify and quantify. The site is monitored in the monthly report with a TRIF of 0. No safety management system was available for review. With little data available the assessment of materiality could not be completed. With the number of people involved and the limited activities on site the likelihood of a material issue arising is very low.

Abel UG: Although the site is non-operational there are risks in care and maintenance. No risk assessments were provided for review so any special restrictions and concerns are difficult to identify and quantify. The monthly board report is not tracking statistics for this site (4 people in care and maintenance mode). It is noted that there is a safety management system for Underground Operations Eastern region but it is unclear if all the controls are still in place in care and maintenance. With little data available the assessment of materiality could not be completed. With the number of people involved and the limited activities on site the likelihood of a material issue arising is very low.

Tasman UG: Although the site is non-operational, there are risks in care and maintenance. No risk assessments were provided for review so any special restrictions and concerns are difficult to identify and quantify. No safety management system was available for review. With no data available the assessment of materiality could not be completed. With the number of people involved and the limited activities on site the likelihood of a material issue arising is very low.

Water Management

Donaldson OC

The 2017 annual environmental report identified that the mining operations at the site were completed in April 2013. Progressive rehabilitation occurred throughout the life of the mine and the final rehabilitation activities were completed in March 2014. The site is currently subject to the conditions of EPL 11080, which is currently pending a decision from the EPA to allow for surrender. A Water Management Plan was prepared for the site in 2000 (not provided for review).

A groundwater licence applies to the site to allow for the groundwater extraction from the mining area. A water supply work approval applies to the site for the works associated with the open cut mining pits within the Hunter unregulated and Alluvial Water Sources 2009 Water Sharing Plan. The site is under care and maintenance and no issue of material significance was identified relating to current water management practices from review of the documents outlined.

Abel UG

A Water Management Plan has been prepared for the site and was approved by the DP&E in May 2008. Water management at the underground mine includes clean water diversion and water runoff from the 'box cut' area and surface infrastructure area as well as excess mine water directed to the sump within the West Pit adjacent to the Box Cut. This is then pumped to the Big Kahuna Dam within the Donaldson Mine site as needed. This water is then used for operational purposes or transferred to the neighbouring Bloomfield mine Lake Kennerson or discharged to Four Mile Creek. This is in accordance with approvals for the site.

The site is under care and maintenance for the period ending 01 May 2019. The Care and Maintenance MOP of 2016 identifies that no acid mine drainage issues have been encountered or are expected to occur. The water management strategy will continue throughout the care and maintenance period. The site is subject to a water licence (groundwater) that allows for the interception of groundwater. Annual reporting from 2016 and 2017 identified that take was below allowable limits and no compensatory water has been required to be supplied throughout the life of the mine. Review of the 2016 and 2017 annual reporting identified an administrative compliance relating to the submission of an annual return, otherwise there was no reportable ground or surface water incidents or non-compliances.

No issue of material significance was identified relating to current water management practices from review of the documents outlined.

Tasman UG

The site was subject to EPL12483, with this licence being surrendered in July 2015. A site inspection was undertaken by the EPA and the licence surrender is considered confirmation that on-going risk of sediment laden water from site is no longer a significant risk. The Care and Maintenance MOP details that no acid mine drainage issues were experienced during mining activities.

The 2017 Annual Review and 2015 independent audit states that no reportable incidents or non-compliances relating to surface or groundwater were identified in the reporting period.

The independent audit of 2015 revealed that the mining at Tasman ceased in July 2013 and no further groundwater extraction has occurred since that date. The groundwater licence applicable to the site was valid until March 2013 and was not renewed upon expiration.

No issue of material significance was identified relating to current water management practices from review of the documents outlined.

Soils and Contamination

Donaldson OC

As outlined above, a surrender notice has been supplied to the NSW EPA to relinquish the EPL. In order to surrender the licence, the site must have managed all previously contaminated areas to an acceptable limit. The 2015 Independent audit report for the site identified that contamination assessments were undertaken in 2013 to determine the extent of excavations required to remove contamination from the fuel farm and workshop areas. The remediation works occurred in 2013 and 2014 and potentially contaminating sources, such as oil drums, were removed from site by a suitably licenced contractor. Excavated material was landfarmed in the west pit. No evidence of confirmation that landfarmed material was classified as 'acceptable for final land use' was provided.

Abel UG

The MOP for Care and Maintenance identifies that the identification and remediation of contaminated lands has not yet commenced and will likely commence post current MOP. The Plan assigned a Medium risk rating for the perceived risk to rehabilitation posed by failing to address contamination on the site. The Annual Review for 2017 identified that no specific rehabilitation works were proposed for 2018, with works limited to rehabilitating subsidence impacts or erosion and sediment control measures. The approved Water Management Plan includes an Erosion and Sediment Control Plan that was prepared with consideration to Managing Urban Storm water: Soils and Construction.

Tasman UG

As outlined above the development consent and EPL were surrendered in 2015 following site rehabilitation. The MOP for Care and Maintenance identified that the contaminated land assessment had been completed and confirmed that there is no residual soil contamination that would pose a threat of environmental harm and was compatible with the final land use. The MOP also stated that all available soil had been re-spread for use in the final rehabilitation and as such specific controls are not required, beyond possible amelioration in areas where revegetation areas are not stabilising.

Ecology

Long-term monitoring programs are in place for Abel UG coalmine integrated with Donaldson OC and Tasman UG which are all currently in care and maintenance.

At Abel UG, an EPBC referral (2007/3695) confirmed no controlled action. The Biodiversity Management Plans provide for the management of the potential impacts and/or environmental consequences of the Abel UG second workings on aquatic and terrestrial flora and fauna, with a specific focus on threatened species, populations and their habitats, endangered ecological communities and water dependent ecosystems. Project Approval 05_0136 requires that a Biodiversity Offset Strategy is prepared prior to the commencement of construction of the coal conveyor or the vegetation clearing described in the EA, whichever is sooner. As the mine is currently in care and maintenance, this requirement has not yet been triggered. The biodiversity offset costs have not been confirmed.

RPMGLOBAL

At Donaldson OC one threatened flora species (Tetratheca juncea) has been recorded. A Tetatheca juncea Management Plan was developed to provide a comprehensive program for monitoring and management of this population on site. A Bushland Conservation Area Management has also been prepared in accordance within consent condition 72(iii). The property around the open cut is owned by Donaldson Coal and has been retained as a buffer and a compensatory conservation area totalling 625ha. Donaldson Coal will retain management and ownership of this conservation area for a minimum of 36 years from the commencement of construction.

Tasman UG referral (EPBC 2001/253) and Tasman UG Extension Project referral (EPBC 2011/6211) were both determined to be 'not a controlled action'. Mining of coal at Tasman UG ceased in mid-July 2013 and biodiversity values continue to be monitored through ongoing implementation of the flora and fauna monitoring program for the disturbance areas and compensatory habitat area. As reported in the 2017 AEMR, species diversity has returned to levels observed in 2007 and 2008 following a steady decline between 2009 and 2014. Ongoing monitoring will help to develop insight in whether mining activities had an impact on the compensatory habitat area and to track its ongoing recovery.

A Biodiversity Offset Strategy is required to be prepared prior to the commencement of construction of the new pit top (Tasman UG Extension Project). As this project has not yet commenced, these requirements have not been triggered. It is understood that this project is not envisaged to be developed in the short to medium term (ie not within the 3-4 years) and as such has not been considered further. No issue of material significance was identified relating to current biodiversity practices from review of the documents outlined. ERM notes that the Abel UG and Tasman UG Extension biodiversity offset costs and required conservation bonds have not yet been triggered and their costs have not been confirmed.

Rehabilitation and Mine Closure Liability

Donaldson OC:

All rehabilitation works have been completed at this asset. Assessment of rehabilitation performance at the Donaldson OC has been conducted by Global Soil Systems since August 2009. The results of this rehabilitation assessment were compared with the completion criteria for soil quality, vegetative cover, growth rates, species diversity and stem densities, as adopted by Donaldson Coal in the Rehabilitation Plan and MOP. The Global Soil Systems assessment found that several of the rehabilitated areas had met the completion criteria. The remaining rehabilitated areas assessed, were on track to meet the required completion criteria (Donaldson Coal Mine Rehabilitation Monitoring Report, Global Soil Systems 2014).

Under the current MOP limited maintenance works will be carried out to maintain the rehabilitated landform at the site. The site is still receiving small volumes of waste rock from the Abel operations which are placed in West Pit (1,000 cu.m/yr). In addition, West Pit and Square Pit are to be used for the temporary storage of excess water from the Abel UG operations, prior to transfer to the Big Kahuna dam. West Pit and Square Pit are planned to be transferred to the Abel Mining Leases during the term of the current MOP, effectively relinquishing these domains from the Donaldson OC. Until this transfer takes place, the security will remain against ML 1461. For the remaining areas, confirmation that rehabilitation has been successful is required before relinquishment and monitoring of this is planned during the current MOP. The 2017 Annual Review confirmed rehabilitation areas have met or are progressing to meet completion criteria. No material closure issues have been identified for this site. However, the sooner completion criteria can be met, the sooner the site can be relinquished and the appropriate security held by Government released.

Abel UG:

The current MOP provides for the site's rehabilitation requirements specified under the site's approvals. The current MOP states that rehabilitation works have not yet commenced in any active mining areas but progressive rehabilitation of subsidence areas have been completed to the satisfaction of landholders and council, as appropriate. Given the mine is an underground operation, the only significant rehabilitation will be for surface infrastructure. No specific issues affecting the ability to successfully rehabilitate the site have been identified by the most recent Independent Environmental Audit (2017). The costing for the proposed closure of Abel UG was estimated by Umwelt in 2014 and as highlighted in the Life of Mine (LOM) Plan, it did not include personnel costs although it did include a 20% contingency on the total closure cost.

Tasman UG:

Mining of coal at Tasman UG ceased in mid-July 2013. Rehabilitation activities commenced shortly after with sealing of the mine portals in December 2013. The removal of the surface infrastructure was completed in May 2014 and final landform shaping and revegetation was completed in September 2014. Since that time the mine has been under care and maintenance whilst the revegetated landform continues to develop towards a sustainable community acceptable for the relinquishment of ML1555. There have been no disturbance or rehabilitation activities conducted for the Tasman UG Extension Project. The current MOP states that only care and maintenance monitoring of rehabilitation will be carried out and remediative measures implemented if any non-compliance with trigger actions occurs. By the end of the current MOP, it is expected that ecosystem and land use sustainability will be achieved but lease relinquishment will not occur until the following MOP term and is dependent on the future operation of the Tasman UG extension project.

YARRABEE

EHS and Social Setting

A number of existing coal mining operations occur nearby including Jellinbah and Curragh mines located to the south. Blackwater is a mining town with large scale coal mining ongoing since the 1960s. The site operates a Stakeholder Engagement Strategy which provides procedures for external communications.

Heritage Values

A Cultural Heritage Management Plan (CHMP) was signed with the traditional owners Gaangalu Nation People in 2014. All land to be disturbed by mining is surveyed prior to works in accordance with this CHMP.

A Native Title application was made by the Gaangalu Nation People (Tribunal No QC2012/009 Fed Court No QUD400/2012) in August 2012. There are no known issues in relation to cultural heritage or native title that would be considered material risks to the project based on the information available at the time of the assessment.

Emission Discharges

Emissions and discharges are typical of similar open cut coal mining operations. The site operates a number of Environmental Management Plans to control all emissions and discharges and implement appropriate procedures in the event of any incident. These Plans include the following aspects: dust, noise, waste, topsoil, weeds and pests, erosion and sedimentation, surface water and tailings. Plans are in place for the mine and Boonal Train Loadout. Apart from two water discharge non-compliances at Yarrabee in 2015 and 2016 there has been no other non compliances as a result of emissions or discharges in the last three years.

No issues of material significance were identified relating to emission discharges from review of the documents outlined.

Land Tenure and Permitting

The site comprises of ten mining leases (MLs) 1770, 80049, 80050, 80096, 80104, 80172, 80195, 80196, 80197 and 90198. The MLs occupy 15 land parcels and two road reserves. All activities across these tenements is authorised under a single environmental authority (EA) EPML00844613.

Of the ten MLs, one is due to expire in October 2018 – ML80050 Yarrabee South. In the current Plan of Operations, this ML is still proposed for use in 2019. A renewal for this permit will need to be lodged at least 6 months prior to its expiry i.e.

May 2018 which is understood to have occurred). This is a standard administrative process and renewal of the ML is expected to occur. It is not expected that any renewal application would be refused by the QLD Government if sufficient time for renewal is provided.

Coal from the mine is hauled to the Boonal Train Loadout Facility located 37 km from the MLs. Activities at the Train Loadout are regulated under a separate EA EPPR00832813 operated by the Boonal Joint Venture. No EPBC Permit applies to the site.

There are no other issues of material significance identified relating to permitting from review of the documents outlined.

OPERATIONAL EHS PERFORMANCE

Environmental Performance

One non-compliance with EA EPML00844613 was reported between 2015 and 2016, based on the Annual EA returns for the site. This related to a mine water discharge event in Feb 2016 following a significant rainfall event which required excess water to be released from site under a Temporary Emissions Licence. A small exceedance of electrical conductivity was recorded in Twelve Mile Creek. Monitoring of the release was undertaken and reported. No environmental impacts were likely to have occurred and no ongoing investigation by the regulator is taking place. Overall, however, the site has demonstrated compliance with all other aspects of its EA (note: no third party audit reports have been provided to ERM for the mine and this finding is based on site's annual EA returns).

Based on the 2016 third party audit of the Boonal Train Loadout, non-compliances with EA EPPR00832813 were reported for: exceeding throughput tonnages, non-submission of 3 monthly dust monitoring reports and uncontrolled discharge of water following high rainfall events in February and July 2016. Corrective and preventative actions are documented as being implemented to ensure compliance with dust reporting and risk of water discharges and, in regards to the latter, the QLD regulator is understood to have accepted additional water management controls for the period February to May 2016..

Annual Return and environmental performance reporting including correspondence with the administering authority post May 2016 (post the pit dewatering TEL Application timeframe) has not been provided for assessment.

Based on the information reviewed, no material issues associated with environmental performance and compliance has been identified.

H&S Performance

The SHMS Compliance and Effectiveness Audit conducted in May 2017 was based on the Queensland Department of Mines and Energy (DNRM) produced Guidance Note QGN09, "Reviewing the Effectiveness of Safety and Health Management Systems (October 2008, version 2)". There were no major non-conformances with minor non-conformances focused on audit/inspections, obligations to HSDMS requirements, change management, training/consultation, contractor management, fixed plant and hazardous chemicals.

The Broad Brush Risk Assessment conducted in December 2016 indicated consultation with the required wide range of personnel. The risk assessment reviewed indicated a wide range of hazards were identified and assessed by identifying the controls and their adequacy.

The key comparable statistic of TRIFA is running at 7.6 is slightly below the Queensland coal mining open cut industry average (2016/17) of 12.6. No material issues were identified.

Water Management

The site manages water in accordance with the EA under the Water Management Plan (WMP). The WMP provides controls for the mine and Boonal Train Loadout. ERM notes that the WMP is required to be reviewed and updated annually to ensure it remains current to operations. The Version Control on page 2 of the WMP suggests the Plan was not reviewed for 7 years between 2010 and 2017. This is a minor non-compliance. However, the current version of the Plan was reviewed in August 2017, indicating it is likely to be appropriate to operations at the present time. Further review is required to confirm this interpretation.

Based on the information reviewed, no material issues associated with water management has been identified.

Soils and Contamination

Whilst there is no detailed mapping of soils in the area it is acknowledged in the Rehabilitation Report and Success Criteria 2013 that the mine is subject to cracking clays and dispersive soils with the presence of Gilgai and sodic soils. The presence of these soils is not considered to be a material risk based on the information provided however further investigation to the soil types is required to assess the management methodology and costs associated with the treatment of these soils to ensure their stability.

No information on known contamination on the Yarrabee open cut mine site has been provided for assessment. Under Section 8.3 Rehabilitation Methods of the Rehabilitation management Plan any contaminated soil material is to be placed in the pit for burial then partially back filled with spoil to create a residual void within the landscape. Section 10.3.2 of the RMP also notes that a contaminated land assessment is to be performed to determine contaminated areas of areas of highly saline material associated with major pieces of infrastructure across the Yarrabee Coal Mine site. The locations of these sites and volume of potentially affected material is unknown from the information provided and hence no determination on the actual level of risk can be determined.

Ecology

Rehabilitation and Mine Closure Liability

The site's Rehabilitation Management Plan (RMP) implements the requirements of EA EPML00844613 for the rehabilitation of the MLs. On review, it is noted that the RMP provided in the data room is a 2012 version and refers to operations on only six MLs (rather than 10). It therefore appears that rehabilitation on the remaining 4 MLs is not provided for in the RMP, including existing disturbance listed in the Plan of Operations for infrastructure on ML80197 and 80198. This is a non-compliance with the EA and potential material risk. However, ERM also notes that the EA requires an amended RMP to be submitted to the QLD regulator by 31 December 2017 and a more recent version of the RMP may not have been provided to ERM to view. The 2017 RMP must include all 10 MLs within its scope. If operating under the 2014 RMP, the site is presently not in compliance with the EA with disturbance already having occurred on ML80197 and ML80198 without appropriate rehabilitation measures being identified first.

No evidence has been provided to confirm the Financial Assurance bond of AUD69M has been lodged with the QLD Government as security for rehabilitation. However as the mine is in operation it is assumed the FA has been lodged.

The current Plan of Operations states that DE Pit, which was receiving tailings slurry from the wash plant, will require several years of drying before the surface will be solid enough to allow machinery or waste rock to be placed on the surface for rehabilitation. This risk has not been identified in the RMP. However, the Pit DE Tailings Operations Plan (2014) does present conceptual management methods for the drying of tailings through natural evaporation and collection of water in low point sumps. Given DE Pit has now entered the decommissioning phase, the drying out of tailings is critical to the success of the domain's rehabilitation. Generally, the drying of coal tailings can present a significant risk to rehabilitation success and eventual relinquishment of this infrastructure. Without appropriate monitoring and management, this issue could present a material risk to the site if drying does not occur as expected. Notably, no rehabilitation was reported in the EA annual returns during the last three years. The Plan of Operations states rehabilitation targets of 385 ha and 428 ha in 2018 and 2019 respectively. These are large areas to be rehabilitated in the next 18 months and AUD9M budget has been allocated to rehabilitation during the 2018 financial year. With rehabilitation reforms underway in QLD, the lack of rehabilitation to date could become a risk in the next 12-24 months, however further information on the reforms is required. Condition F4 of EPML008446613 requires the proponent to apply to amend the environmental authority to adopt the final landform domains and rehabilitation success criteria required by condition F5 and condition F7 by 31 May 2018 however no information has been provided to determine if this approval requirement has been met.

Section 7.3 Rehabilitation Methods included in the Rehabilitation Report and Success Criteria 2013 provides that the regrading of areas are to have a slope of no greater than 15% for rehabilitation of spoil. Currently it is understood that the slope is between 25-30% and hence is a potential material risk associated

with the costs associated with reforming the landscape to achieve 15% to stabilise the re-contoured landform.

As no rehabilitation has been reported in the EA annual returns during the last three years and with significant rehabilitation targets in 2018 and 2019 and rehabilitation reforms underway, achieving successful rehabilitation to meet targets is a key issue for the asset which requires focus and effort to ensure targets are met over the next 12 – 24 months, otherwise this may become a material risk.

MIDDLEMOUNT

EHS and Social Setting

The site is within the Isaac Regional Council area. Land uses surrounding the site include low density cattle grazing and separate coal mining operations i.e. German Creek, German Creek East and Foxleigh.

The December 2017 external audit report for the compliance against the Environmental Authority (EPML00716913) for Middlemount noted a complaint has been received in relation to vibration from blasting activities. The report also highlighted that vibration monitoring for blasting activities had not been undertaken however details of this aspect have not been provided for review. Complaints associated with noise and vibration are not uncommon for open cut mining operations and a one off complaint as the external report infers (although not explicitly stated) are unlikely to be a material risk.

Heritage Values

The site has an approved Cultural Heritage Management Plans in place with the Barada Barna People and Barada Barna, Kabalbara & Yetimarla People #4 native title claimants. Management of Aboriginal cultural heritage is conducted in accordance with the CHMPs. ERM is not aware of any non-compliances.

The MCPL Environmental Management Plan (MP003) dated 26 April 2017 does not indicate the presence of existing cultural heritage or Native Title issues associated with the operation. The EMP has provisions for surveys and inspections to be conducted on new clearing and works activities with the involvement with the BBKY#4 appointed Field Officers to assess for any unexpected finds.

The EMP does refer to the Cultural Heritage Management Plan however this has not been provided for review however based on the information provided in the EMP (MP003) cultural heritage for the existing operation does not pose a risk to the project.

A search of the public Native Title register has indicated that there is an active native Title application over the southern portion of ML70417 by the Barada Kabalbara .Yetimarala People (Tribunal No QC2013/004 Fed Court No QUD383/2013) which also incorporates the south eastern corner of ML70379. Additionally the southern portion of ML70379 has an active native title claim (QC2013/004 Feb Court No QUD383/2013) by the Barada Kabalbara Yetimarala People. This latest claim does not affect operations on the ML.

The risks associated with the existing operational footprint are considered minimal to the project and where additional clearing and land disturbance activities are planned for areas within the native title claim areas are addressed in the EMP includes involvement with the native title claimants in the pre-works survey and assessment process.

No non compliances or additional issues are associated with cultural heritage are known to ERM.

Emission Discharges

Emissions and discharges are typical of similar open cut coal mining operations. The site's Environmental Management Plan provides controls for all emissions and discharges and appropriate procedures in the event of any incident. No non-compliances as a result of emissions or discharges have occurred in the last three years.

The EA requires particular limits to be applied to exploration activities (Conditions F31 – F45). The environmental management of exploration activities is not included within the Site's Environmental

Management Plan and it is understood from interviews on site that there is no formal Plan for managing these activities within the relevant ML. The lack of a formal Plan presents a risk of non-compliance with the EA for exploration activities, assuming other process and activity controls are not implemented as part of exploration activities on site, however such risk is unlikely to be material.

Land Tenure and Permitting

The current mine operates within three mining leases (MLs) 70379, 70417 and 700014. The expiry date of all three MLs is 30 September 2031. There are four land parcels within the MLs and two road reserves. Three of the land parcels are freehold owned by Middlemount Coal Pty Ltd. One parcel is leasehold land, owned by the Queensland Government but leased to a joint venture lead by BHP Coal Pty Ltd. This leasehold parcel is located in the centre of ML70379.

All mining activities across the three MLs are carried out under a single environmental authority (EA) EPML00716913. A Plan of Operations for activities to be undertaken in 2018 has been lodged with the Department of Environment and Science (DES), along with a corresponding Financial Assurance cost estimate proportional to the rehabilitation liability.

Under the Commonwealth Environment Protection and Biodiversity Conservation (EPBC) Act, operations are approved through two separate permits: EPBC 2010/5394 (Middlemount Stage 2) and EPBC 2016/7717 (North-eastern Extension).

Secondary permits are in place for water diversions and allocations required by the Water Act 2000 (QLD).

New tenure and environmental permit applications commenced in 2017 to enable the expansion of the pit to the newly acquired tenement to the North West. In relation to tenure for this tenement, an application for surface rights across ML70379 has been made to the Qld Department of Natural Resources, Mines and Energy (DNMRE) along with a new ML application for new infrastructure to facilitate the extension of the East Dump. Approval of these applications will require finalisation of any Native Title, landholder compensation / land acquisition issues to be resolved prior to grant. The expansion of the pit is within the current mine plan and that further permits are required to allow the continuation of mining in the later years of the mine life. Further, it is noted that part of the offset area for Stage 2 approved under EPBC 2010/5394 will be affected when the this planned expansion project is approved and commences. It however noted that this permit is not required for over 5 years and as such it is envisaged that the required permits will be approved prior to the commencement of mining in these areas. As such this is not considered a material risk to the continued mining and mine plan presented.

OPERATIONAL EHS PERFORMANCE

Environmental Performance

An audit by DES in March 2016 did not identify any matters of concern or evidence of non-compliance of the EA. However, one area of concern was identified at Sediment Dam 1, in particular a risk of potential overtopping. It is understood this concern was resolved and a repeat audit by DES in July 2017 did not identify any non-compliances or matters of concern.

The third party independent audit of the EA in December 2017 (LRS Environmental, Dec 17) identified three non-compliances with the EA (i.e. Conditions E3 Tailings sampling, D1 Blast Vibration Monitoring and G33 Supply of Register of Regulated Dams to DES with annual returns). Based on interviews with site personnel, ERM understands that all of these matters have been closed out. No material issues have been identified.

H&S Performance

The Middlemount safety management system describes the critical hazards for the site and the cardinal rules (related to single fatality hazards). This document is a shared document with the five contracting firms. They have individual implementation plans and various forms of internal monitoring which appears to be effectively implemented.

Running between 2 and 3, their performance is well below the Queensland industry average for open cut coal mining (2016/17) of 12.6. Their statistics are very good and they have lead indicator such as hazard

identifications that demonstrate an increase in recognition of hazards and reporting. No material issues have been identified.

Water Management

The site operates a Water Management Plan (WMP) in accordance with the requirements of the EA. The WMP forms part of a broader water management system which collectively addresses site water balance, regulated structure operations, receiving environment monitoring, erosion and sediment control and severe weather practices. The WMP must be updated at least every three years and the current version was updated in 2016 which is compliant.

No material issues have been identified.

Soils and Contamination

The 2010 Environment Impact Statement indicated that the project area is subject to limited subsoil suitability for rehabilitation due to dispersivity, a tendency for gully erosion and alkalinity/sodicity. If dispersive subsoils are left exposed and not rehabilitated within an adequate timeframe they could be impacted by wind erosion. The risk of soil salinity was considered low.

The Rehabilitation Management Plan Version 1.0 dated 2012 confirms that to date no detailed site specific analysis of the tunnel erosion potential of spoil on the site has been conducted. Further, Chapter 11 of the RMP provides a risk assessment for the rehabilitation program however the mitigation plans to address unmitigated risks are based on proposed characterisation, trials and consideration of various methodologies. No information has been provided as to the status of the existing topsoil stockpile condition and the costs associated with the ongoing management and trialling of this material for rehabilitation purposes.

No information has been provided on potential and actual contamination associated with the project for this review, however in the Rehabilitation Management Plan Addendum 2014 it is noted that most of the coarse reject and tailings material generated from processing coal from the Middlemount and Pisces seams and some of the floor material from the Middlemount sea, are likely to be potentially acid forming (PAF) and will require management. As the volume of material that may be affected by PAF is unknown the costs associated with the management of these soils at the time of rehabilitation is unable to be estimated.

Condition F14 of the Environmental Authority EPML00716913 requires the completion of a Rehabilitation Management Plan. Therefore it is considered that the RMP is a regulated approved document by the administering authority and as such the commitments in mitigation plan outlined under Chapter 11 of the RMP are enforceable and as such the costs associated with implementing the mitigation plan commitments needs to be considered with respect to the overall final rehabilitation of the project area. With consideration to the commitments in the RMP and the limited information provided for assessment with respect to the status of progressive rehabilitation activities being undertaken the management of soils and potential contamination arising from the tailing management may present as a material risk for the project if not addressed as part of the upcoming study. As such currently is not considered a material risk within the LOM plan.

Ecology

Ecological impacts of mining activities are regulated under the EA and the two EPBC permits. Three offset areas are active, each with different requirements under the relevant permits. This poses some risk with managing compliance. Furthermore, part of one offset area (Stage 2 Offset Area approved under EPBC 2010/5394) is planned to be mined in the future by the Western Expansion.

It is understood that the site intends to develop a single Offsets Plan that is consistent and integrates all offset requirements into a single document. Whilst no non-compliances with offset requirements have occurred to date, having a single Offsets Plan will assist to ensure compliance is maintained. The need to mine an existing offset area will require negotiation with the relevant regulator. In principle, offset areas are intended to be protected in perpetuity. However, it is understood that only 1.1% of the total Stage 2 Offset Area is planned to be mined.

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Rehabilitation and Mine Closure Liability

No evidence has been viewed by ERM to confirm the Financial Assurance (FA) bond of AUD25.8M has been lodged with the QLD Government. However, given the mine is operational it is assumed that the FA has been lodged.

The Rehabilitation Management Plan (RMP) identifies key risks to rehabilitation success as being a lack of suitable (non-erosive) spoil and capping material. Mitigation measures involving spoil characterisation and material balance calculations, as well as field trials, are planned to control these risks. The RMP was updated to include the results of these initial studies but it appears additional work is required. Should these risks not be managed then there may be a requirement to amend the rehabilitation criteria required by the EA. Such an amendment would be a material risk to completing the site's rehabilitation requirements, if it was required which currently it is not.

The Middlemount Mine operation incorporates an area of 3,344ha in total. Section 5 of the Middlemount Plan of Operations, Revision 1.0 dated 8 January 2018 confirms that 32.5ha of area has been rehabilitated since 2014, with a number of issues occurring during the 2016-2017 rehabilitation program which resulted in rehabilitation being restricted to 25ha instead of the proposed 63ha. These issues included changes to the mining program within the vicinity of the proposed rehabilitation area, buffering from completed rehabilitation areas to new mining activity areas and the lack of competent pit rock to complete the rehabilitation methodology. A further 20 ha planned for the 2018 period. No information has been provided as to the success of the 32.5ha of rehabilitation completed in the past four years of operation.

Based on the commitments made in the RMP and in the absence of information to confirm the completion and outcomes from these commitments to date, it is considered that the final rehabilitation may exceed the amount currently calculated for FA, being AUD25M and therefore may present a risk for the project whoever is not considered to meet the material risk threshold. Rehabilitation is likely to be constrained by a lack of suitable spoil and capping materials on site. Initial studies have been completed to address these risks but additional investigations will be required to confirm final rehabilitation success. The need for an EA amendment of rehabilitation outcomes could become a permitting risk, particularly given the current reform of rehabilitation requirements by the Qld regulator.

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16. HVO/MTW Underground Mining Potential

RPM highlights that the current HVO and MTW Ore Reserves and LOM Production Schedule presented in ***Section 8*** and ***Section 9*** are based on the current open cut mine designs and specifically excludes the underground resources. RPM notes that there is significant potential for underground mining to be undertaken on this material.

The Company and previous owners completed various studies for the underground portion of the HVO/MTW area of the Project (the "UG Project"). RPM has completed a review of the associated reports which outlines the proposed production profile, operations and costs. RPM utilised these reports and completed further in-house review and designs to better define the economic viability of an underground operation within the Project (the RPM Scoping Study).

The following summarises the results of a review into the underground mining potential at MTW and HVO and conceptual planning outcomes. RPM highlights the quantities and forecasts presented below are not Coal Reserves, nor does the review and underlying studies constitute a Prefeasibility Study, rather is considered a scoping level study to an accuracy of +- 50%.

RPM notes that the study presented is high level in nature and requires additional drilling and mining studies to be undertaken and may not result in an economically viable project being defined and are presented to highlight the potential for additional mining to be undertaken if drilling and studies show the economic viability of any defined resource.

16.1 Asset Description

Within the HVO and MTW leases, there has been a significant amount of coal identified as potential underground targets by various studies. Based on current inputs, the open cut operations are economic to deeper seams as the basal cut off (as outlined in ***Section 10***) and as such the underground mineable quantities tonnage is now significantly reduced from previous studies. To date, all underground mine planning that has been completed to a conceptual level only with the focus of most of the previous work being the MTW area. High-level geotechnical and gas reservoir characterisation work has been undertaken for MTW. The most recent study work includes a technical review of previous conceptual work undertaken by a third party in June 2013 and internal modelling by the previous owners conducted in 2015. RPM notes the Company is currently undertaking further reviews however this is not finalised as at the effective date of this Report.

The June 2013 study was designed primarily as a review of the Lower Hunter assets and as a tool for the development of a conceptual underground mining strategy that would sit as either complementary, or as an alternative, to open cut mining at MTW and HVO. This work involved development of mine layouts, production scheduling and economic evaluation. It appears that little consideration was given during this study to the timing and interaction between open cut and underground operations.

The 2015 study work was completed by the previous owner and RPM has only sighted the XPAC design and schedule. This provides an insight into the most recent strategic thinking however, as would be expected for the level of study, no detailed timeframe was presented nor would it be expected.

The coal working section is that part of a coal seam, or aggregated coal seams including non-coal parting material that can be worked by underground methods. A set of criteria was applied to assessment of working sections for underground extraction. The criteria used to assess the suitability for working section development are outline in ***Table 16-1***

Table 16-1 Criteria used by previous owners in the assessment of underground working sections

Parameter	Factor
Working section thickness	1.6m to 6.0m
Maximum parting thickness	0.3m
Working section raw ash	< 45%
Depth	75m to 600m
Seam dip	< 10 degrees

RPM has reviewed the characteristics of each of the potential underground targets within the context of latest thinking in relation to open cut operations.

MTW

Potential underground targets at MTW have been identified in the Mount Arthur, Vaux and Bayswater Seams. Due to open cut extraction or insufficient depth of cover to open cut final voids the Mount Arthur target has been confined to the Thorley lease area as shown in ***Figure 16-1***. The Mount Arthur seam characteristics are provided on ***Table 16-2***.

The Vaux Seam lies 20m to 30m below the Mount Arthur Seam and as such could be mined in areas where the Mount Arthur Seam has been extracted by underground methods however would be too close to the surface in areas where the Mount Arthur had been extracted by open cut. Review of existing and planned cover remaining over the Vaux Seam following open cut activity has resulted in the identification of two target areas, one covering the MTO lease and the other below the northern part of the Warkworth Pit. These areas are shown on ***Figure 16-2*** and the seam characteristics are provided on ***Table 16-3***.

The Bayswater Seam lies an additional 80m below the Vaux Seam and is not constrained through prior open cut mining or lack of fresh cover. As shown on ***Figure 16-3*** the Bayswater target covers the extent of the MTO lease and the Warkworth pit. It should be noted that the MTO lease is stratified and includes all Resources above the Bayswater Seam. This means that a lease extension would need to be secured if underground mining is to be undertaken in the Bayswater Seam at MTO. YAL has submitted an application for an exploration lease for this purpose. The characteristics of the seam are provided on ***Table 16-4***. There is very little exploration of either the Lemington Seam or the Barrett Seam which are located below the Bayswater Seam and as such neither are considered to be underground mining targets at this time. RPM understands that YAL will be completing exploration drilling to these seams within the next 2 years.

Table 16-2 MTW – Mount Arthur Seam characteristics

Parameter	Factor
Proximity to open cut pits	Thorley pit
Proximity to surface infrastructure	South tailings dam and Putty/Charlton Road
Seam thickness	2.4m to 4.2m
In Situ estimate	86Mt
Depth of cover (from topo)	175m to 245m
Cover to base of open cut	100m
Seam dip	Shallow, except for south east potion of MTW South
Raw ash	22.0% to 37.0%
Likely products	Semi soft coking and thermal

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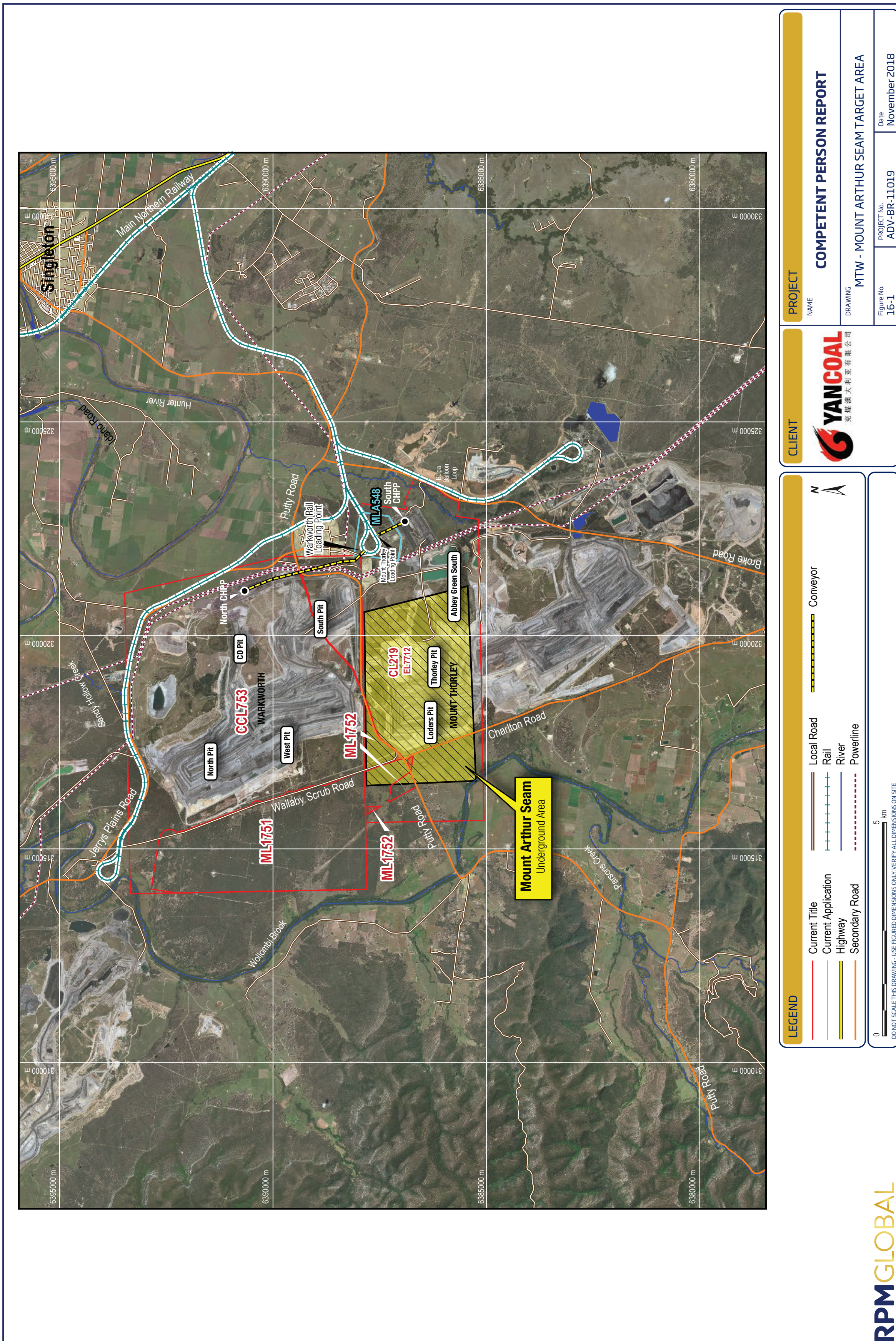
Table 16-3 MTW – Vaux Seam characteristics

Parameter	Factor
Proximity to open cut pits	West pit and Thorley pit
Proximity to surface infrastructure	North/south tailings dam and Putty/Charlton Road
Seam thickness	1.2m to 4.1m
In situ estimate	67Mt
Depth of cover (from topo)	100m to 400m
Interburden to seam above	20m to 30m below Mt Arthur seam
Seam dip	Shallow, except for south east potion of MTW South
Raw ash	15% to 20%
Likely products	Low ash semi soft

Table 16-4 MTW – Bayswater Seam characteristics

Parameter	Factor
Proximity to open cut pits	West pit and Thorley pit
Proximity to surface infrastructure	North/south tailings dam and Putty/Charlton Road
Seam thickness	2.7m to 8.4m
In situ estimate	338Mt
Depth of cover (from topo)	200m to 450m
Interburden to seam above	60m below Vaux seam
Seam dip	Shallow, except for south east potion of MTW South
Raw ash	25% to 30%
Likely products	Low ash thermal


PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MTW - MOUNT ARTHUR SEAM TARGET AREA
Figure No.
16-1
PROJECT No.
ADV-BR-11019
Date
November 2018
CLIENT
YANCOAL
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Conveyor
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DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
RPMGLOBAL
Singleton
Main Northern Railway
Hunter River
Putty Road
Warkworth Rail Loading Point
Mount Thorley Loading Point
MLA548
South CHPP
North CHPP
Broke Road
Abbey Green South
South Pit
CD Pit
CCL753
WARKWORTH
CL219
EL7712
Thorley Pit
Loders Pit
MOUNT THORLEY
North Pit
West Pit
ML1752
ML1751
Wallaby Scrub Road
Charlton Road
Mount Arthur Seam
Underground Area
Jerrys Plains Road
Sandy Hollow Creek
Wollombi Brook
Parsons Creek
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315000 m
310000 m
6395000 m
6390000 m
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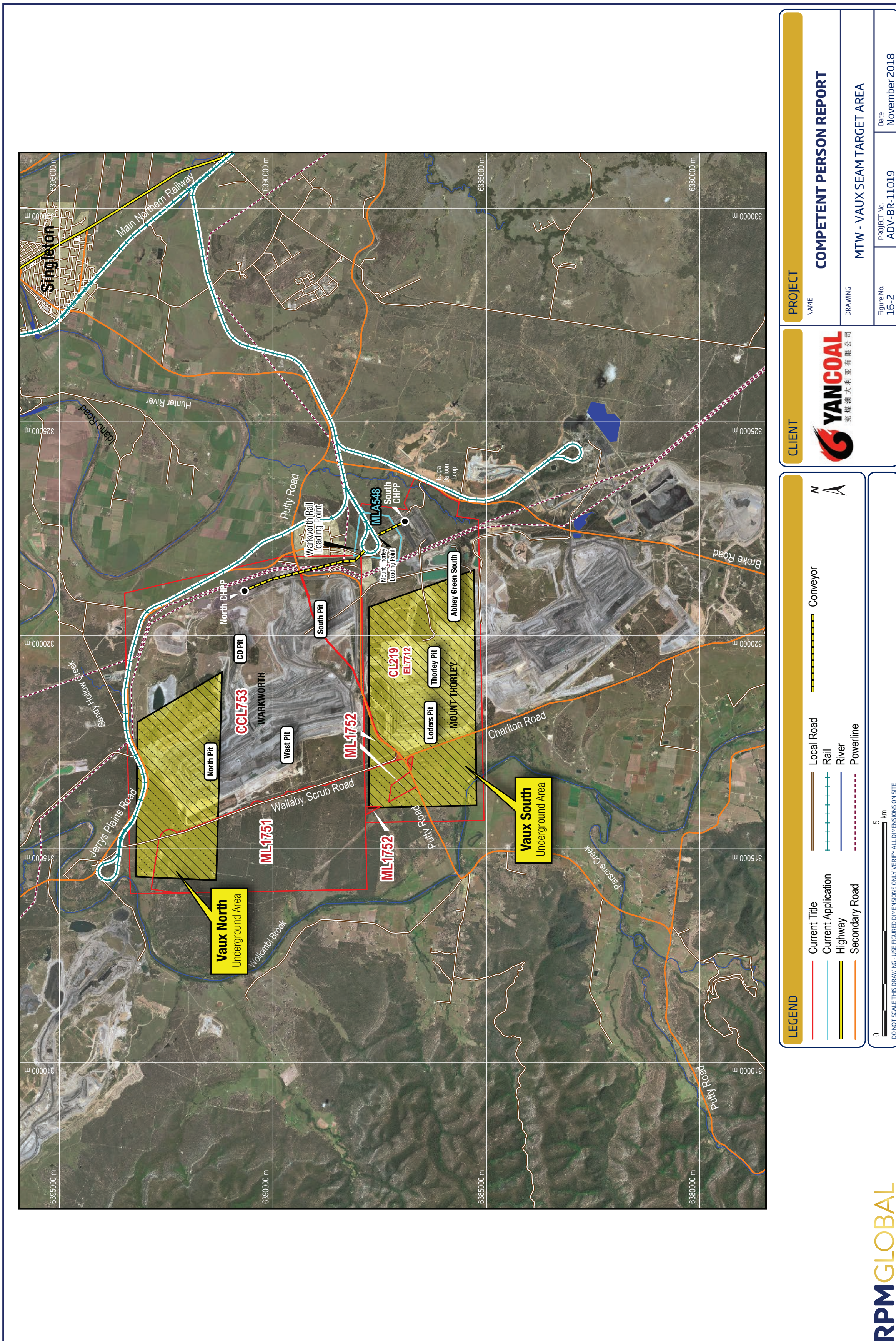

Singleton
Main Northern Railway
Hunter River
Putty Road
Warkworth Rail Loading Point
Mount Thorley Loading Point
MLA548
South CHPP
North CHPP
Bulga Balloon Loop
Broke Road
Abbey Green South
CD Pit
South Pit
CCL753
WARKWORTH
West Pit
North Pit
CL219
EL7712
Thorley Pit
Loders Pit
MOUNT THORLEY
ML1752
ML1751
Wallaby Scrub Road
Charlton Road
Jerrys Plains Road
Sandy Hollow Creek
Wollombi Brook
Parsons Creek
Vaux North
Underground Area
Vaux South
Underground Area
LEGEND
Current Title
Current Application
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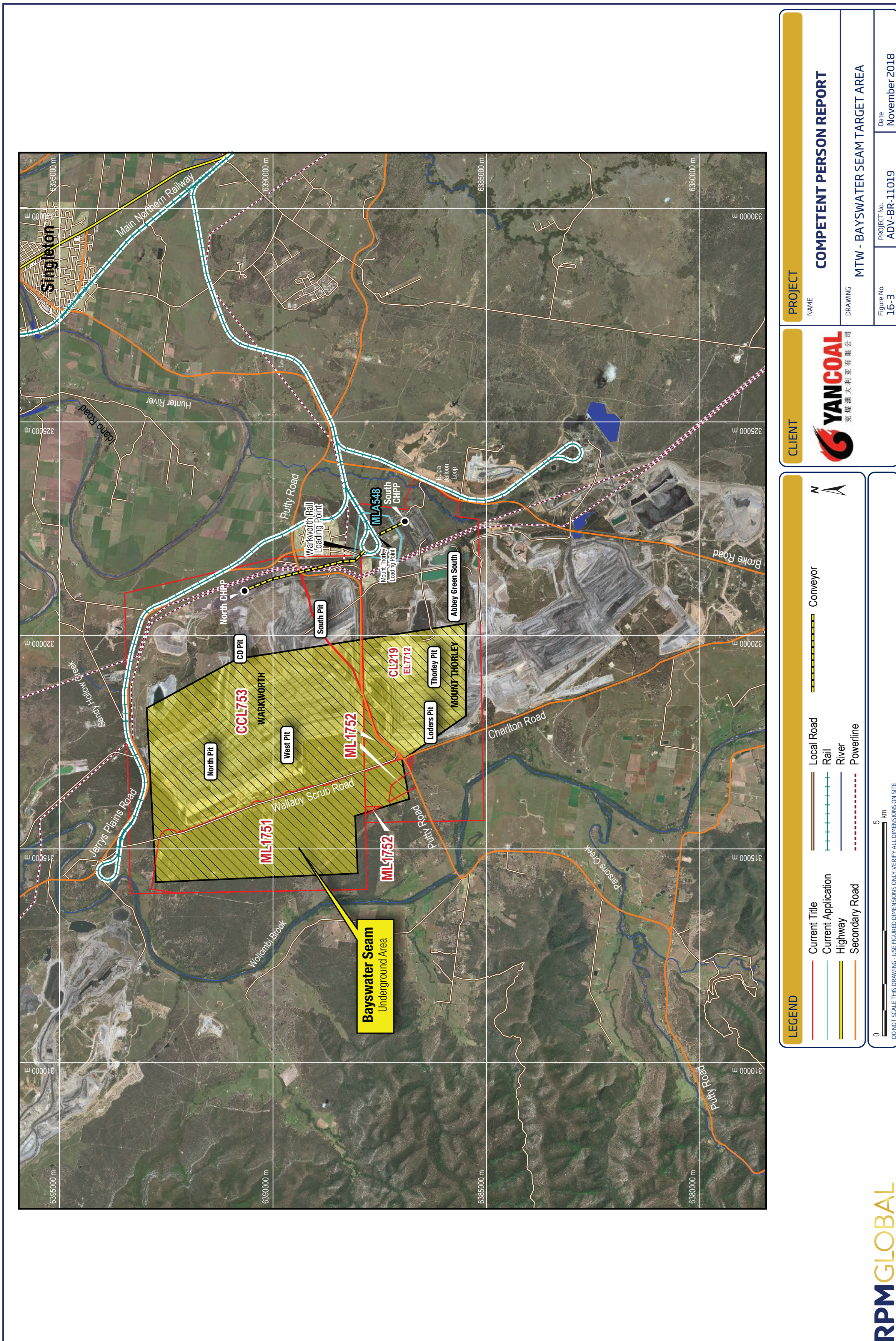
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MTW - VAUX SEAM TARGET AREA
Figure No.
16-2
PROJECT No.
ADV-BR-11019
Date
November 2018
RPMGLOBAL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Putty Road
Warkworth Rail Loading Point
MLA548
South CHPP
North CHPP
Mount Thorley Loading Point
Bulga Balloon Loop
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Broke Road
CD Pit
South Pit
CCL753
WARKWORTH
CL219
EL7712
Thorley Pit
MOUNT THORLEY
North Pit
West Pit
ML1752
Loders Pit
Charlton Road
Wallaby Scrub Road
ML1751
ML1752
Jerrys Plains Road
Sandy Hollow Creek
Wollombi Brook
Parsons Creek
Bayswater Seam
Underground Area
LEGEND
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Secondary Road
Local Road
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Conveyor
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DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MTW - BAYSWATER SEAM TARGET AREA
Figure No.
16-3
PROJECT No.
ADV-BR-11019
Date
November 2018
RPMGLOBAL

RPMGLOBAL

HVO

At HVO potential underground mining targets have been identified in the Arties Seam, Liddell Seam and Barrett Seam. As shown in ***Figure 16-4 to Figure 16-6*** these seam are much thinner than the MTW targets. The Arties and Liddell seams are constrained through a lack of sufficient cover and as such have been confined to the areas shown on Figure 16-4 and Figure 16-5. The deeper Barrett Seam is not affected by open cut operations and as shown on ***Table 16-6*** and covers a wider area.

Table 16-5 HVO – Arties Seam characteristics

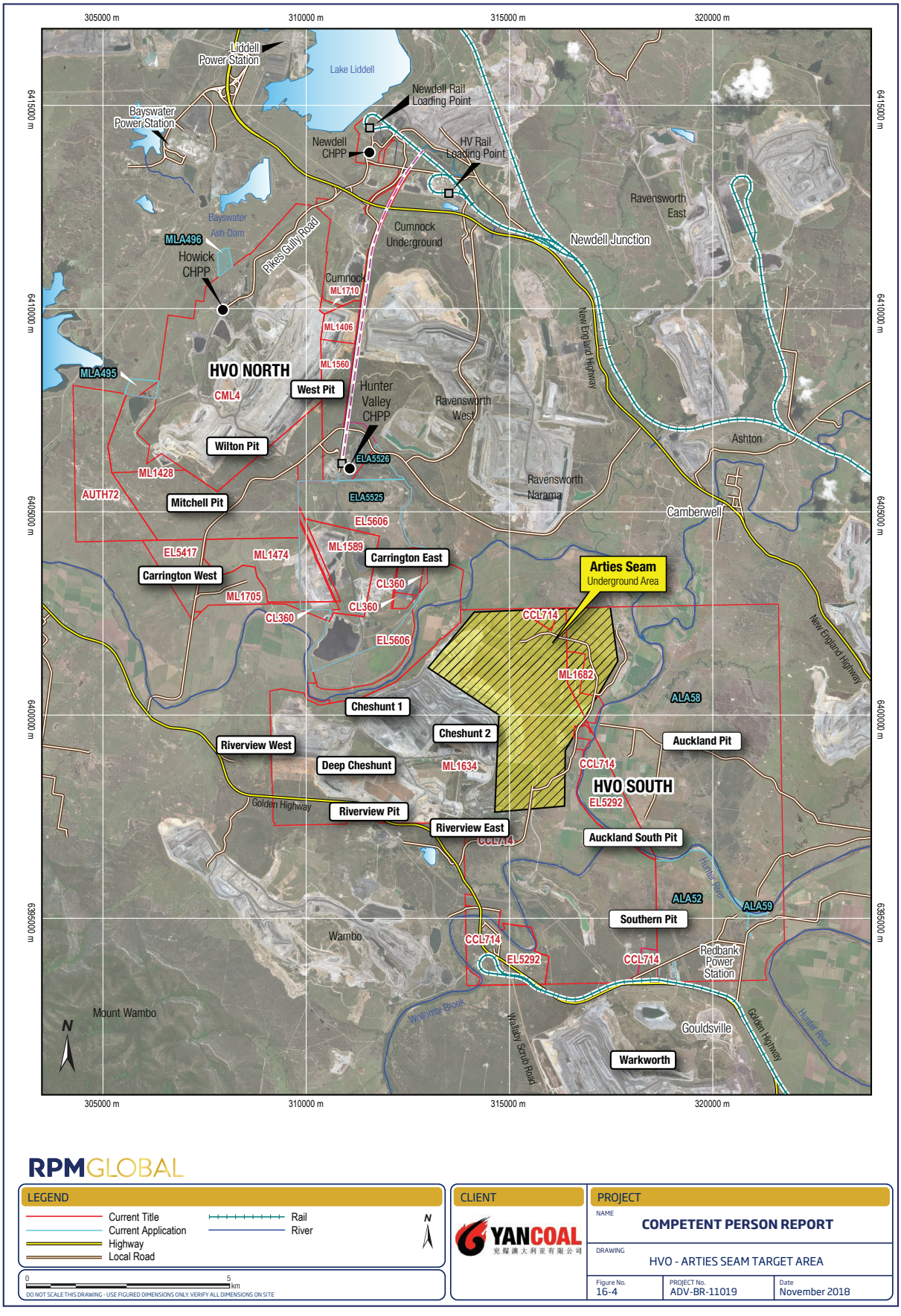
Parameter	Factor
Proximity to open cut pits	Cheshunt pit
Proximity to surface infrastructure	-
Seam thickness	1.5m to 2.3m
In situ estimate	35Mt
Depth of cover (from topo)	200m to 375m
Burden to base of open cut	170m – 180m
Seam dip	Shallow
Raw ash	28% to 46%
Likely products	Low ash thermal to semi-soft

Table 16-6 HVO – Liddell Seam characteristics

Parameter	Factor
Proximity to open cut pits	Cheshunt pit
Proximity to surface infrastructure	-
Seam thickness	1.2m to 2.6m
In situ estimate	Insufficient data to estimate
Depth of cover (from topo)	275m to 475m
Interburden to seam above	60m – 70m
Seam dip	Shallow
Raw ash	22% to 35%
Likely products	Low ash thermal to semi soft

Table 16-7 HVO – Barrett Seam characteristics

Parameter	Factor
Proximity to open cut pits	Cheshunt pit
Proximity to surface infrastructure	-
Seam thickness	1.9m to 2.9m
In situ estimate	82Mt
Depth of cover (from topo)	300m to 500m
Interburden to seam above	17m – 32m
Seam dip	Shallow
Raw ash	22% to 33%
Likely products	Semi soft



RPMGLOBAL

LEGEND

Current Title
Current Application
Highway
Local Road
Rail
River
N

0 5 km

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

YANCOAL 兖煤澳大利亚有限公司

PROJECT

NAME
COMPETENT PERSON REPORT

DRAWING
HVO - ARTIES SEAM TARGET AREA

Figure No.	PROJECT No.	Date
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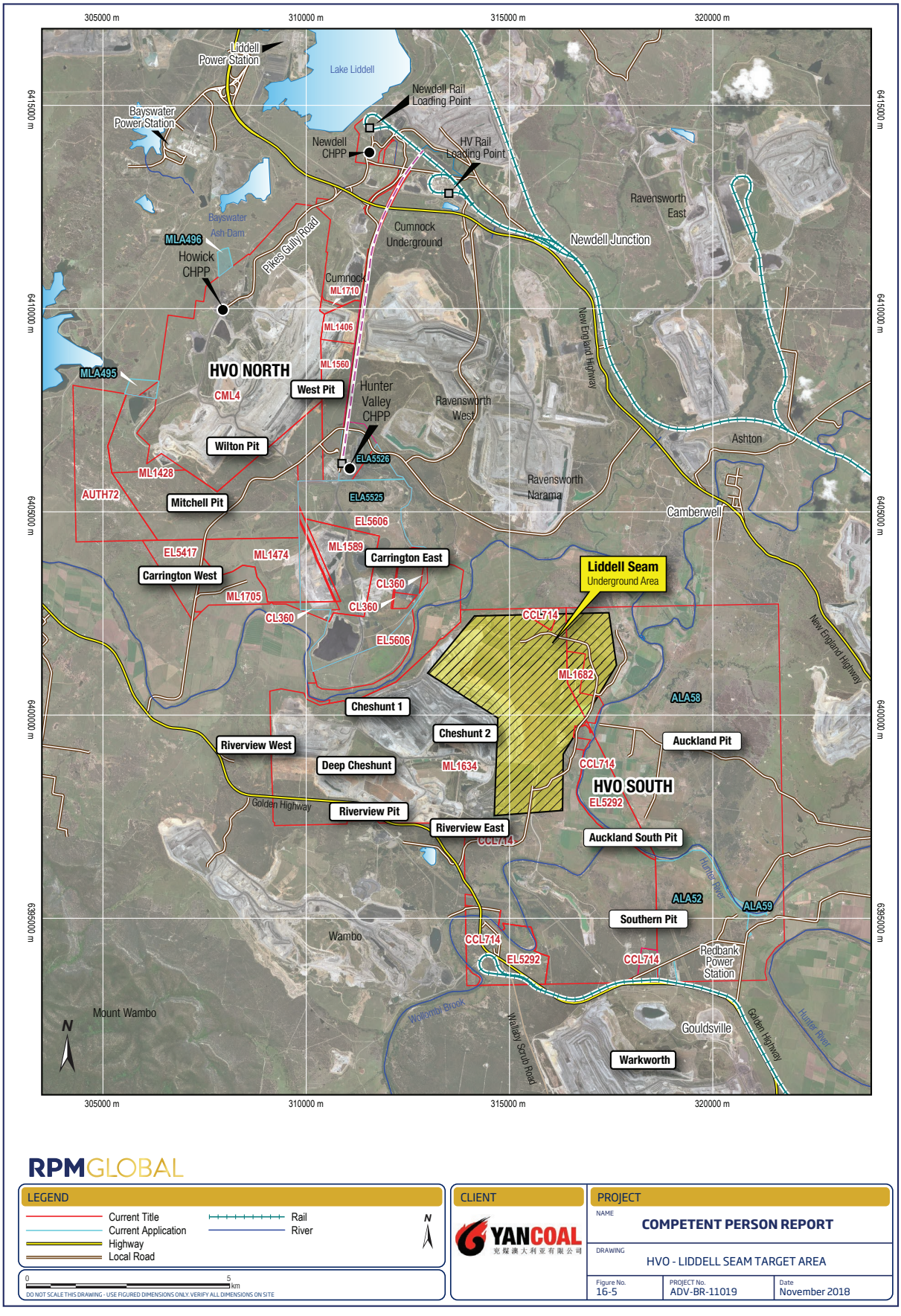


RPMGLOBAL

LEGEND

Current Title
Current Application
Highway
Local Road
Rail
River
N

0 5 km

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

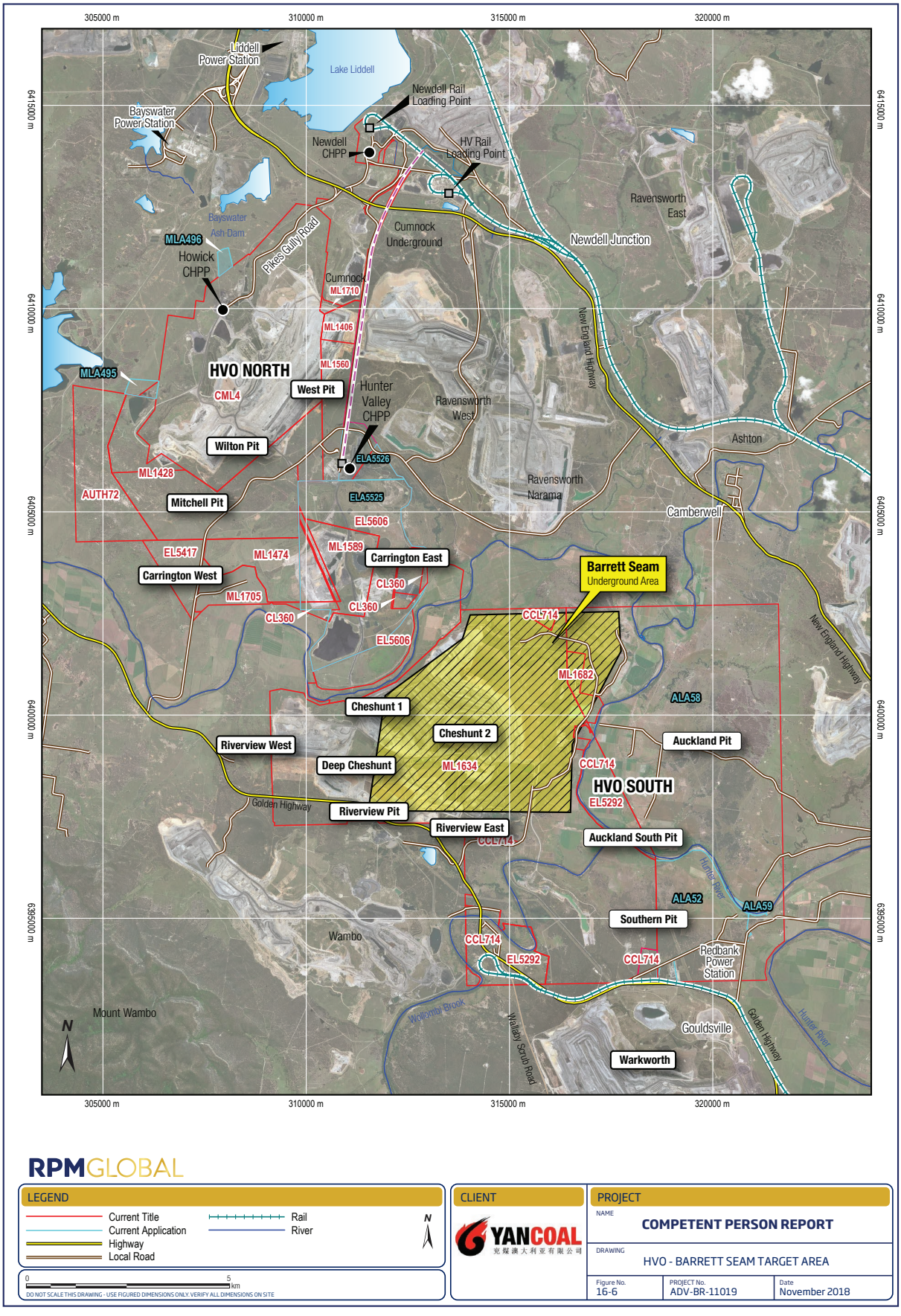
YANCOAL 兖煤澳大利亚有限公司

PROJECT

NAME
COMPETENT PERSON REPORT

DRAWING
HVO - LIDDELL SEAM TARGET AREA

Figure No.	PROJECT No.	Date
16-5	ADV-BR-11019	November 2018



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LEGEND

Current Title
Current Application
Highway
Local Road
Rail
River
N

0 5 km

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

YANCOAL 兖煤澳大利亚有限公司

PROJECT

NAME
COMPETENT PERSON REPORT

DRAWING
HVO - BARRETT SEAM TARGET AREA

Figure No.	PROJECT No.	Date
16-6	ADV-BR-11019	November 2018

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16.2 Production Estimate

RPM has reviewed the Resource areas and quantities available for underground mining operations in order to consider the possible production range for individual operations and the number of operations that could operate concurrently at the site as required for the Scoping level of study. Operational considerations that contribute to a conceptual underground development strategy include:

- The conversion of in situ tonnages to potential ROM production.
- Interaction between underground and open cut operations.
- Interaction between separate underground production units operating in close proximity (either within the same seam or overlying seams).
- Productivity range relative to the seam characteristics (depth, thickness, continuity, geotechnical considerations, etc)
- Economics of the Resource, i.e. how much capital does the scale of the Resource naturally support.

All scenarios have applied either longwall or the Longwall Top Coal Caving method. As discussed within the individual seam commentary below, RPM considers that the seam characteristics are generally favourable for longwall mining as is being utilised at Ashton and Austar by the Company.

Figure 16-7 shows the performance of the top Australian longwall operations over the last fifteen years based upon publically available production information collated by RPM. This illustrates the long-term trend of the top performers remaining within a fairly tight range of 3.5Mt to 5.5Mt in a year with a single outstanding performer recording between 7Mt and 9Mt. Historically, it would be expected that the outstanding performer would typically hold its position for four or five years before returning to the pack and another high performer takes is place. This trend is generally attributed to the commencement of new operations that are mining in the shallowest and most favourable conditions with new equipment and latest technology. As the mine progresses, conditions become more challenging and equipment downtime increases.

In terms of mine planning it has therefore been assumed by industry that an operation should be designed to produce up to 10Mtpa with the operation potentially achieving up to this figure for a limited period. Long-term (life of mine) rates however, should be pegged at much lower levels. Until recently, the long-term rate assumed for this purpose was up to 5.5Mtpa.

The graph does however show that the industry has broken out of this trend over the last three or four years and the majority of the top performers are now appearing to consistently produce in the range of 5.0Mtpa to 7.5Mtpa. RPM considers that this is due to widespread adoption of automation technology that is able to maintain more consistent operating conditions on the face and reduced delays as a result of operator error.

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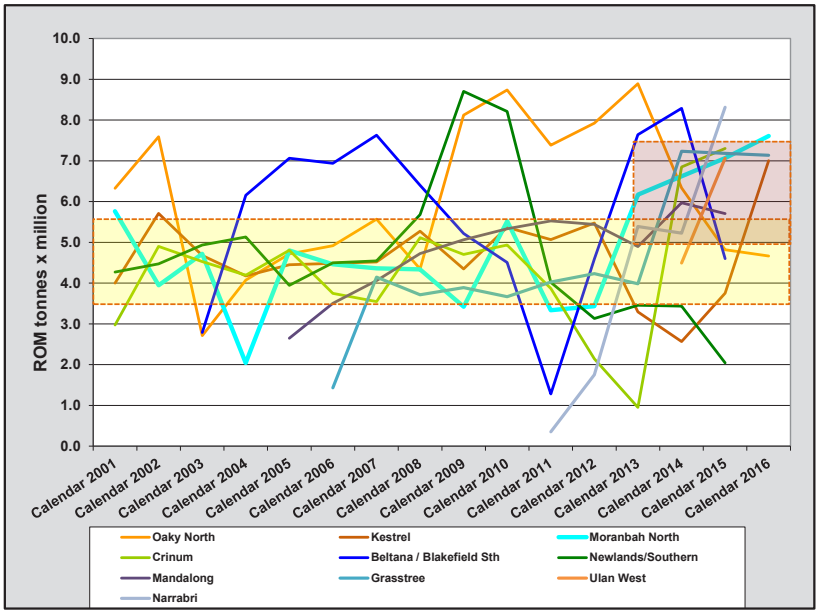
Figure 16-7 Historic production for top 10 producers



The scenarios proposed by previous studies all require the application of twin longwall systems (two units operating in the same general vicinity) or dual (two units operating in otherwise disconnected workings however at the same site) longwall mines.

In Australia there is currently limited operational experience of operating these systems with the majority of underground mines working a single longwall. The original Gordonstone Mine, renamed Kestrel Mine, was initially setup to operate two longwalls and more recently the Oaky North Mine was expanded to operate with two longwalls.

In RPM's experience running multiple longwall units at full production presents significant operational challenges and it is often difficult to maintain adequate development inventory in advance of the longwall. Ventilation and gas management systems as well as general underground logistics support are also often made far more difficult, however having said that with careful planning these challenges can be overcome to form a successful operation.

Longwall production has been found historically to be highly dependent on depth of cover with horizontal and vertical stress generally increasing with depth and creating a more challenging operating environment. Through industry experience, RPM has developed a guideline for estimating productivity relative to depth. This is illustrated in ***Figure 16-8*** whereby there is little or no production derating up to a depth of 300 m, after which production is expected to decline to a minimum factor of 80% from around 450 m. This means that a longwall that is deemed capable of producing at 7Mtpa at 250m depth would be expected to produce around 5.6Mtpa in the same seam however at 500m deep.

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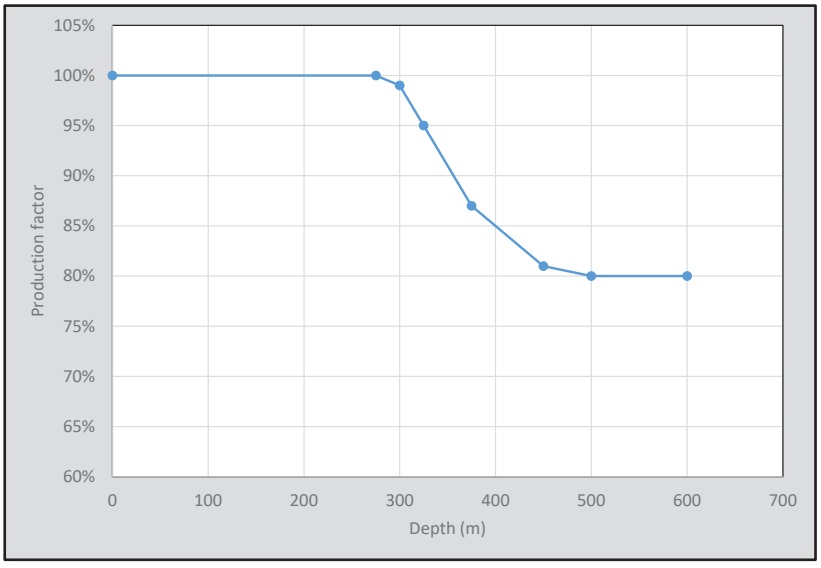
Figure 16-8 Production factor relative to depth



Production can also be dependent on seam thickness although the relationship has historically been far less defined than the depth relationship. In theory thicker seams yield more coal per meter cut than their thinner counterparts and so overall productivity is expected to be higher. Higher longwall faces are however harder to manage and are more vulnerable to deterioration in high stress environments. Historically in Australia, thicker seam operations have often exhibited large swings in production whilst more moderate thickness operations (3m to 4 m) have been able to achieve more a consistent operating environment and more reliable production rates.

RPM is of the opinion that recent successes with the introduction of automation will enable operators to maintain greater control over the longwall face and as such thicker-seam operations will be better placed to achieve their potential. Importantly there is a similar seam thickness range in the Mount Arthur and Vaux seams at MTW and Arties, Liddell and Barrett at HVO and as such similar productivities may be expected. The Bayswater Seam at MTW is much thicker (up to 8.4 m) and would be expected to produce at higher rates.

Issues related to placement of tailings and spoil in the open cut voids directly above underground mines further complicates underground extraction in most areas at MTW and HVO. Overlying liquid tailings can present a significant hazard to underground mining as a result of the risk of inrush. Unconsolidated spoil can significantly impact stress regimes (and consequently productivity and roof support requirements) and access to the underground workings via surface boreholes. The significance of these issues should not be underestimated and technical solutions will have to be found before underground mining can commence. These will be addressed in future studies.

RPM has assumed that a minimum fresh interburden thickness of 80m is required below any surface spoil. In areas where this cannot be maintained, the higher coal seam is assumed to remain unmined, however operations may continue in deeper seams.

Seam-wise production and productivity

MTW Mount Arthur Seam

The Mount Arthur Seam provides a potential underground mining target within the MTO lease area only. Open cut operation will be concluded in the area within the next 6 months and will not directly impact underground mining. The old pits are however planned to be backfilled with a combination of waste and

tailings which may impact the geotechnical loading of the in situ strata. The burden between the base of the open pit, mined to the Woodlands Hill Seam and potential underground operation is estimated to be around 100m and as such should be sufficient however this would need to be confirmed through geotechnical review.

The backfilling of the open pit areas conflicts with the underground option to obtain a low-cost access point from an existing highwall. Detailed design would be required to define the optimal access point and any compromise required with open cut waste storage.

The average thickness of the seam is 3.2m which makes it well suited to high production mechanised mining. An 80 cm claystone band sits directly above the Mount Arthur Seam with the Warkworth Seam lying directly above the claystone. The claystone is deemed too thick to extract as part of the mining sequence thereby providing access to the Warkworth Seam. The competence of the claystone with overlying coal has not been assessed as part of this review however RPM considers there may be a risk with this material in the immediate roof. It is estimated that there is approximately 86Mt of Mount Arthur Seam Resource within the MTO lease.

The potential ROM quantity of 44.5Mt was scheduled for this seam in the 2015 model. In consideration of the shallow depth and moderate seam thickness RPM expects the production range for this target would average 5.5Mtpa with annual output ranging from 4.5Mt to 6.5Mt.

MTW Vaux Seam

As shown on Figure 16-2 the Vaux Seam target is divided across two distinct areas, Vaux North and Vaux South. Vaux South lies 20m to 30m below the Mount Arthur underground target and would have to be scheduled to commence following completion of the Mount Arthur operations.

The depth of cover averages 190m and the seam thickness averages 2.5m thus making is an appropriate target for underground mechanised mining. The Vaux North depth of cover under the Warkworth Pit extends to 320m which may result in a drop off in productivity however not to a significant level.

It is estimated that there is 42Mt of Resource in Vaux South which equates to 27Mt ROM when allowing for 80% resource recovery and 80% mining recovery. Productivity would be expected to be similar to the Mount Arthur Seam, averaging 5.5Mtpa, with a range from 4.5Mt to 6.5Mt.

For Vaux North it is estimated that there is approximately 25Mt of Resource and with the same recovery factors applied, this equates to 16Mt ROM. It is expected that there will be a slight reduction in productivity to 5.2Mtpa resulting from the increased depth.

MTW Bayswater Seam

The average thickness of the Bayswater Seam in MTW is 7.05m with thickness increasing to over 8m in some areas. Previous studies have recommended the application of the longwall top coal caving (LTCC) method. Elevated stress levels are required with this method to assist in fracturing the coal as part of the caving process. RPM does not consider that LTCC will be a viable choice in this case due to the relatively low depth of cover and the expected reduction in horizontal stress with the extraction of the overlying Vaux Seam.

RPM has therefore based production assumptions on a thick-seam longwall operation with a maximum extraction height of 6.0 m. The total Resource estimate is 338Mt and allowing for a Resource recovery of 80% and a reduced mining recovery of 68% to allow for up to 6m extraction, this results in a mineable quantity of 184Mt ROM.

As shown in Figure 16-9 average productivity is expected to range from 6.5Mtpa to 7.5Mtpa based on depth. For any one year the potential output could be expected to range from 5.5Mt to 8.5Mt.

Access would be expected from the eastern side of the Resource as an extension of the Vaux Seam workings.

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HVO Arties Seam

The depth below open cut final voids appears to be sufficient to protect the underground from connection to the surface.

The Arties Seam thickness ranges in thickness from 1.5m to 2.3 m. Resources with seam thickness less than 2.0m are generally considered to be thin and will require more specialised equipment in order to effectively mine. The lack of height provides ergonomic challenges for operators and generally result in reduced productivity.

The Resource is estimated to be 35Mt which translates to 22Mt when applying a Resource recovery of 80% and mining recovery of 80%.

RPM has assumed that given the limited seam thickness, average productivity would not be expected to significantly exceed 4Mtpa. RPM considers that whilst this may remain a potential underground target there is currently a high level of uncertainty and a low probability of a favourable economic outcome. This target has therefore not been considered any further.

HVO Liddell Seam

The Liddell Seam lies 60m to 70m below the Arties Seam and as such can be considered over a similar area to the Arties Seam.

The Liddell Seam thickness ranges in thickness from 1.2m to 2.6m which places it in a similar marginal category as the Arties Seam.

There is limited exploration upon which to base a Resource estimate or mine plan. Based on seam thickness it is assumed that the in situ and ROM tonnages for the Liddell Seam will be similar to the Arties Seam.

RPM has assumed that given the limited seam thickness, average productivity would not be expected to significantly exceed 4Mtpa. RPM considers that whilst this may remain a potential underground target there is currently a high level of uncertainty and a low probability of a favourable economic outcome. This target has therefore not been considered any further.

HVO Barrett Seam

The Barrett Seam lies between 17m and 32m below the Liddell Seam however is predominantly greater than 20 m. Should the Liddell Seam be mined, detailed geotechnical analysis would be required to confirm sufficient coverage lies between the two seams to allow mining to proceed in the Barrett. The Barrett Seam thickness ranges between 1.9m and 2.9m which provides a more attractive target for underground mechanised mining than either the Arties or the Liddell.

As the Barrett target area falls beneath the Cheshunt Pit then open cut mining would need to be largely complete in this pit before underground operation could proceed. It is estimated that there is up to 82Mt of in situ Resource within the Barrett Seam area which converts to 52Mt based on 80% Resource recovery and 80% mining recovery.

With an average seam thickness of 2.5m the Barrett Seam lies at the low end of the moderate thickness mining however does not necessarily fall into the thin seam mining category. An average production rate of 4.8Mtpa has been estimated for working in this seam.

Summary

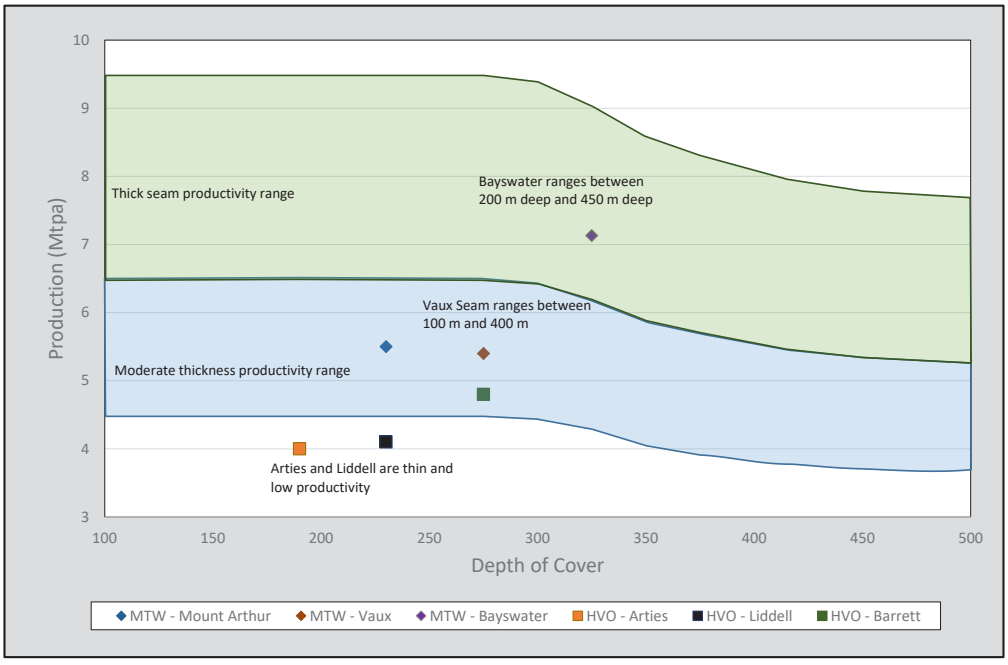
Table 16-8 shows the in situ and ROM estimates for each of the underground targets as discussed in the previous sections. It should be noted that not all ROM tonnage has been included in the table for the Arties or Liddell seams due to the high levels of uncertainty and high probability of a negative or very marginal economic outcome.

Table 16-8 Underground tonnage summary

Site / Seam	In situ (Mt)	ROM (Mt)
MTW		
Mount Arthur	86	45
Vaux	67	40
Bayswater	338	185
Total MTW	**491**	**270**
HVO		
Arties	35	
Liddell		
Barrett	82	50
Total HVO	**117**	**50**
TOTAL MTW / HVO Complex	**608**	**320**

Figure 16-9 shows the high-level productivity estimation for each seam based on depth and seam thickness characteristics.

Figure 16-9 Average productivity by seam



16.3 Production Schedule

A full underground schedule has not been completed at this level of study, however comment can be made on when operations may commence, the potential production and life of each operational sector, the number of contiguous longwall operations and potential annual output from the complex.

Figure 16-9 provides a high-level estimate of each seam based on the productivities and projected ROM tonnage. The Bayswater Seam is estimated to take up to 26 years to complete whilst the other seams combined are estimated to take 27 years to mine. With the Bayswater Seam using one height of longwall

equipment and the other targets all requiring smaller equipment this lends itself to a two longwall arrangement with one longwall in the Bayswater Seam and the second longwall working simultaneously through the other mining targets.

The powered roof supports are the major high-cost capital item with long life and so scheduling to ensure optimal utilisation over the total life of the complex is a key schedule consideration. Roof support life is measured in cycles where one cycle is completed every time the longwall moves a single web forward. Longwalls typically advance between 0.8m and 1.0m every cycle depending on the equipment set up which is a consideration of the seam characteristics. Based on support life of 70,000 cycles RPM has estimated that a single set of supports would be sufficient to mine the thick seam Resources at MTW in the Bayswater Seam. One set of moderate height supports would be required for the Mount Arthur and Vaux Seam operations at MTW and one additional set would be required to mine the Barrett Seam at HVO.

Table 16-9 Life of mine and roof supports

Target	ROM (Mt)	Rate (Mtpa)	Life (years)	Thickness (m)	Cycles (#)	LW Life (%)
MTW – Mt Arthur	44	5.5	8	3.20	28,971	41%
MTW – Vaux	50	5.4	8	2.54	35,269	50%
MTW – Bayswater	184	7.1	26	6.00	63,889	91%
HVO - Barrett	52	4.8	11	2.40	45,573	65%
Total	**323**					

Figure 16-10 provides a conceptual schedule for the underground operations across MTW and HVO. The sequencing and timing has been organised to achieve continuous operation whilst minimising interaction between the underground operations and the open cuts. At this time no consideration has been given to the impact on total output of the complex or processing capacity.

Figure 16-10 Conceptual underground production schedule

16.4 Operating and Capital Costs

Capital Costs

RPM has provided indicative capital costs based upon typical industry costs observed in recent years. The general logic behind the estimate is as follows:

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- MTW - Mount Arthur is a new operation and must bear the initial capital cost of all new equipment and infrastructure.
- MTW - Vaux South is an incremental extension of the MTW - Mount Arthur operations and other than the installation of new underground services and infrastructure, should be able to utilise much of the equipment already in operation.
- MTW - Vaux north is a satellite operation and as such will require the installation of all new fixed infrastructure however will be able to utilise the production and mobile equipment from existing operations.
- MTW - Bayswater represents an expansion to the underground operations, it is operating in a much thicker seam and so little of the existing equipment is transferrable. Other than the limited additional depth for access, this will be similar to establishing a completely new operation.
- HVO - Barrett is another satellite operation and has been costed in a similar manner to Vaux North. By this point however, it is estimated that the original powered roof supports will have completed their life and a new set will need to be purchased.

Table 16-10 provides a summary of the timing and breakdown of the estimate of initial capital costs. As estimates have been based upon database figures, individual line items should be considered with a level of accuracy of +/- 50%. Contingency has been applied at 15%.

Table 16-10 Initial capital estimate

	Owners Cost	Mt Arthur	Vaux South	Vaux North	Bayswater	Barrett	Total
Key Dates							
Mine access		Y-2	Y6	Y11	Y10	Y14	
Longwall		Y1	Y9	Y14	Y13	Y17	
Initial Capital							
Set up	100						100
Mine access		87	15	128	30	102	362
MIA		25				25	50
Ventilation		40		40	20	40	140
Development		75			75		150
Longwall eqt		163			190	163	516
Coal clearance		30	15	30	15	30	120
Diesel eqt		22	11		22	11	66
UG Infrastructure		55	28	55	28	55	220
Closure	100						100
Neat estimate	**200**	**497**	**69**	**253**	**380**	**426**	**1,824**
Contingency	30	75	10	38	57	64	274
Total	**230**	**572**	**79**	**291**	**436**	**490**	**2,098**

Sustaining capital is required to cover the replacement of operational equipment, other than the powered roof supports which are costed individually. Historical records show that sustaining capital for underground operations typically ranges between AUD4/t ROM and AUD8/t ROM depending on the age and complexity of the operation. RPM has applied high level sustaining capital rates in ***Table 16-11*** to provide a life of mine sustaining capital estimate. It is assumed that this is distributed over the life of mine in proportion to total ROM output.

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Table 16-11 Sustaining capital estimate

	Mt Arthur	Vaux South	Vaux North	Bayswater	Barrett	Total
ROM (Mt)	45	25	15	185	50	320
Rate (AUD/t ROM)	3	5	5	5	5	
Total (AUDM)	**135**	**125**	**75**	**925**	**250**	**1,510**

Operating Costs

Operating cost ranges for the underground have been developed from RPM's industry knowledge in line with the level of accuracy of the CAPEX. Underground costs are typically categorised into development, longwall, outbye and engineering to provide a "Pit Top Cost". Additional costs for technical services and general and admin have also been applied to provide a total underground operating costs. Costs are included to a ROM pad at the Pit Top, however surface transport costs to CHPP's, Coal processing, rail freight and Corporate overhead are not included. These are assumed to be in line with the current open cut OPEX which are detailed in Appendix G (LOM average of AUD13.8/ROM t HVO and AUD10.7/ROM t MTW). Examples of a breakdown of these costs for three scenarios are provided on ***Table 16-12***. The three scenarios are as follows:

- Scenario 1 – 2.0m seam at 250m depth of cover with a production rate of 4.5Mtpa. This is similar to the HVO Barrett underground target.
- Scenario 2 – 2.5m seam at 150m depth of cover with a production rate of 5.5Mtpa. This would be similar to the MTW Mount Arthur operation.
- Scenario 3 – 6.0m seam at 350m depth of cover with a production rate of 8.0Mtpa. This would be similar to Bayswater.

Table 16-12 UG OPEX Cost scenarios

	Cost Scenario 1 (AUD/t ROM)	Cost Scenario 2 (AUD/t ROM)	Cost Scenario 3 (AUD/t ROM)
Development	13.1	9.1	3.9
Longwall	8.9	6.8	8.9
Outbye	6.7	5.6	5.2
Engineering	4.2	3.4	3.3
Pit Top Cost	33.5	24.9	21.3
Technical Services	1.1	1.0	0.8
General & Admin	1.7	1.5	1.2
Total Underground	**36.3***	**27.3***	**23.3***

**Excludes CHPP and Offsite costs which total LOM average of AUD13.8/ROM t HVO and AUD10.7/ROM t MTW*

Table 16-12 illustrates the wide variability in costs in respect to different operating conditions and mining approach. This creates a high level of uncertainty with regard to high-level estimates of underground operations and little reliance may be attached to any unit rates before more detailed analysis is undertaken.

Figure 16-11 shows the operating cost output range over depth, thickness and production. Indicative positions of each of the underground targets have been provided on the chart to illustrate the relative attractiveness of each deposit.

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Figure 16-11 Site Operating cost ranges

16.5 Development Sequence Overview

Development of underground mines generally encompasses a number of steps which vary in both length and costs, these include:

- Exploration and Mining Studies.
- External Approvals and
- Construction and Operations.

The UG Project has advanced the initial exploration and study phase as outlined above. These works have highlighted the economic potential in the UG Project.

Exploration and studies

The progression of exploration through the various stages of study, to construction and ultimately operation are dictated by three primary factors:

1. External approvals – this includes federal and state approvals and encompasses environmental and mining approvals.

2. Internal approvals – these approvals predominantly relate to the release of funds and provision of corporate support for progression to the next phase of study or development.

3. Time to complete a phase of study or construction.

Internal approvals

Internal approval processes and the manner in which they are implemented are specific to individual organisations and their objectives. These approvals can in some cases have a greater impact on the project development timeline than external approvals.

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Study phase

An exploration and study program required to prove up a greenfield coal deposit normally follows three distinct study phases. The actual length of each study phase is not fixed and will depend upon the size and complexity of the resource, specific community or environmental issues and the quality of the supporting data and analysis at the start of the study phase. In addition to this, the depth of investigation and analysis required by the client may vary significantly from one organisation to another and this will be reflected in the time that a company is prepared to invest in a particular phase.

RPM understands that The Company will begin Pre-feasibility studies in 2018.

Exploration

Staged exploration work is undertaken prior to and throughout the early stages of each of the above study phases. This exploration work is progressively focused on the higher-value areas within the deposit and is tailored to meet the objectives of the study phases. The deposit's JORC classification status therefore progresses from exploration results through to Measured Resources throughout the study phases.

At the Concept Study phase, much of the data available for the deposit would be Inferred with some broad portions brought up to higher classification status. During the Pre-feasibility stage, the key areas of the deposit sufficient in size on which to base a reasonable-sized mine are typically elevated to an Indicated status. At the completion of a final Feasibility Study, it is typical to have the area which is planned to be mined during the first five to ten years of mine life, explored sufficiently to be classed as Measured Resources, with the remainder of the proposed mine's resources remaining at an Indicated Resource level. As the mine is developed, ongoing exploration required for the completion of detailed mine planning will progressively elevate the life of mine resources from an Indicated to Measured status.

RPM understands that The Company will begin Pre-feasibility exploration in 2018.

The duration of each stage of exploration is largely dependent upon the size, depth and geological complexity of the resource. Access and weather conditions can also impact on the actual time to complete each stage. **Figure 16-12** shows the Company's indicative timeline for the project.

Figure 16-12 Staged Exploration and Study Time Line

Summary

RPM concludes that for a greenfield site with no approvals, it is likely to take around five years to complete exploration, mining and associated studies and relevant environmental studies and approvals. Following this there is likely to be a full year prior to the commencement of construction, during which internal approvals and funding is obtained, engineering design and tendering / procurement commence. Surface construction and underground access plus development can be expected to continue for around 3 years before the longwall can commence operation.

RPM highlights that the HVO/MTW operations are currently active mines, as such the ramp up timeline may be reduced significantly given the current site and regional infrastructure in place. As outlined below there is a number of options to develop the underground operations in conjunction with the open pit operations. These options will be analysed and optimised as part of the ongoing pre-feasibility study being completed by the Company.

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16.6 Development Options

RPM understands that there is no set development option or sequence for the UG Projects, however RPM notes that there are various options which are being considered in current studies which are flexible in timing of commences and can optimise the interaction between the current operations and underground while realising value however not to the detriment to the current open cut LOM.

RPM notes there are two key limitations of the underground production, these include the interactions between the open cut and underground operations along with the ability to process additional material planned to be produced from the underground mines. RPM is aware the Company has significant experience with operating open cut and underground operations, including within the same project such as at Moolarben. As such this is not considered a limiting factor, however will require detailed planning an ongoing optimising to ensure no impact between the two operations such as the waste and tailings material in pit dumping strategy as outlined above. RPM considers the key consideration to the development of the underground operation is the ability to process additional run of mine coal. Of importance, as outlined in Section 11 the HVO and MTW operations have a total of four CHPP's with a total capacity of 42mtpa while planned ROM production is 20.6Mtpa at HVO and 17Mtpa at MTW. As such there is some capacity for increased throughput at the current plants however the likely production rate is well in addition to this level (5 to 8mpta). RPM notes there are three main scenarios for production plant:

- Scenario1 - Delay Underground operations beyond the open pit mine life at MTW. RPM does not consider this an attractive viable option with production currently planned to cease at MTW in 2040. As such no value would be realised in this scenario in the short term, nor would this allow offset of the current take or pay commitments.
- Scenario 2 – Maximise throughput case. Construct an additional CHPP to process all underground production. While this would add additional CAPEX to the start-up costs this scenario but would realise value in the short term, in addition to allow a dedicated CHPP without interaction with the open cut operations or the seams which will be mined. RPM is aware there are potential locations for a CHPP.
- Scenario 3 – Capped throughput case. Limit production to the excess capacity at the current CHPP. This would limit start-up CAPEX and simplify the underground production plan (one Longwall vs two), however would reduce the realised value in the short term. While decreasing the production complexity this would increase the complexity in the CHPP due to variable seam throughputs. RPM notes that the CHPP's currently process up to four seams as such this would not be considered a limiting factor.
- Scenario 4 – A combination of scenario 2 and 3. This scenario would allow significant flexibility in the underground operations while maximising the current CHPP capacity. As with Scenario three this would increase the interaction with the open cut operation however this is not considered a determining factor in optimsation decisions

RPM considers all four scenario to be achievable and realistic and highlight the commercial path to production of the operation, however given the current level of study no detail options analysis has been completed nor it is warranted at this stage. In determining the optimal development scenario a number of studies, both on a technical and commercial front, need to be considered, these are planned to occur over the next 12 to 18 months.

16.7 Risk Overview

Some of the key risks that will be addressed as part of the ongoing studies into the potential for underground operations at MTW and HVO include:

- **Mining Approvals** - No current mining approvals are in place for commencement of UG operations. These are expected to take a period of time, however systematic approach is in place in NSW.
- **Geotechnical Conditions** - Assessment of geotechnical conditions and the resultant productivity and cost impacts arising from mining multiple seams. This will include defining effective subsidence management as well as gas and spontaneous combustion management strategies particularly in areas of reduced interburden.
- **Interaction with Open Cut** - No studies have been undertaken to determine and plan for impact on current operations and CHPP. This would include current tailings and waste storage plans and impact on underground operations.

- **Geological Information** - Delineation of any limiting geological structures (faults, dykes, sills, etc.) in seams not currently mined by open cut methods.

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17. Mine Risks and Opportunity Assessment

17.1 Opportunity

RPM considers there are several opportunities within the Assets. These include:

- **HVO/MTW Underground** –As further outlined in ***Section 16*** this would include multiple areas and could be undertaken in conjunction with the current open pit operations. If undertaken this would increase ROM production by up to 5 to 7Mtpa and have the added advantage of augmenting take or pay commitments of the groups operation.
- **HVO Boundary Coal Pillar**- The current Coal Reserves and LOM plans excludes significant coal within the boundary pillar of the tenement holding due to the inability of mining across the tenement boundary on the neighbouring tenement (***Figure 9-3***). A study from a third party indicates that an additional coal tonnage of between 100 and 120Mt could be exploited with extensions of the West, Carrington East, Riverview East and West and Cheshunt Deep pits. Integrated mine planning to a PFS level of detail is required to confirm this coal is technically feasible and economically viable. Following completion of this work then boundary coal may be considered for inclusion in Company mine plans and inclusion in Coal Reserves.
- **Blending** – The current LOM plan presented in this Report and the supporting cashflow analysis, assumes no blending occurs either within the operations or between the operations. The products generated by the operations are generally high value coal types and blending based on product qualities can realise additional value rathe then selling single products from the operations. In addition as the Company further incorporates HVO/MTW into its operations this blending strategy could be used to further optimise mining operations in both short and medium term planning through careful and meticulous mine plans focusing on:
  - Maximise the exploitation of the in situ resources by potentially increasing pit limits using improved revenue streams and
  - Incorporate the ability to reach quickly to market condition by changing the short term mine plan to target seams with specific coal qualities.
- **Moolarben Expansion** –The expansion involves optimisations to approved Stage 1 and Stage 2 operations at the Moolarben mine which will increase open cut ROM coal production to 16Mtpa and a Moolarben Complex ROM production capacity of 24Mtpa. The Approvals Modification also involves a minor extension to the OC2 pit limit, minor extensions and reductions of the OC3 pit limits, rehabilitation, water management and relocated/additional surface infrastructure.

17.2 Risk

Mining is a relatively high risk business when compared to other industrial and commercial operations. Each mine has unique characteristics and responses during mining and processing, which can never be wholly predicted. RPM's review of the Mines indicates mine risk profiles typical of large scale mines at similar levels of resource, mine planning and development in Australia. Until further studies provide greater certainty, RPM notes that it has identified risks and opportunities with the Assets as outlined in ***Table 17-2***.

RPM has attempted to classify risks associated with the Mine based on Guidance Note 7 issued by The Stock Exchange of Hong Kong Limited. Risks are ranked as **High**, **Medium** or **Low** and are determined by assessing the perceived consequence of a risk and its likelihood of occurring using the following definitions:

Consequence of risk:

- **Major**: the factor poses an immediate danger of a failure, which if uncorrected, will have a material effect (>15% to 20%) on the Mine cash flow and performance and could potentially lead to Mine failure;
- **Moderate**: the factor, if uncorrected, could have a significant effect (10% to 15% or 20%) on the Mine cash flow and performance unless mitigated by some corrective action and
- **Minor**: the factor, if uncorrected, will have little or no effect (<10%) on Mine cash flow and performance.
- Likelihood of risk occurring within a 7 year timeframe:

- **Likely**: will probably occur;
- **Possible**: may occur and
- **Unlikely**: unlikely to occur.

The consequence of a risk and its likelihood of occurring are then combined into an overall risk assessment as shown in ***Table 17-1*** to determine the overall risk rank.

Table 17-1 Risk Assessment Ranking

Likelihood	Consequence		
	Minor	Moderate	Major
Likely	Medium	High	High
Possible	Low	Medium	High
Unlikely	Low	Low	Medium

RPM notes that in most instances it is likely that through enacting controls identified through detailed review of the Mine's operation, existing documentation and additional technical studies, many of the normally encountered Mine risks may be mitigated.

Table 17-2 Risk Assessment

Risk Ranking	Risk Description and Suggested Further Review	Potential Mitigant	Area of Impact
M	**Community Relations** Communities have voiced grievances against some mine operations, in particular regarding noise and dust emissions, leading to equipment downtime and subsequent investment in noise attenuation equipment for equipment.	Continue proactively engaging with affected communities and implementing noise mitigation strategy to remain in compliance with applicable regulatory standards and minimize equipment downtime. Assess and regularly review the noise impacts of planned mine development in increasing proximity to Bulga and continuously estimate related equipment downtime	OPEX, MTW, Stratford and Moolarben Asset Economics
H	**Coal Bursts - Austar** Several Coal Bursts have occurred within the Austar mine which has resulted in loss of production and forced shutdowns and 2 fatalities in 2014. RPM is aware the company has introduced a number of measures to manage the issue.	Ongoing monitoring of rib and face stress levels during development, implementation of additional face shielding on the longwall, management systems developed and implemented.	Safety and Production
H	**Austar Restart** RPM is aware that the Austar permit for the operation of the longwall has recently been suspended following a coal bursts in 2018 and now has approval for limited longwall activities under controlled conditions. Limited operations at Austar recommenced on 14 August 2018 subject to certain conditions which the mine can comply with however full scale operations are as yet to recommence.	Continue discussions with the regulators.	Full-scale Recommencement timeframe and reserves.
L	**Plant Maintenance - all**		

Risk Ranking	Risk Description and Suggested Further Review	Potential Mitigant	Area of Impact
	Several of the CHPP's are ageing and this is reflected in the requirement for more detailed and systematic planning systems. This presents a risk for increased OPEX and unavailability. RPM is aware that maintenance costs are included in the costs presented in this report	The Company has implementing several system to ensure continued operation and utilisations. Ensure management overview of maintenance.	OPEX
L	**Commodity Price Fluctuation** The market for Coal has been variable over recent years, RPM highlights that while the recent lower commodity prices the operations are still profitable, as such the risk to the profit sensitivity	Long term contracts.	Assets Economics
L	**Data Quality - all** Limited original data or sampling and assay protocols or data is available for the drill hole information. However a significant review program has been undertaken.		Resource estimate
L	**Coal Quality – Middlemount/Stratford and Duralie** Drilling suggests potential issues with coking properties in northern area. No estimate completed for SEOC at Ashton. Coal Qualities based on reconciliation with Avon North Pit	Complete Further grade control drilling and modelling	Plant Yield and Costs
L	**Structural Model – Middlemount** Potential for additional structure such as faults to be encountered during mining	Review structural interpretations at the site. Review geotechnical impacts and operational implications.	Resource estimate/ OPEX
L	**Wallaby Scrub Road Permit - MTW** The Closure of wallaby scrub road agreement with the local council is nearing completion. RPM is aware discussions are well advanced and likely to be completed in the near future.	Confirm closure permit	MTW operations
L	**Relative Density - MTW** Some bias may have occurred within for deposits Of particular note is the regressions noted in Section .6	Complete a reconciliation of the BD completed against the mined areas to determine the variation on a local scale.	Local Variation of Resource estimate
L	**Water Management - Yarrabee and Moolarben** Ongoing permits and approval to ensure supply for CHPP and dust suppression. RPM is aware of management's procedure in place which current manage this risk.	Ongoing approvals procedures and management and monitoring	Ongoing production
L	**Potential Acid Forming Tails and Waste- Stratford** Waste and tails storage of PAF material is ongoing in voids etc. Current management plans in place	Ongoing monitoring and planning both short and long term	Ongoing production
L	**Heavy Metals Contaminations- All**		

Risk Ranking	Risk Description and Suggested Further Review	Potential Mitigant	Area of Impact
	Fate of heavy metals in tailings and potential groundwater and soil contamination have not been assessed. Historical or future contamination could lead to regulatory shut-down, community opposition and clean-up costs	Conduct leaching test and soil and groundwater environmental site assessment at relevant locations in and around tailings facilities	Compliance, Assets Economics (closure and/or clean-up costs)
M	**South East Open Cut Approvals** The mining permit is pending an agreement with a single land holder for access in the SEOC area.	Ongoing Negotiation with landholder	Production commencement date.
M	**Groundwater Impacts - Ashton** Potential compliance risks with extracting the lower seam longwall panels around the Bowmans Creek alluvials in the Ashton underground mine, specifically how much water is drained from the alluvials, how well the workforce is able to maintain economic productivity levels with higher groundwater make into the underground workings and any potential discharge issues associated with the higher water make.	Conduct ongoing groundwater modelling, validated by results from environmental testing.	Local Variation of Reserve estimate

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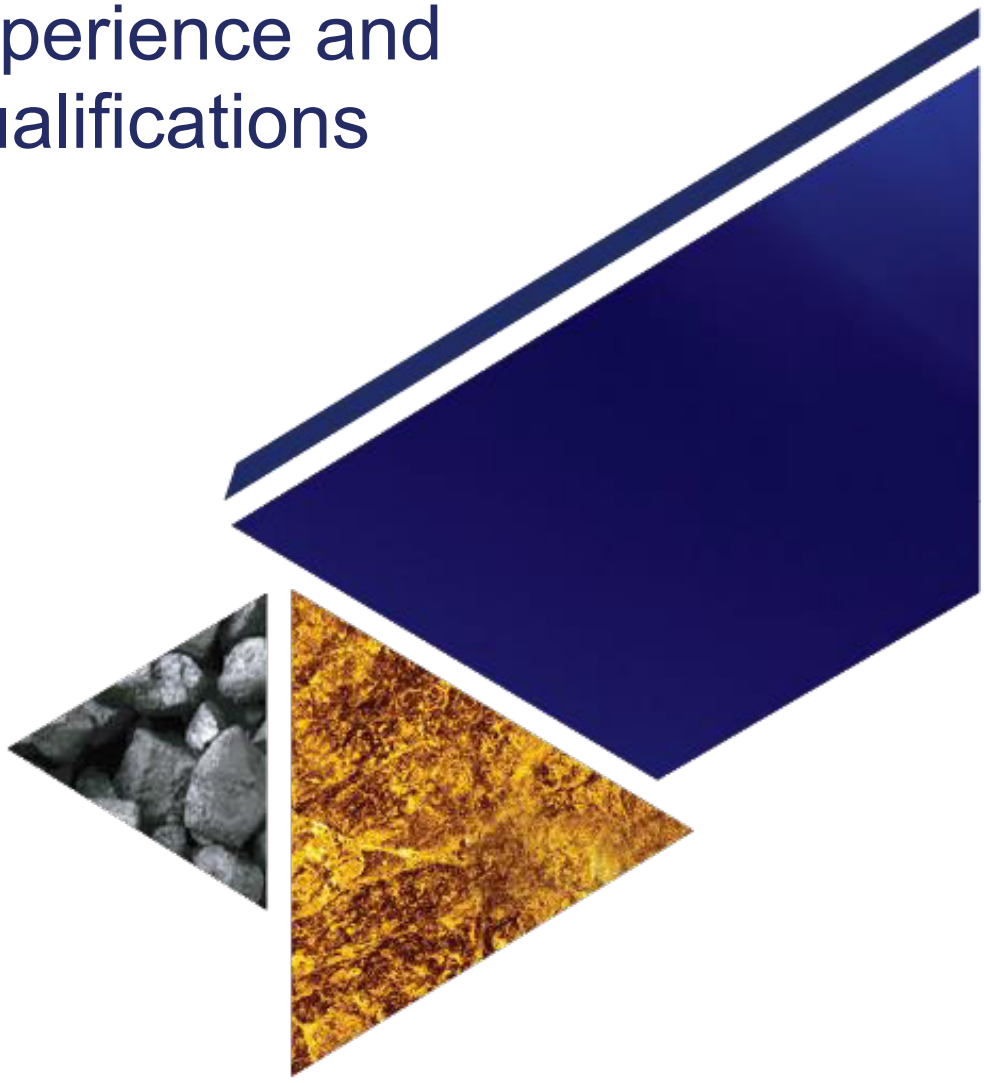
Appendix A. Experience and Qualifications



David McMillan - Master of Engineering - Royal School of Mines - Imperial College, University of London - Executive Consultant RPM (Brisbane)

David's career spans twenty-three years, with over seventeen years of operational experience. He has extensive practical underground and open-cut coal experience working in operational, managerial and technical roles. David's operational experience extends over three continents and covers potash and coal mining. David has been with RPM for six years and currently holds the title of Executive Consultant. During this time he has lead teams in the delivery of major pre-feasibility and feasibility studies for underground coal operations in New South Wales and Queensland. He has also completed numerous technical reviews and mine optimisation studies.

David is a Competent Person for the estimation of Reserves in underground coal operations and is a Registered Professional Engineer of Queensland (RPEQ).

Greg Eisenmenger - Executive Consultant - Bachelor of Engineering (Civil) (Hons)

Greg has more than 35 years of international coal mining industry experience, with a strong technical and general management background. Greg's specific general management capabilities are drawn from involvement in the management of large mining contracts in open cut coal, management of in-house technical and engineering programs, management of the annual budgeting process for individual mine sites and the business unit level and project development involving project definition, tendering, evaluation, award and construction supervision.

Greg is an Executive Consultant with RPM in the mining advisory space, managing coal mining project feasibility studies and undertaking independent technical reviews of mining assets being targeted by potential investors and completing valuations of coal projects.

Brendan Stats - Senior Resource Geologist, Bachelor of Science (Hons) Geology. MAusIMM, MAIG

Brendan is a Geologist with over ten years of experience in the mining industry. Brendan has a strong background in exploration, mine geology, coal quality and open cut geotechnical engineering. Brendan has significant experience working for Rio Tinto in Australia on large open cut coal operations in Queensland and New South Wales. More recently Brendan has worked as a consultant providing services in geology, mine geology, exploration and civil projects. This work involved projects in Australia, Indonesia, South Africa, China, Mozambique and Mongolia. Brendan has worked on mining projects from exploration, project evaluation to operating assets, as well as conducting resource estimate and reporting for listed companies.

With substantial experience in coal, Brendan meets the requirements for Qualified Person for NI 43-101 reporting and Competent Person for JORC reporting for most Coal Resources.

Jeremy Clark – Manager, Hong Kong, Bsc. with Honours in Applied Geology, Grad Cert Geostatistics, MAIG, MAusimm

Jeremy has over 15 years of experience working in the mining industry. During this time he has been responsible for the planning, implementation and supervision of various exploration programs, open pit and underground production duties, detailed structural and geological mapping and logging and has a wide range of experience in resource estimation techniques. Jeremy's wide range of experience within various mining operations in Australia and recent experience working in South and North America gives him an excellent practical and theoretical basis for resource estimation of various metalliferous deposits including Iron Coal and extensive experience in reporting resource under the recommendations of the JORC and NI-43-101 reporting codes.

With relevant experience in a wide range of commodity and deposit types, Jeremy meets the requirements for Qualified Person for 43-101 reporting and Competent Person ("CP") for JORC reporting for most metalliferous Coal Resources. Jeremy is a member of the Australian Institute of Geoscientists

Philippe Baudry – General Manager – China and Mongolia, Bsc. Coal Exploration and Mining Geology, Assoc. Dip Geo science, Grad Cert Geostatistics, MAIG

Philippe is a geologist with over 20 years of experience in the mining industry. With a strong background in mine geology where he worked in both open cut and underground precious metal mines in Western Australia, Philippe gained a post graduate qualification in Geostatistics leading to a specialization in resource estimation and project evaluation. Over the last 11 years Phil has worked as a consultant focused on the Asian and Russian regions and after 3 years living and working in Russia developing 2 porphyry copper projects he moved to Beijing where for the past 9 years he has built up and managed RPM's business in north Asia including offices in China, Hong Kong, Mongolia and Russia before taking over responsibility for RPM's global advisory division which includes over 100 employees in 20 offices.

During his time in Asia, Philippe has worked closely with leading financial institutions across Asia and Europe on transactions ranging from Commercial Loan, Due Diligences to IPO's and has gained detailed understanding of the requirements of both investors and banks in regards to commercial loans, public technical report requirements and listing processes on various financial exchanges. Philippe has an in depth knowledge of the Soviet and other Asian resource/reserve reporting systems and has gained significant experience in both reviewing projects based on these systems and in converting projects from this region to international standards of reporting such as JORC and NI 43-101.

Philippe is a Member of AIG and is a Competent Person and Qualified person (JORC and NI 43-101) for both base and precious metals Mineral Resources.

Doug Sillar – Senior Engineer – Bachelor of Engineering (Mining) (Hons), Grad Dip App Finn, MAusIMM

Doug's work history spans over 16 years in the mining industry. During this time he has developed significant experience in the mining engineering field including expertise in a wide range of areas such as life of mine planning, optimisation of mining operations, mining options studies and design and scheduling. Doug's engineering career has seen him manage a number of mine planning studies ranging from high level conceptual studies through to full feasibility studies.

Throughout his career Doug has developed an ability to analyse the technical and economic issues of mine planning. He has strong project financial evaluation skills and the ability to develop project financial models including capital and operating costs, discounted cash flows and project valuations. Doug has achieved a Graduate Diploma of Applied Finance from Kaplan which compliments his strong technical skillset.

Company's Relevant Experience

RPM (RPM) is the market leader in the innovation of advisory and technology solutions that optimize the economic value of mining Assets and operations. RPM has serviced the industry with a full suite of advisory services for over 50 years and is the largest publicly traded independent group of mining technical experts in the world.

RPM has completed over 14,000 studies across all major commodities and mining methods, having worked in over 118 countries globally.

RPM has operations in all of the world's key mining locations enabling them to provide experts who understand the local language, culture and terrain. RPM's global team of technical specialists are located in 18 offices around the world. Through their global network, RPM can provide you access to the right specialist technical skills for your Assets.

RPM's advisory division operates as independent technical consultants providing services across the entire mining life cycle including exploration and Assets feasibility, resource and reserve evaluation, mining engineering and mine valuation services to both the mining and financial services industries.

RPM's trusted advisors typically complete assignments across all commodities in the disciplines of:

- Geology;
- Mining Engineering;
- Coals Processing;
- Coal Handling and Preparation;
- Infrastructure and Transportation;
- Environmental Management;

- Contracts Management;
- Mine Management;
- Finance and Assets Funding;
- Commercial Negotiations.

RPM was founded in Australia and as a result, has a solid understanding of and is committed to compliance with the codes which regulate Australian corporations and consultants.

Over the past 45 years, RPM has grown into an international business which has continued to provide Client and those that rely on its work the confidence that can be associated by the use of the relevant global industry codes some of which include:

- The Australasian Institute of Mining and Metallurgy Code of Ethics;
- The Australasian Code for Reporting of Exploration Results, Coal Resources and Coal Reserves;
- The Australian Institute of Geoscientists Code of Ethics and Practices;
- Society for Mining, Metallurgy and Exploration Code of Ethics; and
- The National Instrument 43-101 Standards of Disclosure for Coal Assets.

RPM has conducted numerous independent mining technical due diligence studies and reporting for IPO's and capital raisings under the requirements of all key mining equity markets over the past six years, with involvement in capital raisings worth more than USD44 billion. Some of this and other work is summarised in ***Table A1***.

RPM leverages the power of its specialist knowledge to also provide cutting edge mining software that is sought after globally for mine scheduling, equipment simulation and financial analysis. RPM software is relied on by mining professionals to understand how to structure their long and short term operations efficiently using auditable best practice methodologies and solutions.

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Table A1 - Mining Related IPO and Capital Raising Due Diligence Experience

2017 China Molybdenum Company., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKEx Prospectus to support the a indirect Major Transaction for the acquisition of the Tenke Copper and Cobalt Mine, DRC.

2016 China Molybdenum Company., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKEx Prospectus to support the a Major Transaction for the acquisition of the Tenke Copper and Cobalt Mine, DRC.

2016 China Molybdenum Company., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKEx Prospectus to support the a Major Transaction for the acquisition of the Phosphate and Niobium Mine Brazil

2016 CGN Mining Company Limited; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKEx Prospectus to support the a Major Transaction for the acquisition of a 19.9% equity stake in Fission Uranium Corps Pattersons Lake Uranium Project, Canada**.**

2015 BHP Limited Demerger into South 32; independent technical review and compilation of a Competent Persons Report as defined by the European Securities and Markets Authority's Recommendations on consistent implementation of Commission Regulations ("EC") No 809/2004 implementing the Prospective Directive (the "ESMA Recommendations"). The ITR was completed on the assets of Illawarra Coal Holdings located in the New South Wales state of Australia.

2014. MMG., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Prospectus to support the acquisition of the Las Bambas Copper Mine, Peru.

2014 Hidili International Development Company., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Prospectus to support the divestment of Multiple Coal Mines, Yunnan Province, China.

2013 China Molybdenum Company., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Prospectus to support the acquisition of the Northparkes Copper and Au Mine, Central West NSW, Australia.

2012 China Au Resources International., Ltd; Tibet Jiama Copper-Polymetallic Phase II NI 43-101 HKEx Pre-Feasibility Study. China

2012 China Precious Metal Resources Holdings Co., Ltd Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Prospectus to support the acquisition of an Au Operation Yunnan Province, China.

2012 Kinetic Mines and Energy., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Prospectus to support the IPO of an underground coal asset in Inner Mongolia Province, China.

2012 China Daye Non-Ferrous Metals Mining., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Prospectus to support the acquisition of 4 operating underground copper, lead, zinc assets in Hubei Province, China.

2012 Huili Resources Group ., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Prospectus to support the IPO of multiple underground nickel, lead, zinc, copper and au mining assets in Xinjiang and Hami Province, China.

2011 China Polymetallic Limited Mining., Ltd; Competent Persons Report of Mineral Resources and Ore Reserves under JORC and Independent Technical Review for inclusion in a HKSE Prospectus to support the IPO of a lead zinc silver polymetallic underground mining assets in Yunnan Province, China.

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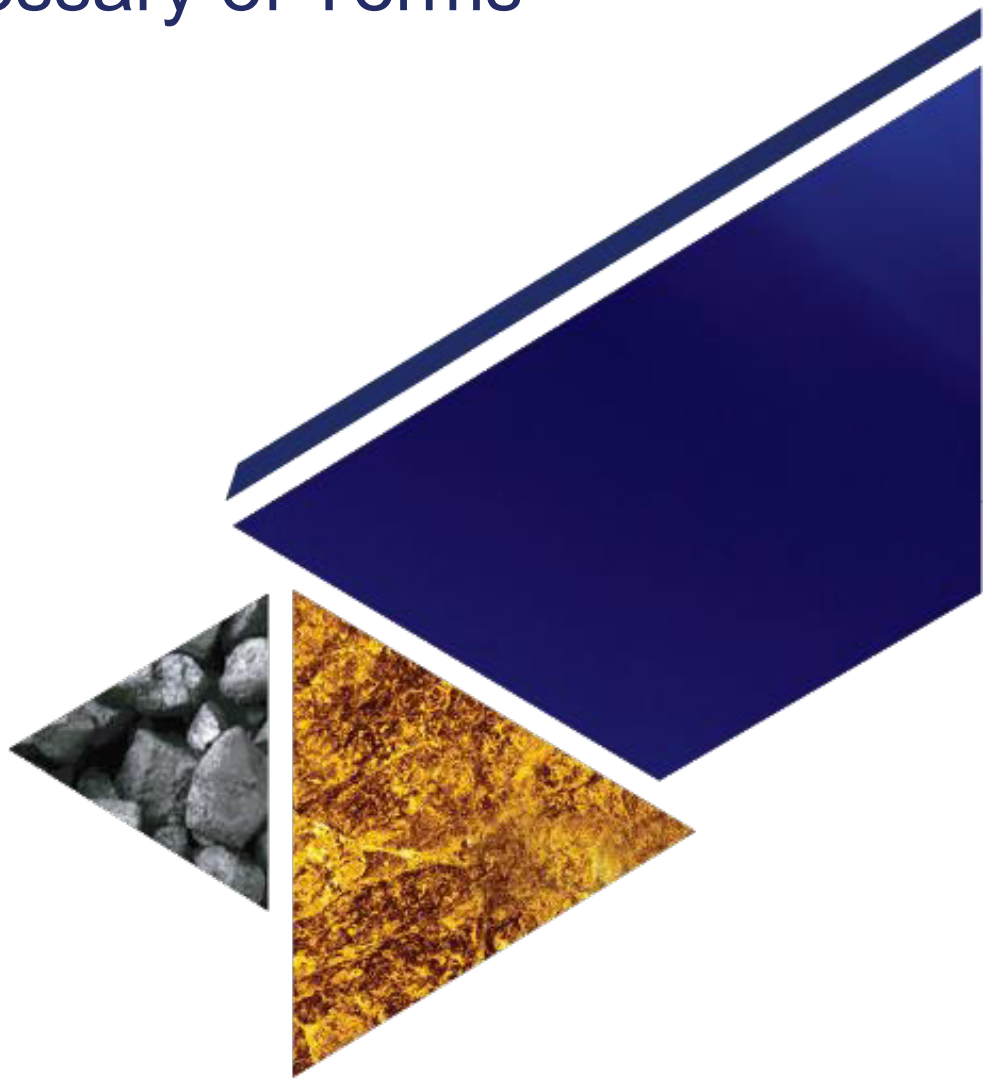
Appendix B. Glossary of Terms



Abbreviation	Unit or Term
A	Ampere
ad	air dry
adb	air dry basis
AFC	Armoured Face Conveyor
AHD	Australian Height Datum
AIG	Australian Institute of Geoscientists
AOP	Annual Operations Plan
ar	as received
arb	as received basis
ARD	Apparent Relative Density
ARTC	Australia Rail Track Corporation
AUD	Australian Dollar
AUSIMM	Australasian Institute of Mining and Metallurgy
bcm	bank cubic metre
BESR	Break Even Strip Ratio
BoW	Base of Weathering
C	Celsius (temperature)
Ca	Calcium
CAPEX	Capital expenses
CHPP	Coal Handling Processing Plant
Client	Yancoal Australia Ltd
Company	Yancoal Australia Ltd
CPR	Competent Persons Report
CQCN	Central Queensland Coal Network
CSN	Crucible Swell Number
DD	Diamond Drillholes
ddpm	dial divisions per minute
DES	Department of Environment and Science (Qld)
DMC	Dense Medium Cyclone
DNRME	Department of Natural Resources, Mining and Energy (Qld)
DPE	Department of Planning and Environment (NSW)
DPI	Department of Primary Industry
DTM	Digital Terrain Model
EA	Environmental Authority (Qld)
EHS	Environmental, Health and Safety
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMS	Environmental Management System
EP	Equator Principles
EPA	Environmental Protection Authority (NSW)
EPBC	Environment Protection and Biodiversity Conservation (EPBC Act 1999)
EPC	Exploration Permit for Coal
EPCM	Engineering, Procurement, Construction Management
EPL	Environment Protection Licence
ESAP	Environmental and Social Action Plan
FoS	Factor of safety
FS	Feasibility Study
g	Grams
g/cc	Grams per cubic centimetre (density measurement)
gar	gross as received
GDB	Geological Database
GPS	Global Positioning System
HGI	Hardgrove Grindability
HKEx	Hong Kong Stock Exchange
HVCC	Hunter Valley Coal Chain
HVO	Hunter Valley Operations
HVON	HVO North
HVOS	HVO South
H:V	Horizontal:Vertical ratio

hp	Horsepower
H2SO4	Sulphuric acid
Hz	hertz
JORC	Joint Coal Reserves Committee
JORC Code	Refers to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 edition, which is used to determine resources and reserves and is published by JORC on behalf of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Minerals Council of Australia
kcal	thousands of calories
km	kilometre
sq.km	square kilometres
Kt	thousands of tonnes
ktpa	thousands of tonnes per year
kV	kilovolt
kW	kilowatt
kWh	kilowatt hour
l	Litre
l/s	Litres per second
LAS	Log ASCII Standard
lb	pound
lbs	pounds
LD	Large Diameter
LOM	Life of Mine
LPMA	Lands and Property Management Authority
LTCC	Longwall Top Coal Caving
m	metre
cu.m	cubic metre
masl	meters above sea level
M	Million
MBcm	Million Bank cubic metres
M&I	Measured and Indicated (with respect to Resources)
ML	Mining Lease
MOP	Mine Operations Plan
Mt	Million tonnes
Mtpa	Million tonnes per annum
MTW	Mount Thorley/Warkworth
MW	megawatt
MWh	megawatt-hour
nar	net as received
NPV	Net present value
NSW	New South Wales
OC	Open Cut
OK	Ordinary Kriging
OPEX	Operational expenses
P	Phosphorus
PCI	Pulverised Coal Injection
PG	Professional Geologist
PoO	Point of Observation
PPE	Personal Protective Equipment
ppm	parts per million
QA/QC	quality-assurance/quality-control
QLD	Queensland
RC	Reverse Circulation Drill Holes
RCE	Rehabilitation Cost Estimate
RD	Relative Density
Rec	Recovery
ROI	Return on investment (percentage, after tax)
ROM	Run of Mine
RPM	RPM Global
Rv max	Vitrinite Reflectance

S	Sulphur
SD	Standard deviation
SGBB	Sydney-Gunnedah-Bowen Basin
SO_2	Sulphur Dioxide
SR	Strip Ratio (expressed either as t:t or bcm:t)
SSCC	Semi Soft Coking Coal
t	Metric tonne
tph	Metric tonnes per hour
tpd	Metric tonnes per day
t/m^3	Tonnes per cubic metre (density measurement)
TSF	Tailings Storage Facility
UCS	Uniaxial Compressive Strength
UG	Underground
USD	United States Dollars
Wi	Work index (grinding characteristic of rock)
WWTP	waste water treatment plant
XRF	X-ray fluorescence
YAL	Yancoal Australia Ltd
2D	2 Dimensional
3D	3 Dimensional

Note: Where the terms Competent Person, Inferred Resources and Measured and Indicated Resources are used in this report, they have the same meaning as in the JORC Code.

A 'Coal Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Coal Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Coal Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Coal Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

A 'Measured Coal Resource' is that part of a Coal Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.

Mineralisation may be classified as a Measured Coal Resource when the nature, quality, amount and distribution of data are such as to leave no reasonable doubt, in the opinion of the Competent Person determining the Coal Resource, that the tonnage and grade of the mineralisation can be estimated to within close limits and that any variation from the estimate would be unlikely to significantly affect potential economic viability.

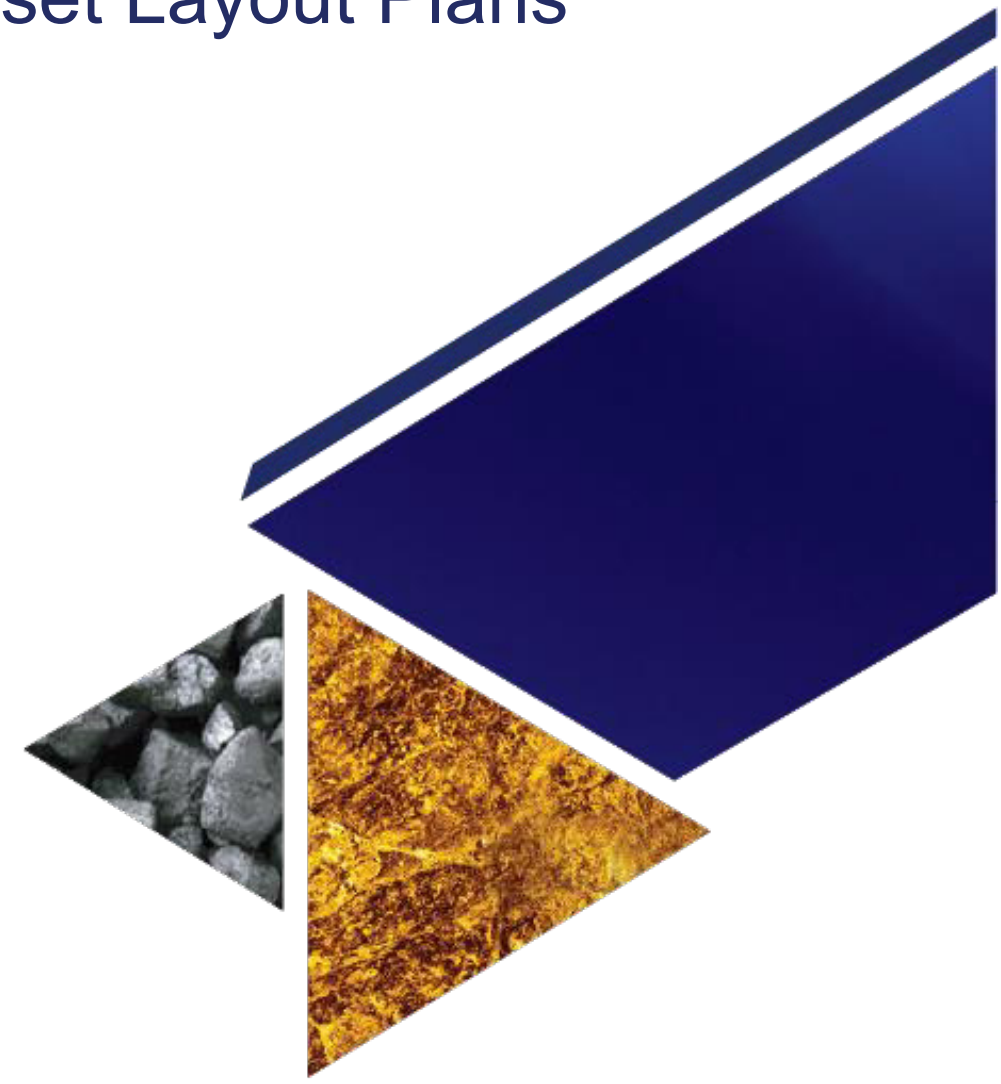
An 'Indicated Coal Resource' is that part of a Coal Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.

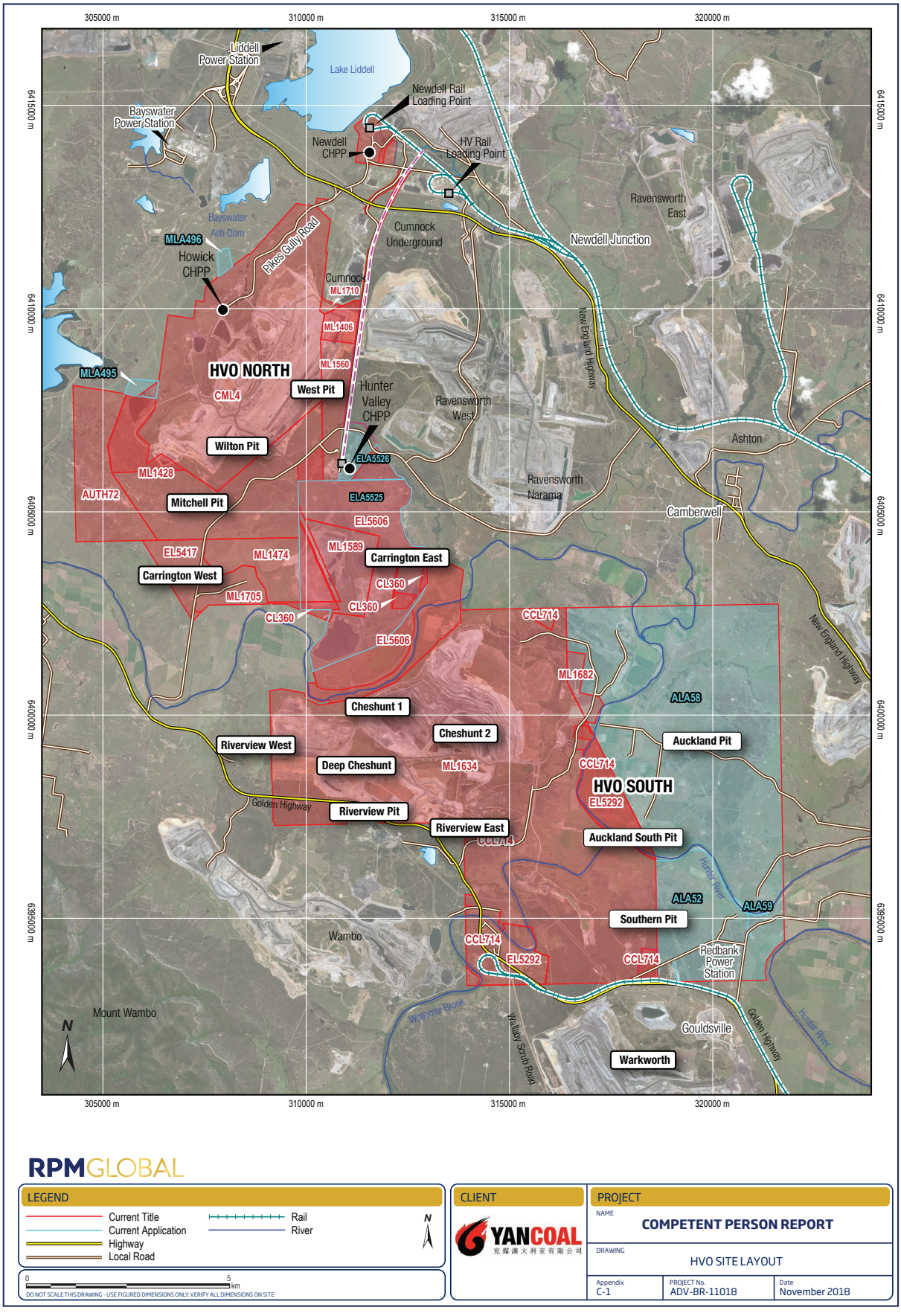
An Indicated Coal Resource has a lower level of confidence than that applying to a Measured Coal Resource, however has a higher level of confidence than that applying to an Inferred Coal Resource. Mineralisation may be classified as an Indicated Coal Resource when the nature, quality, amount and distribution of data are such as to allow confident interpretation of the geological framework and to assume continuity of mineralisation. Confidence in the estimate is sufficient to allow the application of technical and economic parameters and to enable an evaluation of economic viability.

An 'Inferred Coal Resource' is that part of a Coal Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability.

An Inferred Coal Resource has a lower level of confidence than that applying to an Indicated Coal Resource. The Inferred category is intended to cover situations where a mineral concentration or occurrence has been identified and limited measurements and sampling completed, however where the data are insufficient to allow the geological and/or grade continuity to be confidently interpreted. Commonly, it would be reasonable to expect that the majority of Inferred Coal Resources would upgrade to Indicated Coal Resources with continued exploration. However, due to the uncertainty of Inferred Coal Resources, it should not be assumed that such upgrading will always occur. Confidence in the estimate of Inferred Coal Resources is usually not sufficient to allow the results of the application of technical and economic parameters to be used for detailed planning. For this reason, there is no direct link from an Inferred Resource to any category of Ore Reserves.

Appendix C.
Asset Layout Plans





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LEGEND

Current Title
Current Application
Highway
Local Road
Rail
River
N

0 5 km

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

YANCOAL 兖煤澳大利亚有限公司

PROJECT

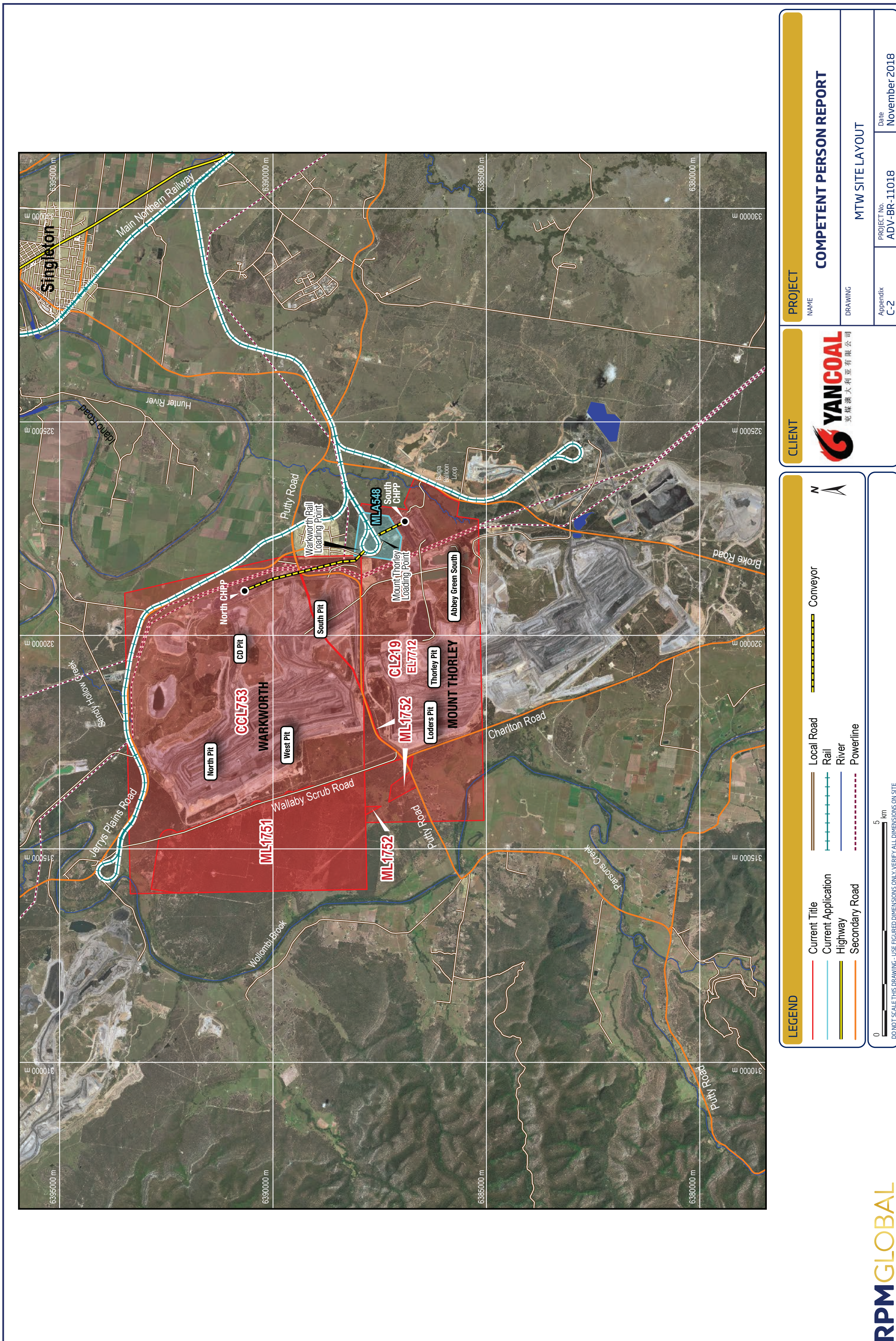
NAME

COMPETENT PERSON REPORT

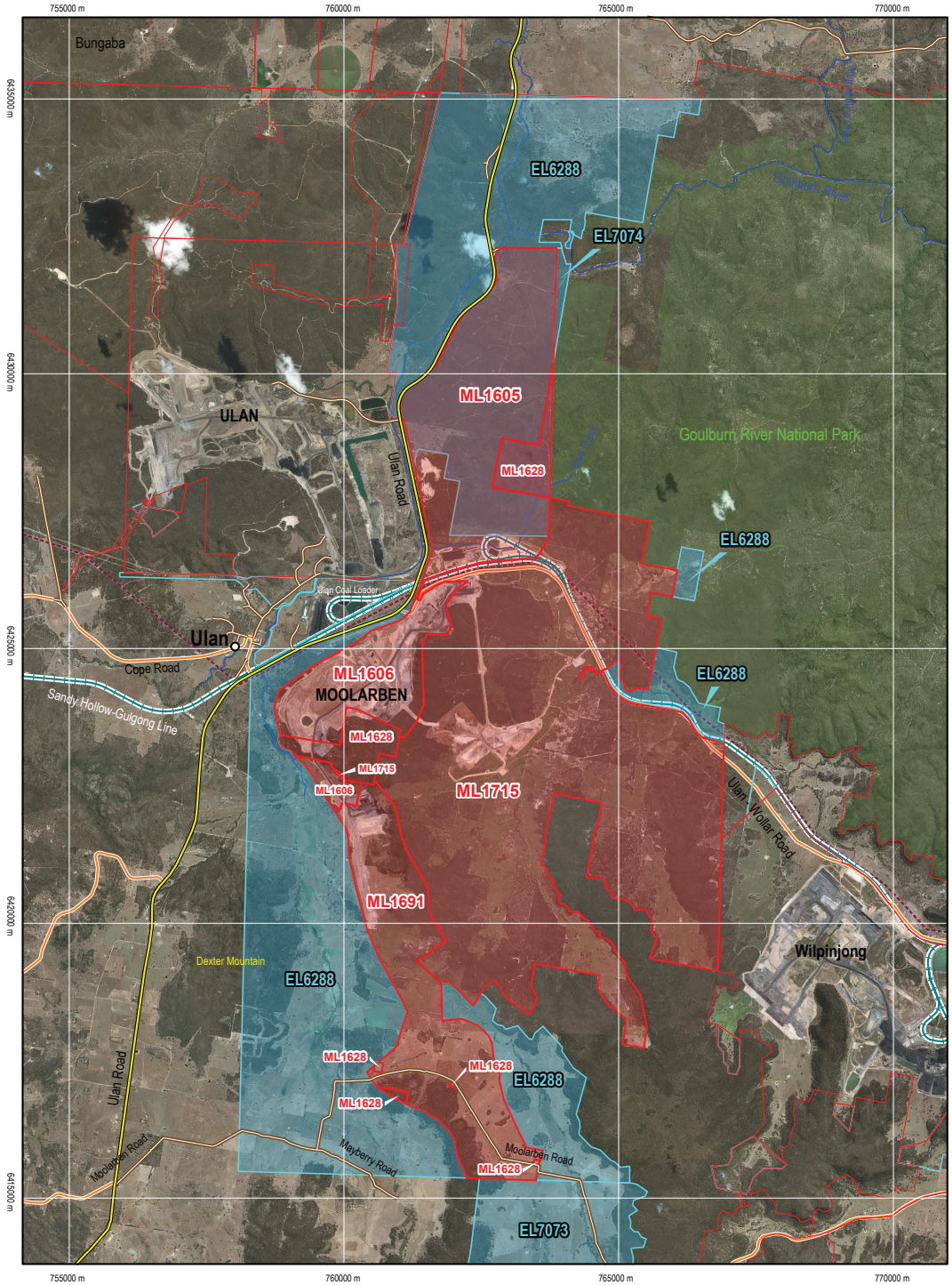
DRAWING

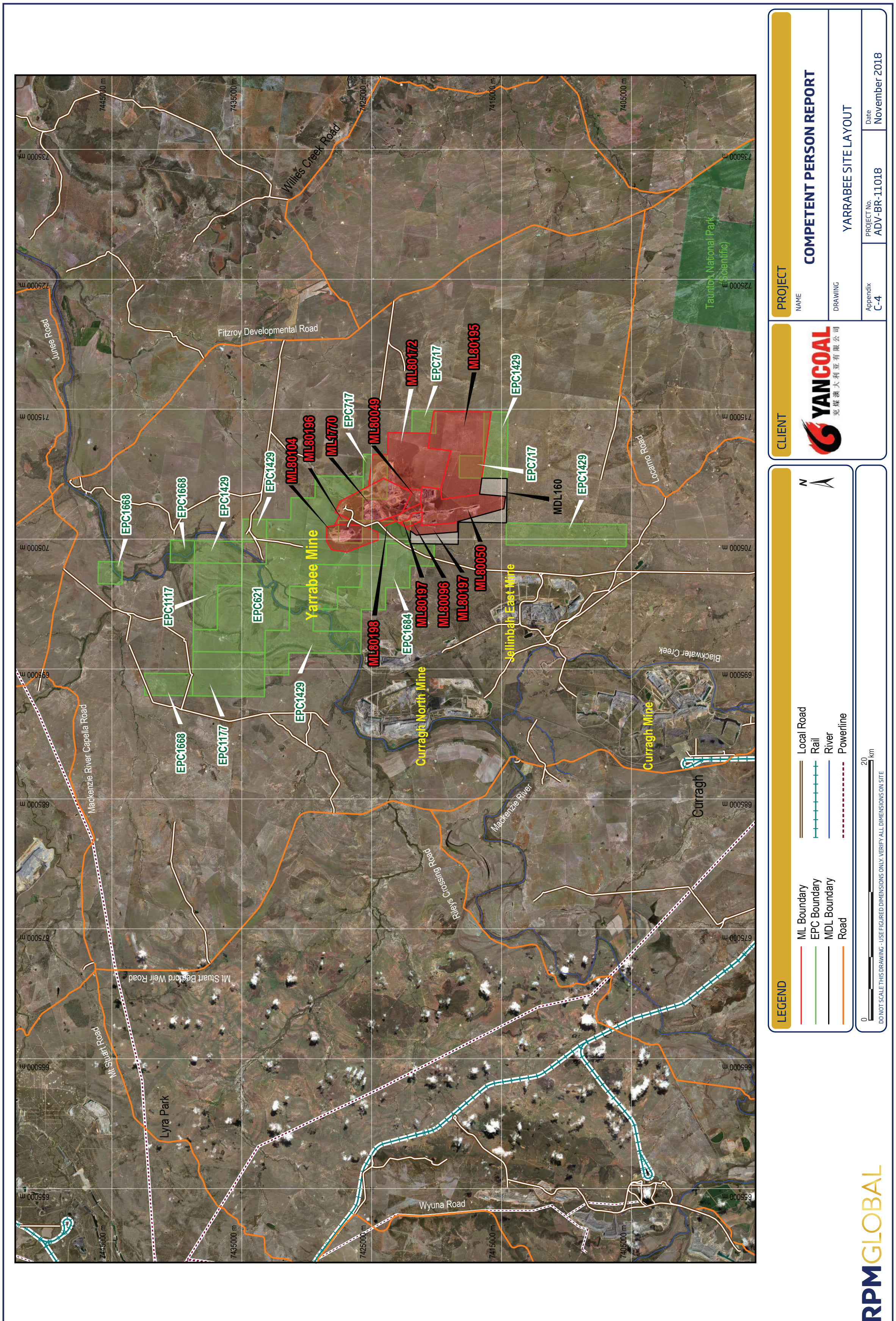
HVO SITE LAYOUT

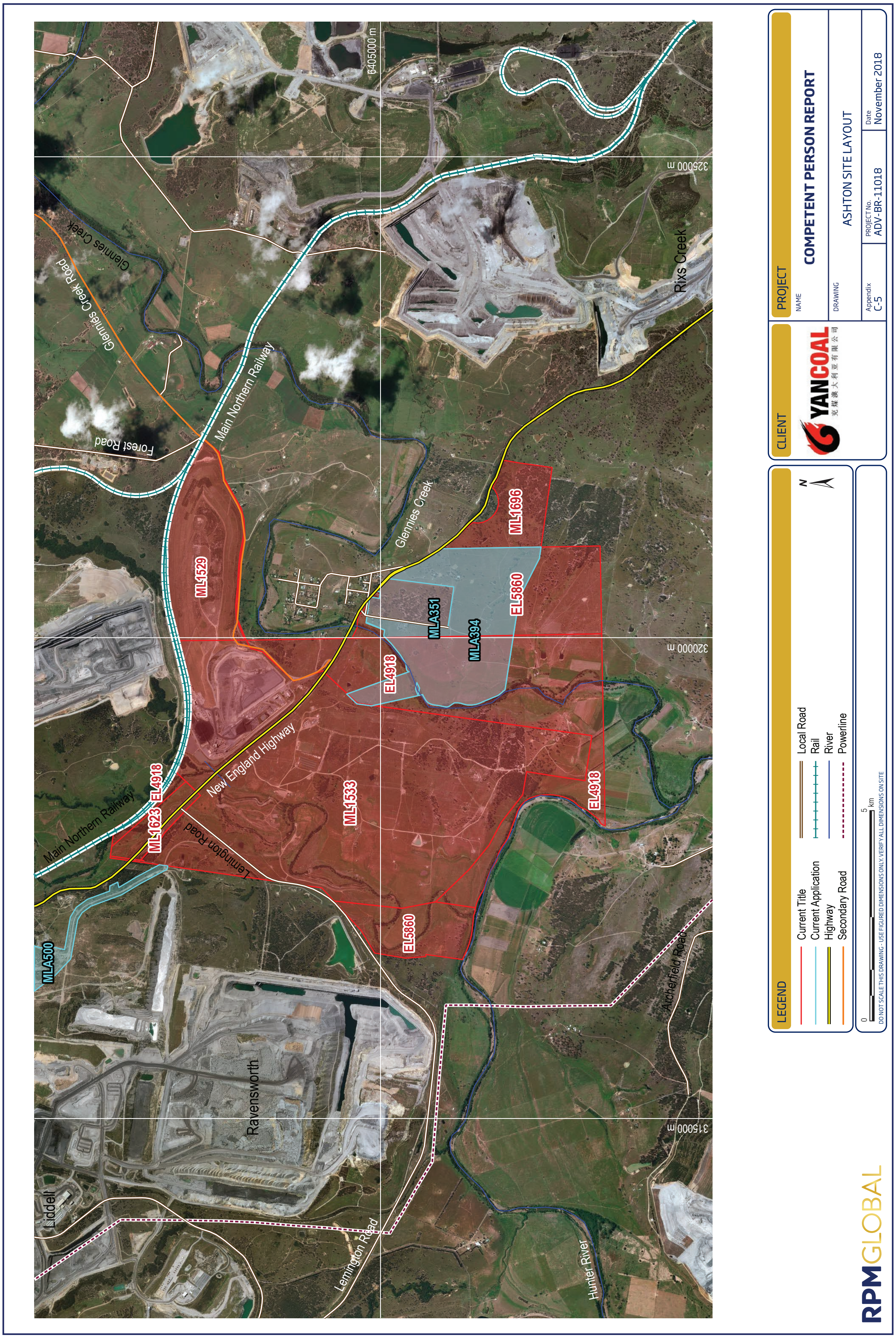
Appendix	PROJECT No.	Date
C-1	ADV-BR-11018	November 2018

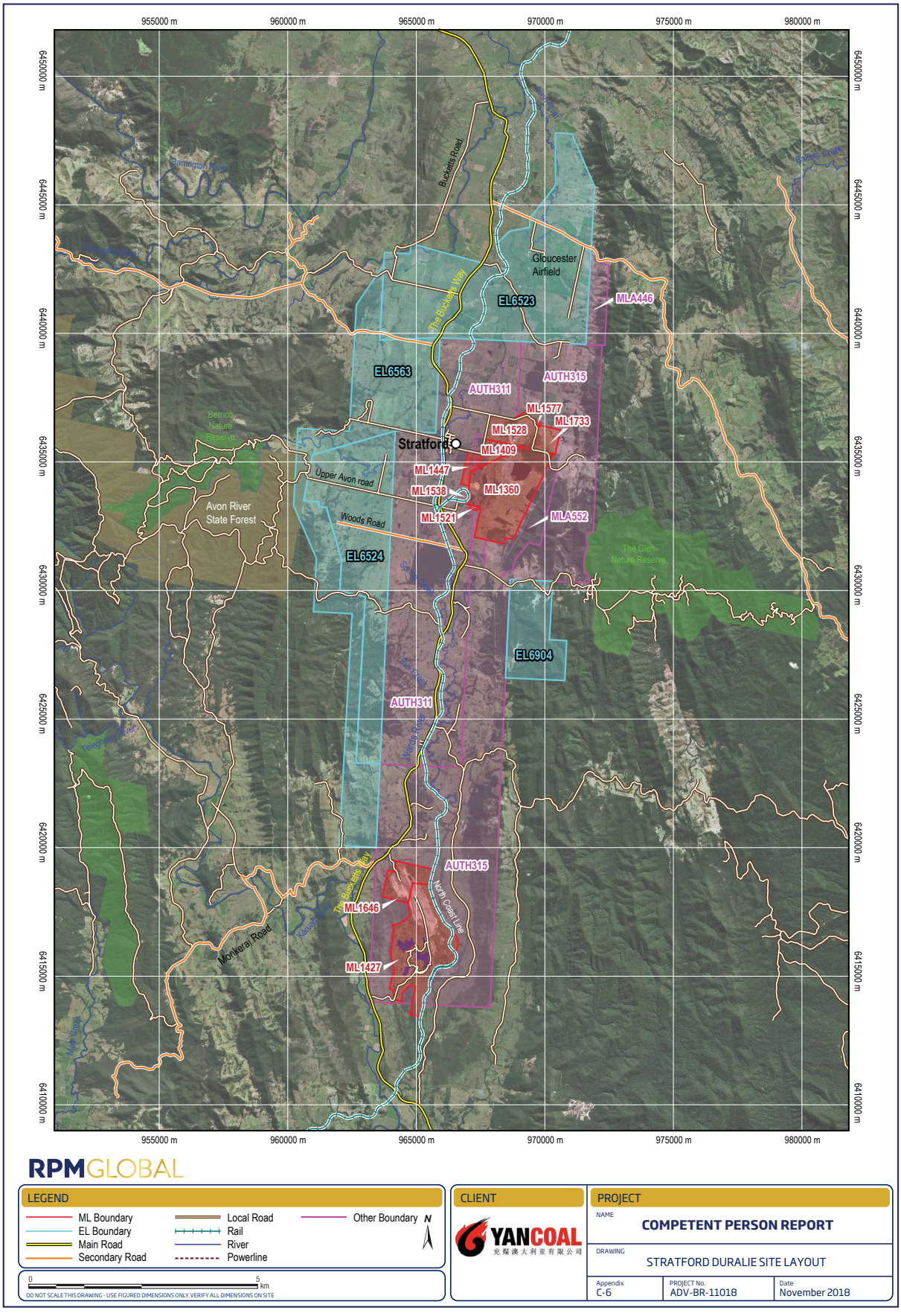


PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MTW SITE LAYOUT
Appendix
C-2
PROJECT No.
ADV-BR-11018
Date
November 2018
CLIENT
YANCOAL
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Conveyor
N
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
RPMGLOBAL
Singleton
Main Northern Railway
Hunter River
Putty Road
Warkworth Rail Loading Point
MLA548
South CHPP
Mount Thorley Loading Point
Bulga Balloon Loop
Broke Road
North CHPP
CD Pit
South Pit
Abbey Green South
CCL753
WARKWORTH
North Pit
West Pit
CL219
EL7712
Thorley Pit
ML1752
Loders Pit
MOUNT THORLEY
Charlton Road
Wallaby Scrub Road
ML1751
Jerrys Plains Road
Sandy Hollow Creek
Wollombi Brook
Parsons Creek


755000 m
760000 m
765000 m
770000 m
6435000 m
6430000 m
6425000 m
6420000 m
6415000 m
Bungaba
EL6288
EL7074
ML1605
ULAN
Ulan Road
ML1628
Goulburn River National Park
EL6288
Ulan Coal Loader
Ulan
Cope Road
Sandy Hollow-Gulgong Line
ML1606
MOOLARBEN
EL6288
ML1628
ML1715
ML1606
ML1715
Ulan-Wollar Road
ML1691
Wilpinjong
Dexter Mountain
EL6288
ML1628
ML1628
EL6288
ML1628
Ulan Road
Moolarben Road
Mayberry Road
Moolarben Road
ML1628
EL7073
N
RPMGLOBAL
LEGEND
ML Boundary
EL Boundary
Main Road
Secondary Road
Local Road
Rail
River
Powerline
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
兖煤澳大利亚有限公司
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MOOLARBEN SITE LAYOUT
Appendix
C-3
PROJECT No.
ADV-BR-11018
Date
November 2018


Yarrabee Mine
Jellinbah East Mine
Curragh North Mine
Curragh Mine
Curragh
Lyra Park
Willies Creek Road
Fitzroy Developmental Road
Junee Road
Mackenzie River Capella Road
Mt Stuart Road
Mt Stuart Bedford Weir Road
Wyuna Road
Rileys Crossing Road
Locarno Road
Mackenzie River
Blackwater Creek
Taunton National Park (Scientific)
ML80104
ML80196
ML4770
ML80049
ML80172
ML80195
ML80198
ML80197
ML80096
ML80050
MDL160
EPC717
EPC1429
EPC1668
EPC1117
EPC621
EPC1684
EPC1177
LEGEND
ML Boundary
EPC Boundary
MDL Boundary
Road
Local Road
Rail
River
Powerline
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
YARRABEE SITE LAYOUT
Appendix
C-4
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL


6405000 m
325000 m
320000 m
315000 m
Glennies Creek
Glennies Creek Road
Forest Road
Main Northern Railway
Glennies Creek
Rixs Creek
ML1529
ML1696
EL5860
MLA351
MLA394
EL4918
New England Highway
ML1623
EL4918
Main Northern Railway
Lemington Road
ML1533
EL4918
EL5860
MLA500
Archerfield Road
Ravensworth
Liddell
Lemington Road
Hunter River
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
N
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
ASHTON SITE LAYOUT
Appendix
C-5
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL



RPMGLOBAL

LEGEND

ML Boundary
EL Boundary
Main Road
Secondary Road
Local Road
Rail
River
Powerline
Other Boundary
N

0 5 km

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

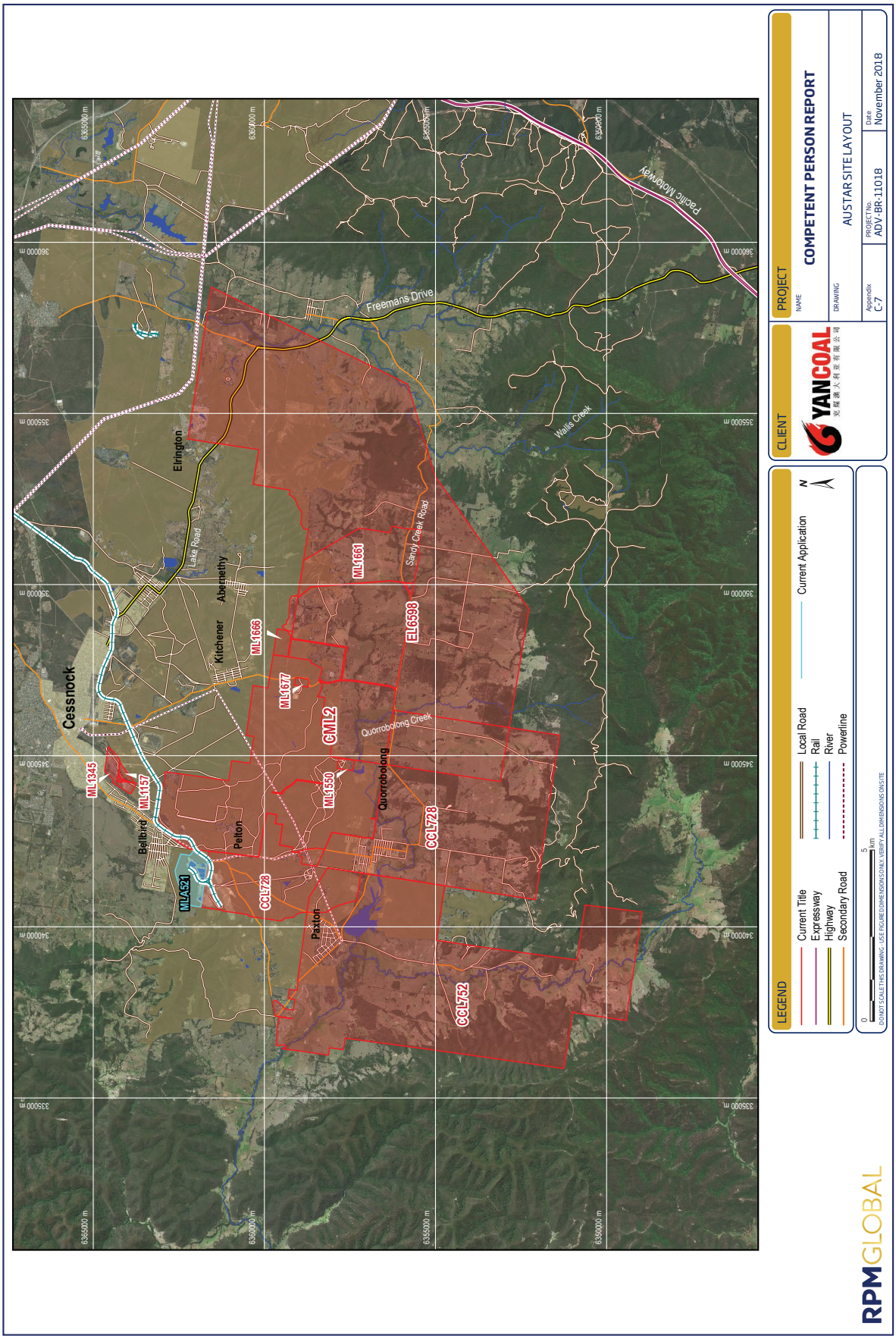
YANCOAL 兖煤澳大利亚有限公司

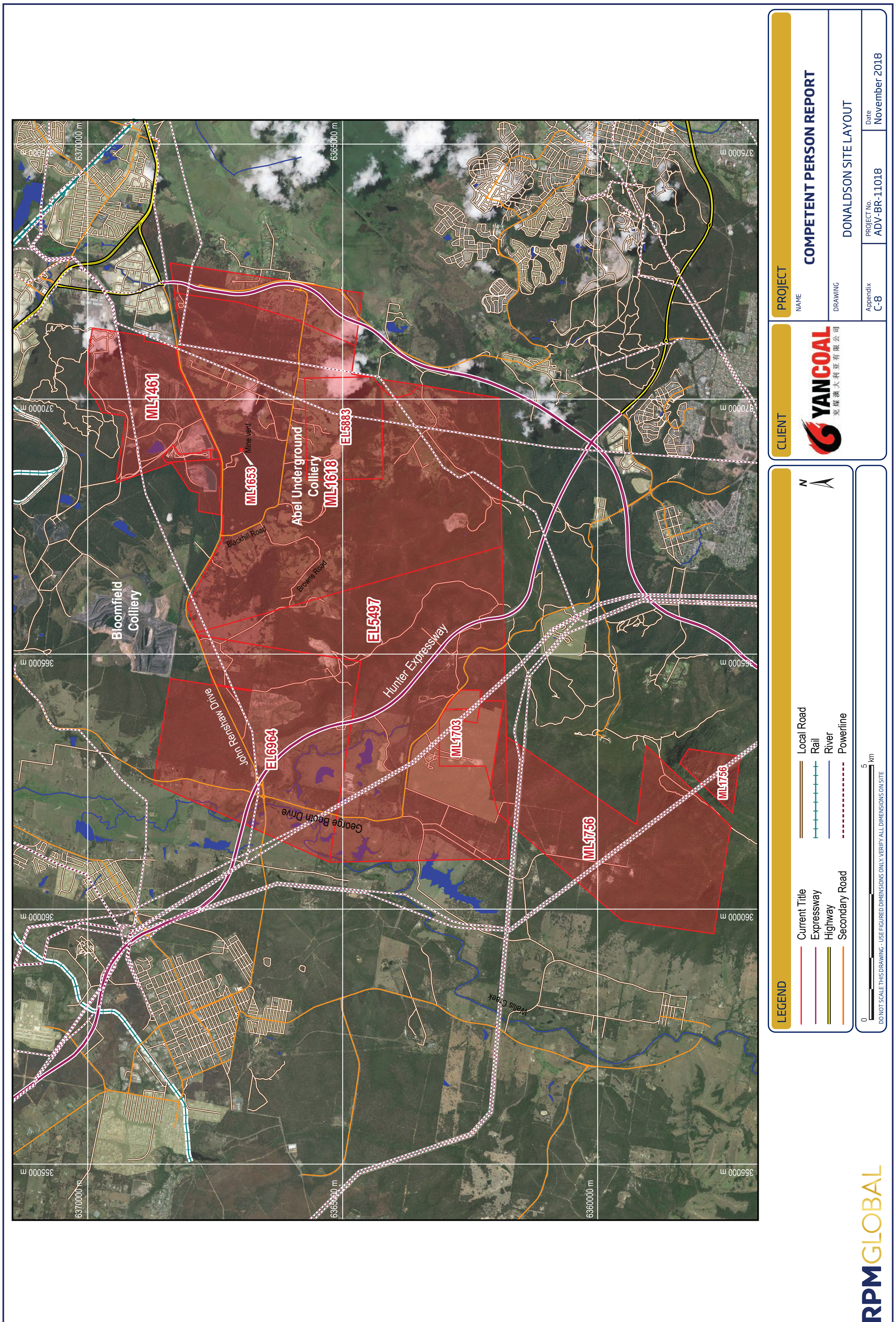
PROJECT

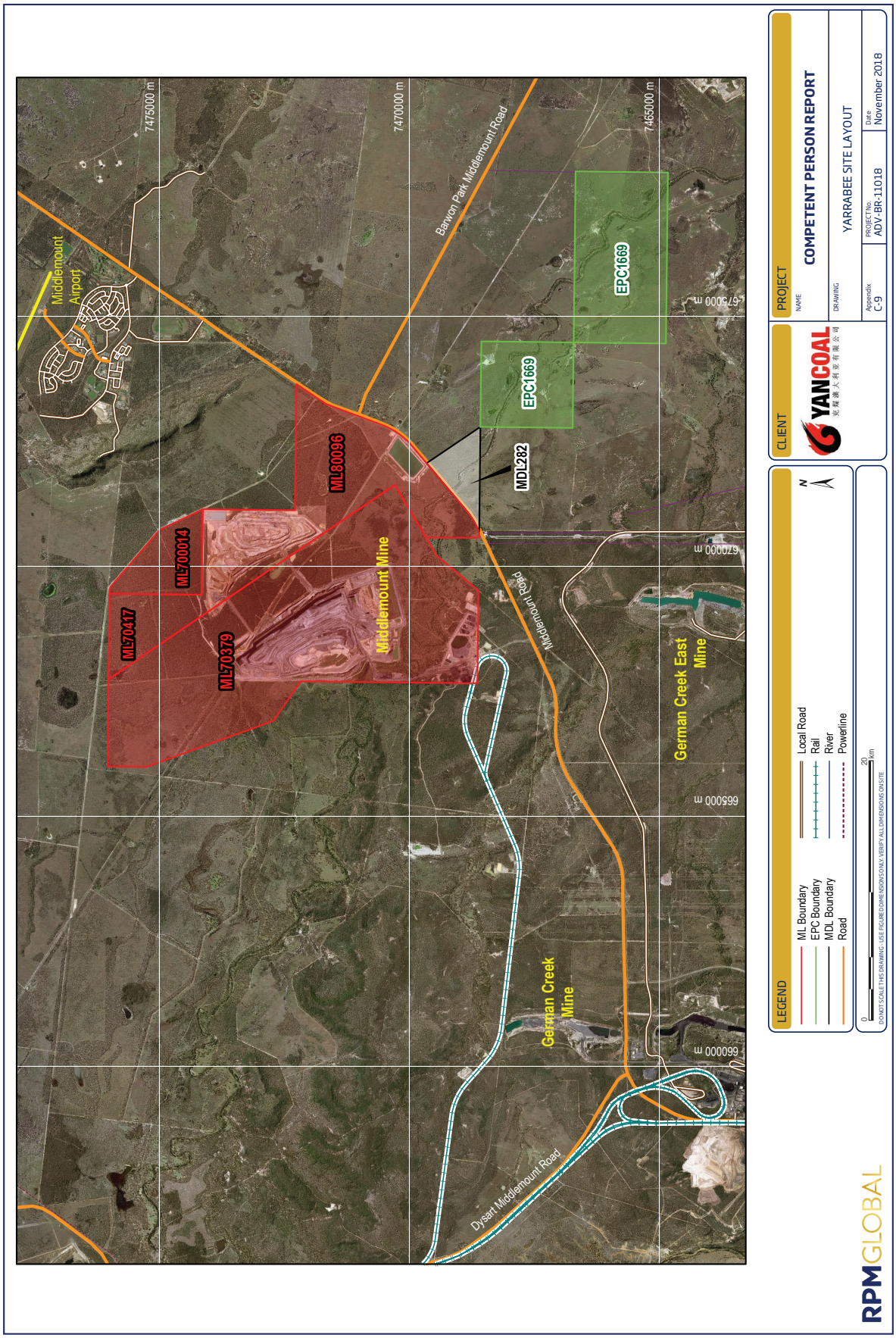
NAME: COMPETENT PERSON REPORT

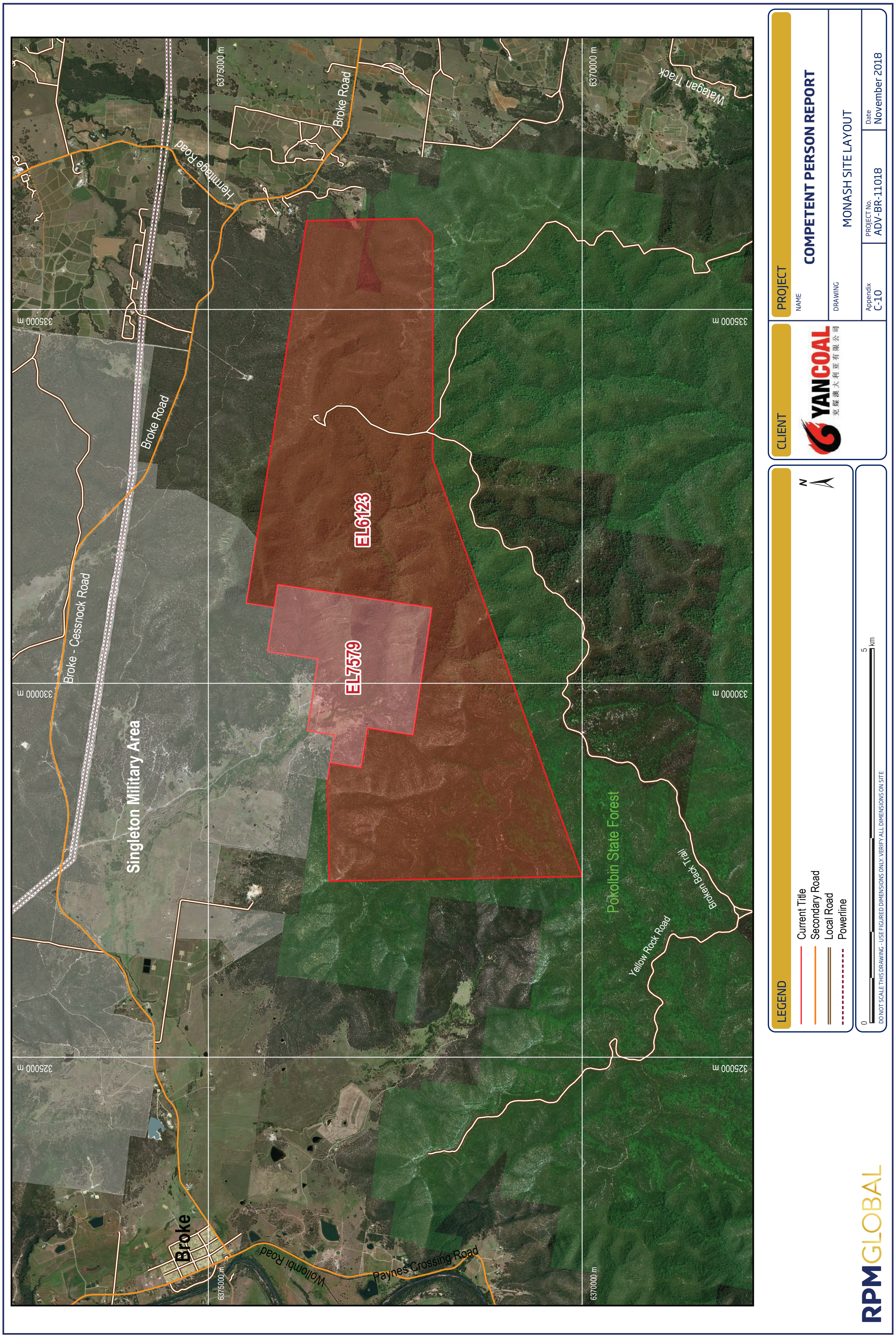
DRAWING: STRATFORD DURALIE SITE LAYOUT

Appendix	PROJECT No.	Date
C-6	ADV-BR-11018	November 2018

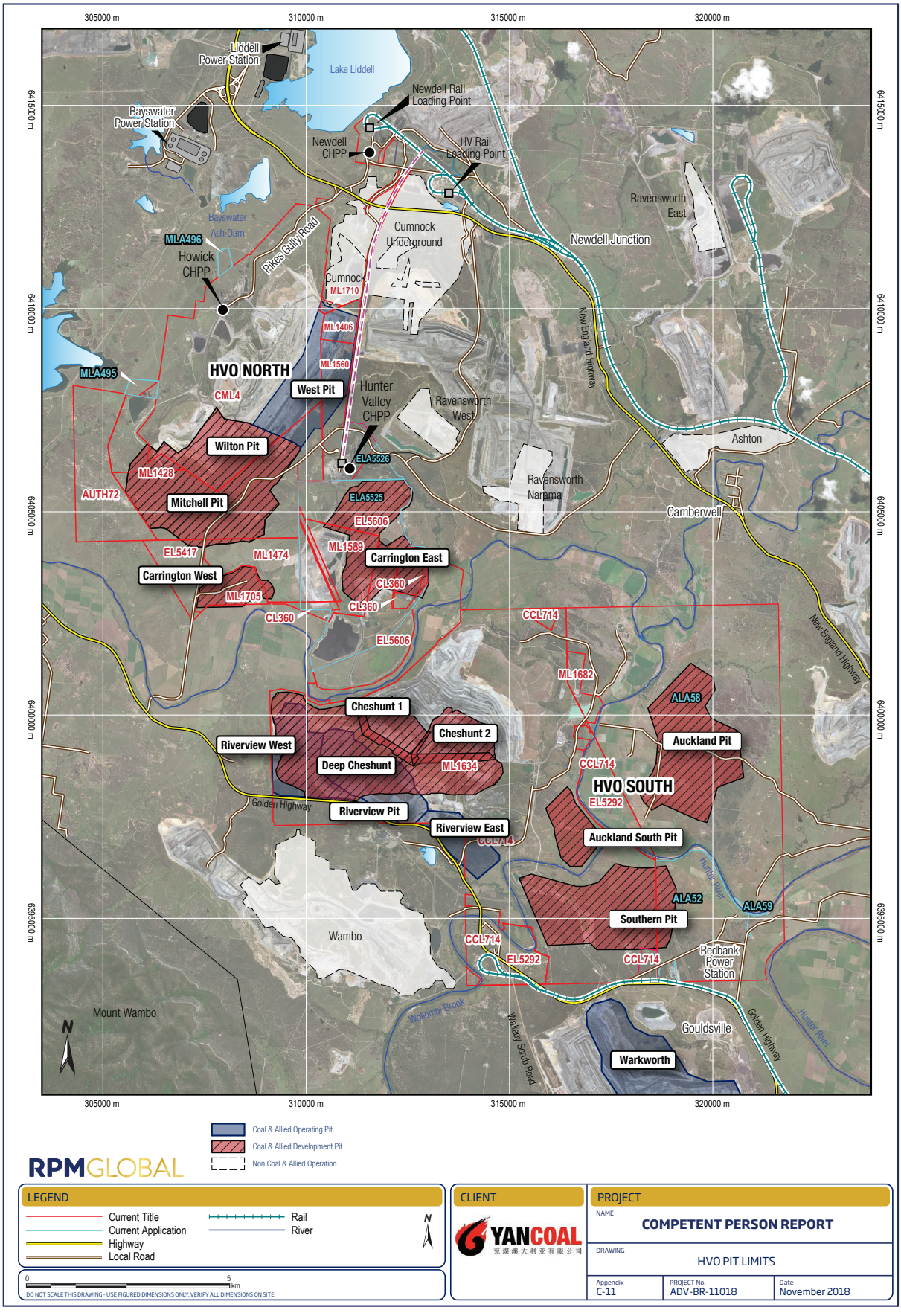

Cessnock
Kitchener
Abermethy
Elrington
Lake Road
Freemans Drive
Pacific Motorway
Sandy Creek Road
Walls Creek
Quorrobolong Creek
Quorrobolong
Pelton
Paxton
Bellbird
ML1345
ML1157
MLA21
CCL729
CCL728
CCL752
CML2
ML1350
ML1677
ML1666
ML1661
EL6398
LEGEND
Current Title
Expressway
Highway
Secondary Road
Local Road
Rail
River
Powerline
Current Application
N
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
0
5
km
RPMGLOBAL
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
AUSTAR SITE LAYOUT
Appendix
C-7
PROJECT No.
ADV-BR-11018
Date
November 2018

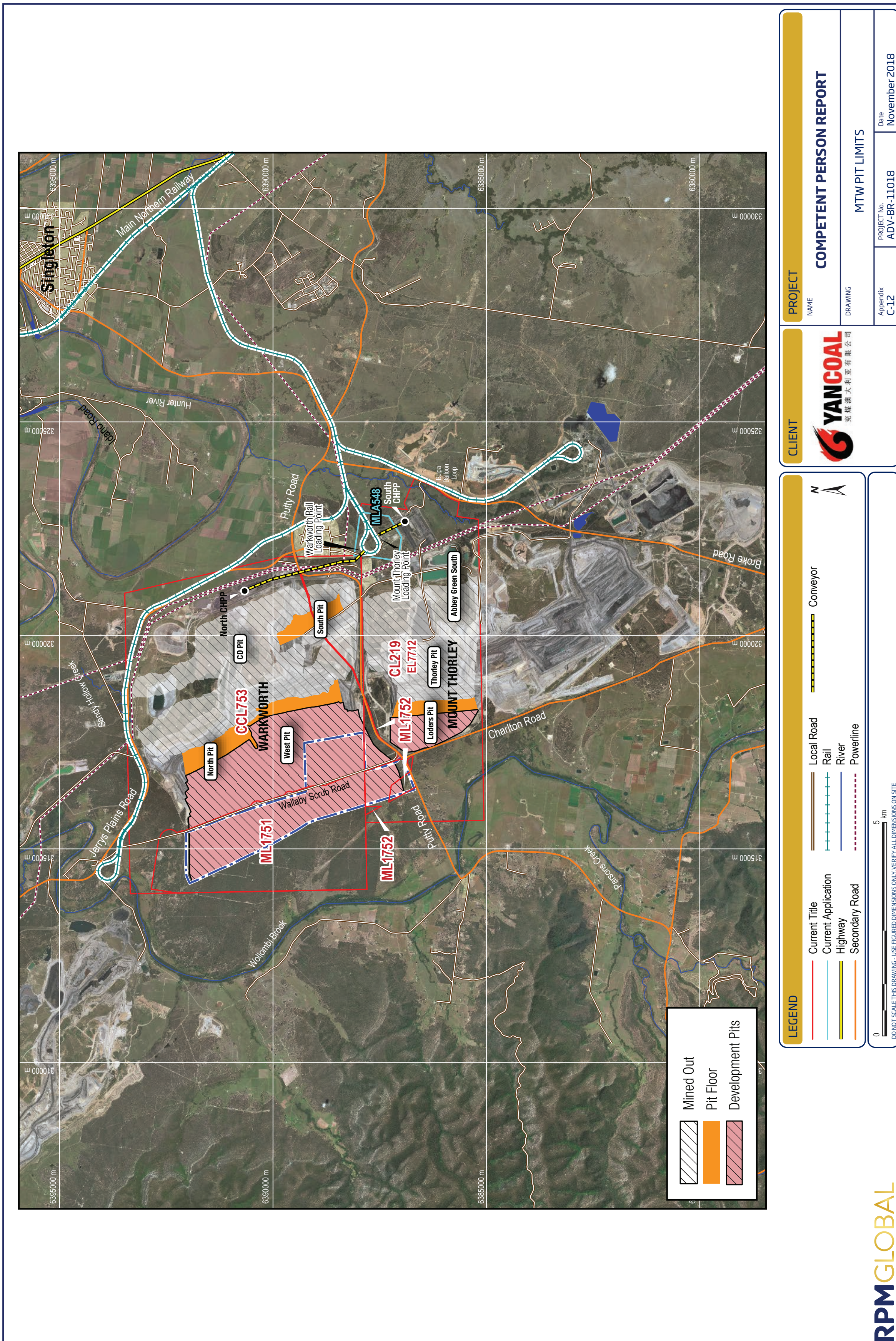

ML1461
ML1653
Mine vent
Abel Underground
Colliery
ML1618
EL5883
Blackhill Road
Browns Road
EL5497
Bloomfield
Colliery
Hunter Expressway
John Renshaw Drive
EL6964
ML1703
George Booth Drive
ML1756
ML1756
Wallis Creek
LEGEND
Current Title
Expressway
Highway
Secondary Road
Local Road
Rail
River
Powerline
N
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
DONALDSON SITE LAYOUT
Appendix
C-8
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL

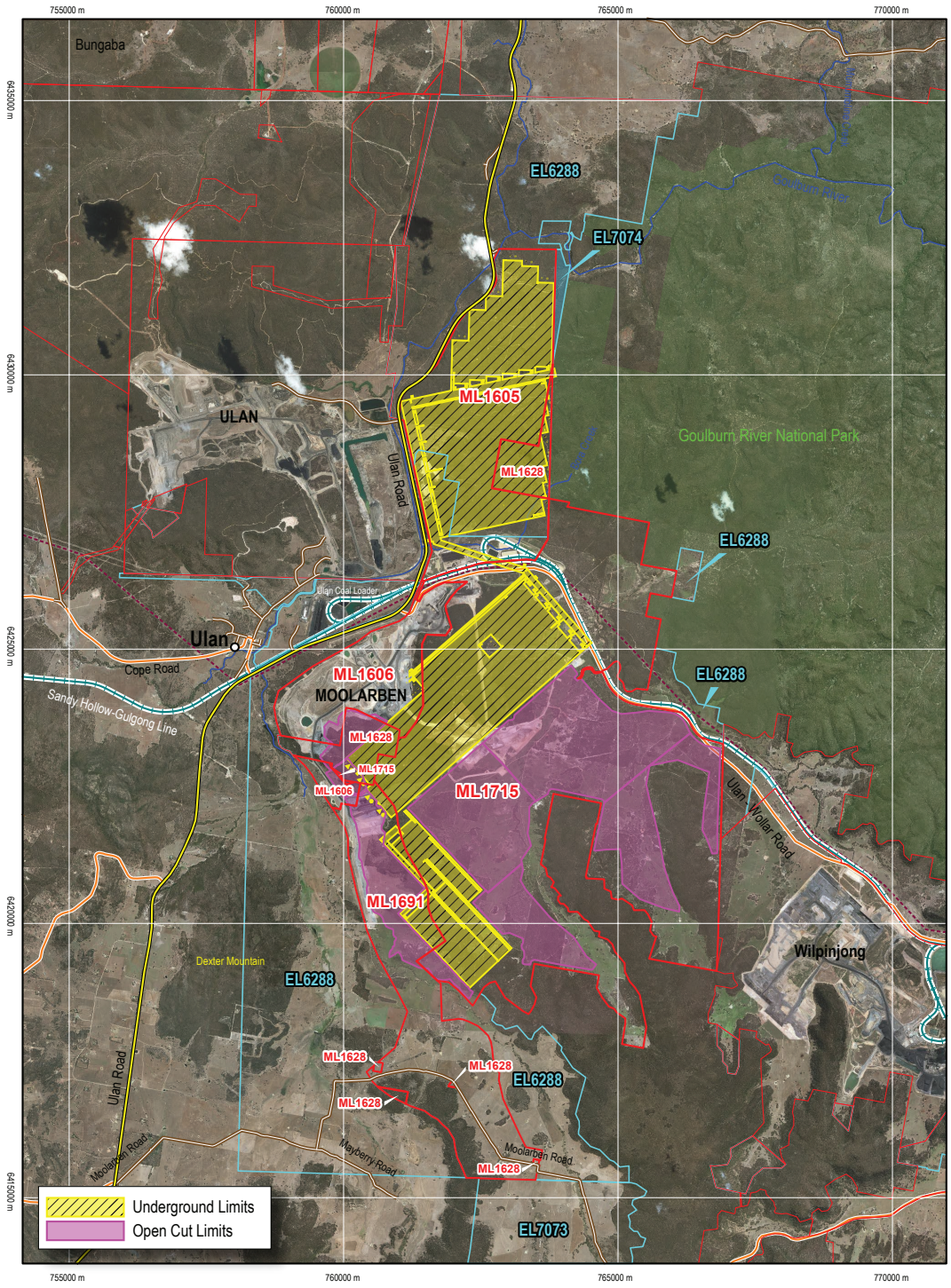

7475000 m
7470000 m
7465000 m
670000 m
675000 m
665000 m
660000 m
Middlemount Airport
Banyan Park Middlemount Road
ML80096
ML70014
ML70417
ML70379
Middlemount Mine
EPC1669
EPC1669
MDL282
Middlemount Road
German Creek East Mine
German Creek Mine
Dysart Middlemount Road
LEGEND
ML Boundary
EPC Boundary
MDL Boundary
Road
Local Road
Rail
River
Powerline
N
0
20
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
RPMGLOBAL
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
YARRABEE SITE LAYOUT
Appendix
C-9
PROJECT No.
ADV-BR-11018
Date
November 2018



Broke Road
Hermitage Road
Watagan Track
Broke Road
Broke - Cessnock Road
Singleton Military Area
EL6123
EL7579
Pokolbin State Forest
Broken Back Trail
Yellow Rock Road
Broke
Wollombi Road
Paynes Crossing Road
6375000 m
6370000 m
335000 m
330000 m
325000 m
LEGEND
Current Title
Secondary Road
Local Road
Powerline
N
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MONASH SITE LAYOUT
Appendix
C-10
PROJECT No.
ADV-BR-11018
Date
November 2018


305000 m
310000 m
315000 m
320000 m
6415000 m
6410000 m
6405000 m
6400000 m
6395000 m
Liddell Power Station
Lake Liddell
Bayswater Power Station
Newdell Rail Loading Point
Newdell CHPP
HV Rail Loading Point
Ravensworth East
Bayswater Ash Dam
MLA496
Howick CHPP
Pikes Gully Road
Cumnock Underground
Cumnock
ML1710
Newdell Junction
ML1406
ML1560
New England Highway
MLA495
HVO NORTH
CML4
West Pit
Hunter Valley CHPP
Ravensworth West
Ashton
Wilton Pit
ML1428
ELA5526
AUTH72
Mitchell Pit
Ravensworth Narama
ELA5525
EL5606
Camberwell
EL5417
ML1474
ML1589
Carrington East
Carrington West
CL360
ML1705
CCL714
EL5606
ML1682
ALA58
Cheshunt 1
Cheshunt 2
Auckland Pit
Riverview West
Deep Cheshunt
ML1634
CCL714
HVO SOUTH
EL5292
Golden Highway
Riverview Pit
Riverview East
Auckland South Pit
Hunter River
ALA52
ALA59
Southern Pit
Wambo
CCL714
EL5292
CCL714
Redbank Power Station
Mount Wambo
Wollombi Brook
Wallaby Scrub Road
Gouldsville
Golden Highway
Hunter River
Warkworth
N
Coal & Allied Operating Pit
Coal & Allied Development Pit
Non Coal & Allied Operation
RPMGLOBAL
LEGEND
Current Title
Current Application
Highway
Local Road
Rail
River
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
兖煤澳大利亚有限公司
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
HVO PIT LIMITS
Appendix
C-11
PROJECT No.
ADV-BR-11018
Date
November 2018


Singleton
Main Northern Railway
Hunter River
Putty Road
Warkworth Rail Loading Point
MLA548
South CHPP
North CHPP
Mount Thorley Loading Point
Abbey Green South
CD Pit
South Pit
CCL753
WARKWORTH
North Pit
West Pit
CL219
EL7712
Thorley Pit
ML1752
Loders Pit
MOUNT THORLEY
Charlton Road
Broke Road
Wallaby Scrub Road
ML1751
Jerrys Plains Road
Sandy Hollow Creek
Wollombi Brook
Parsons Creek
Mined Out
Pit Floor
Development Pits
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Conveyor
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MTW PIT LIMITS
Appendix C-12
PROJECT No. ADV-BR-11018
Date November 2018
RPMGLOBAL



RPMGLOBAL

LEGEND			
ML Boundary	Local Road	N	
EL Boundary	Rail		
Main Road	River		
Secondary Road	Powerline		

0 5 km

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

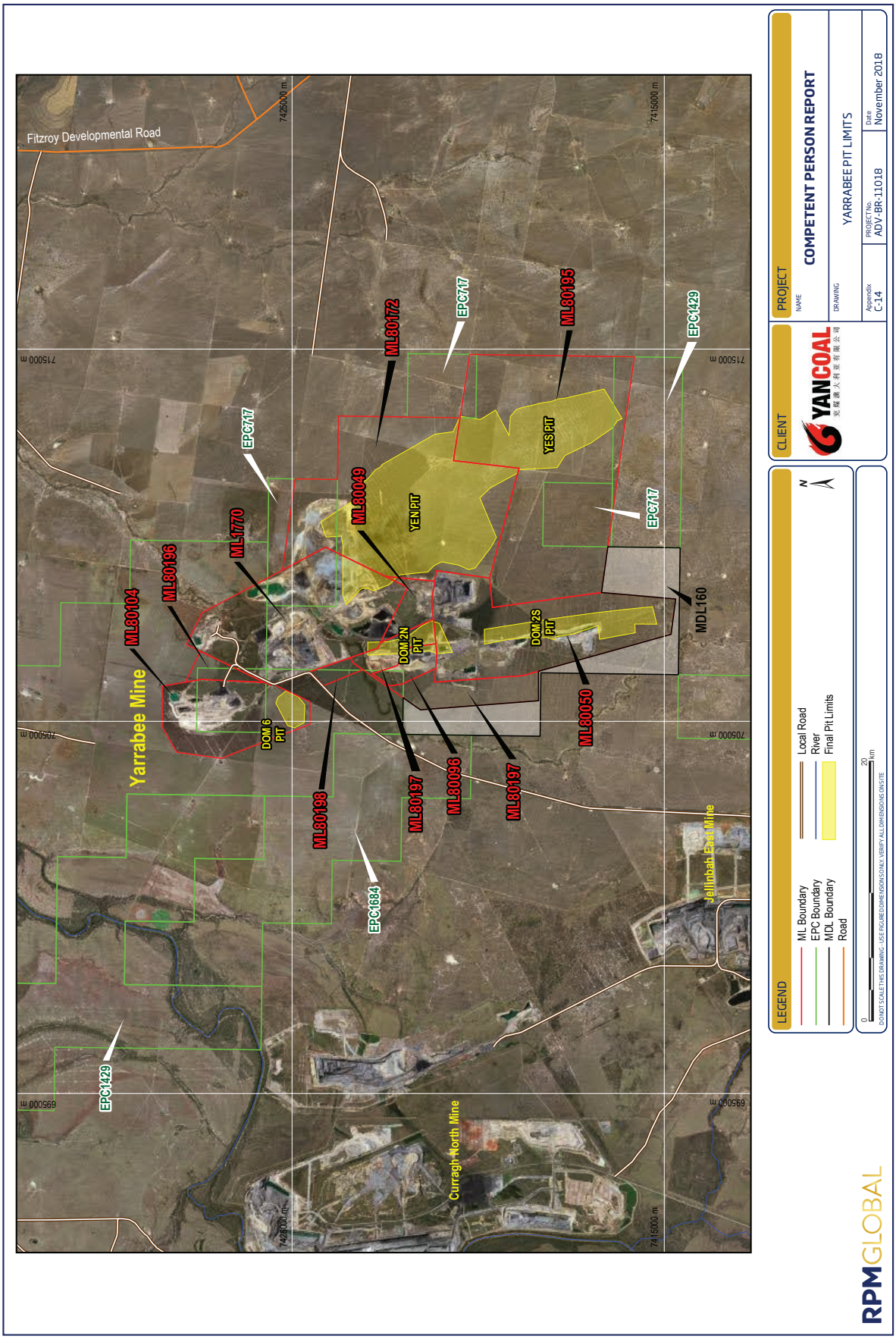
CLIENT: YANCOAL 兖煤澳大利亚有限公司

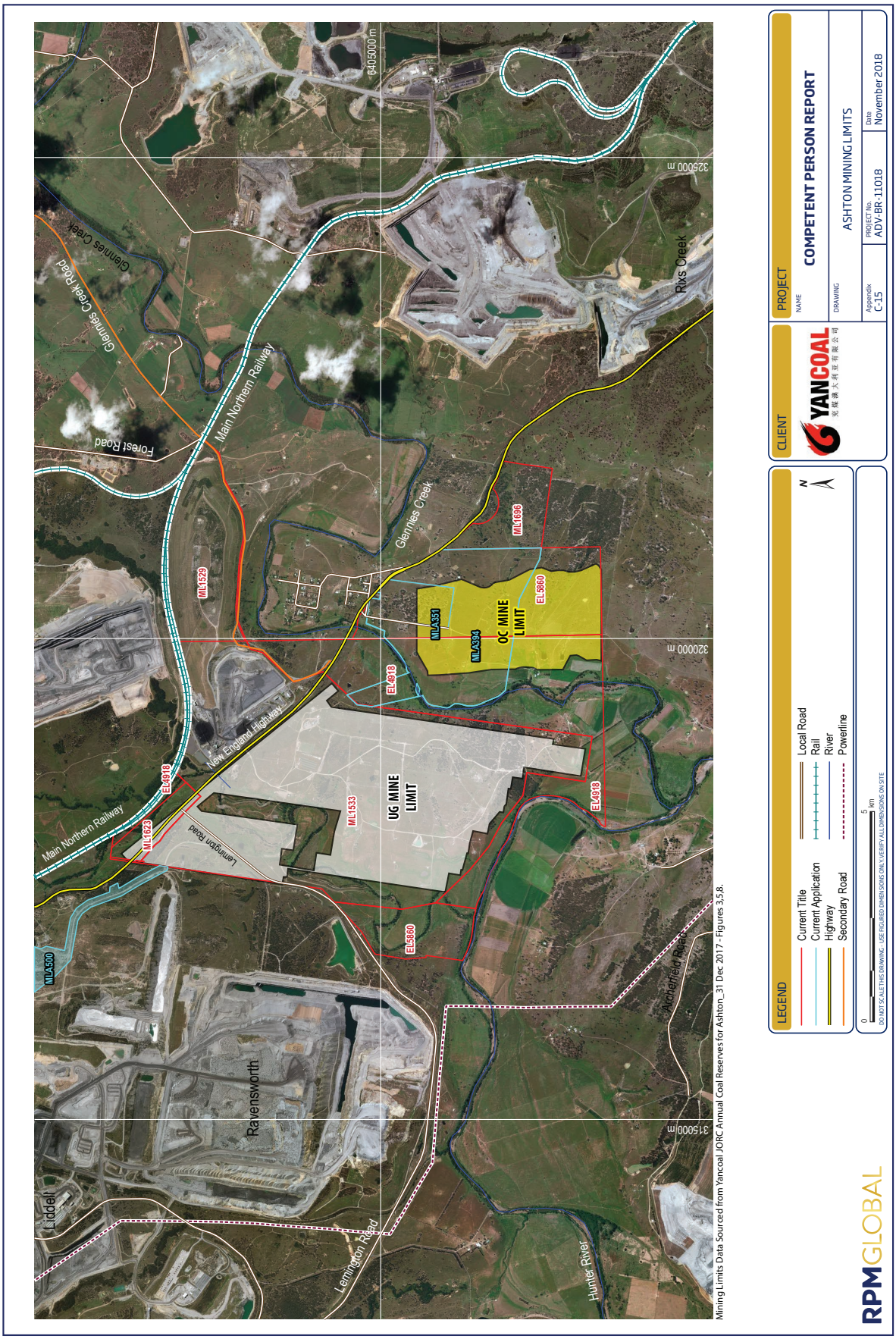
PROJECT

NAME: COMPETENT PERSON REPORT

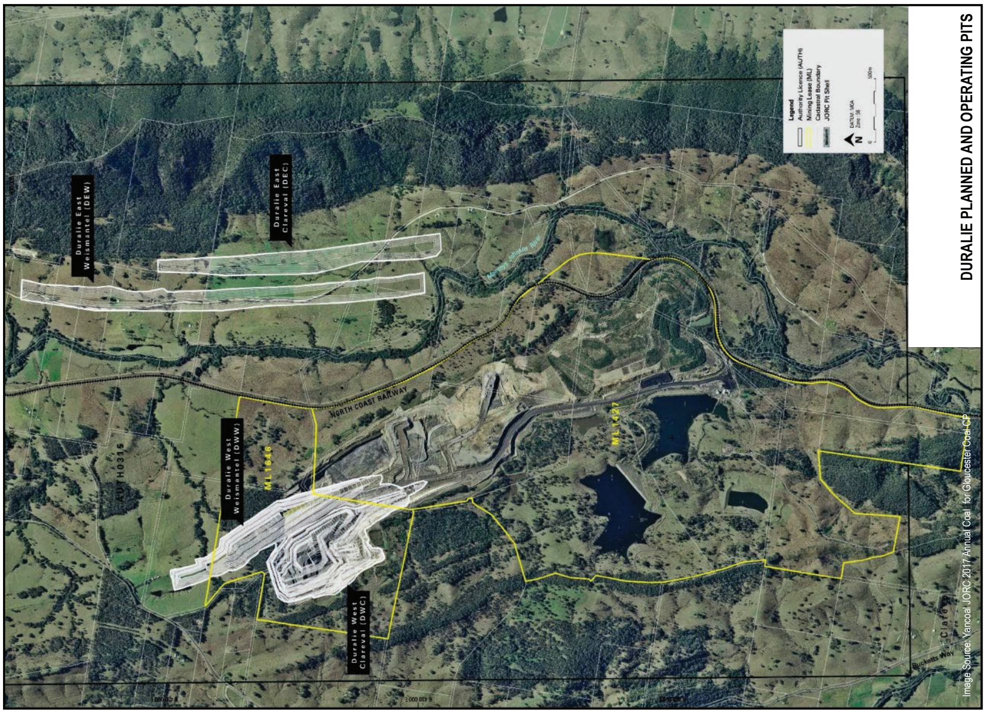
DRAWING: MOOLARBEN MINING LIMITS

Appendix	PROJECT No.	Date
C-13	ADV-BR-11018	November 2018

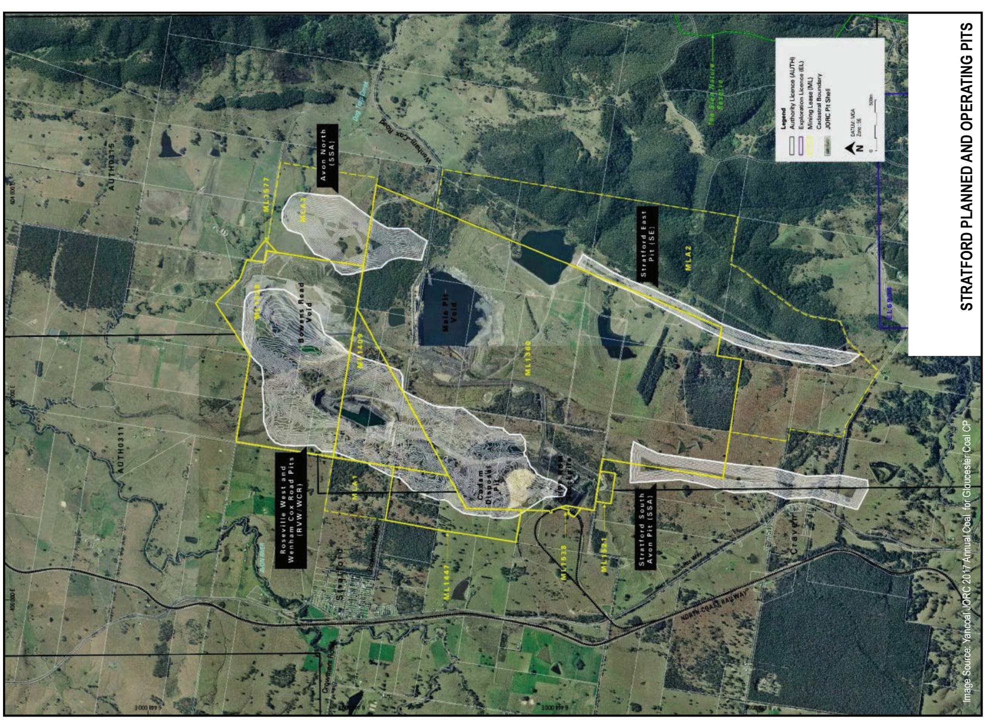

Fitzroy Developmental Road
Yarrabee Mine
Curragh North Mine
Jellinbah East Mine
ML80104
ML80196
ML1770
EPC717
ML80049
YEN PIT
ML80172
EPC717
YES PIT
ML80195
EPC1429
EPC717
MDL160
DOM 6 PIT
DOM 2N PIT
DOM 2S PIT
ML80198
ML80197
ML80096
ML80197
ML80050
EPC1684
EPC1429
LEGEND
ML Boundary
EPC Boundary
MDL Boundary
Road
Local Road
River
Final Pit Limits
N
0
20
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
RPMGLOBAL
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
YARRABEE PIT LIMITS
Appendix
C-14
PROJECT No.
ADV-BR-11018
Date
November 2018



Mining Limits Data Sourced from Yancoal JORC Annual Coal Reserves for Ashton_31 Dec 2017 - Figures 3,5,8.


Duralie East Weismantel (DEW)
Duralie East Clareval (DEC)
Duralie West Weismantel (DWW)
Duralie West Clareval (DWC)
ML1646
ML1427
AUTH0315
NORTH COAST RAILWAY
Legend
Authority Licence (AUTH)
Mining Lease (ML)
Cadastral Boundary
JORC Pit Shell
Image Source: Yancoal JORC 2017 Annual Coal for Gloucester Coal CP

DURALIE PLANNED AND OPERATING PITS


Avon North (SSA)
Roseville West and Wenham Cox Road Pits (RVW WCR)
Bowens Road Void
Main Pit Void
Stratford East Pit (SE)
Stratford South Avon Pit (SSA)
AUTH0311
ML1577
ML1360
ML1447
ML1528
MLA2
NORTH COAST RAILWAY
Legend
Authority Licence (AUTH)
Exploration Licence (EL)
Mining Lease (ML)
Cadastral Boundary
JORC Pit Shell
Image Source: Yancoal JORC 2017 Annual Coal for Gloucester Coal CP

STRATFORD PLANNED AND OPERATING PITS

CLIENT: YANCOAL

PROJECT NAME: COMPETENT PERSON REPORT

DRAWING: STRATFORD / DURALIE PIT LIMITS

Appendix	PROJECT No.	Date
C-16	ADV-BR-11018	November 2018

RPMGLOBAL

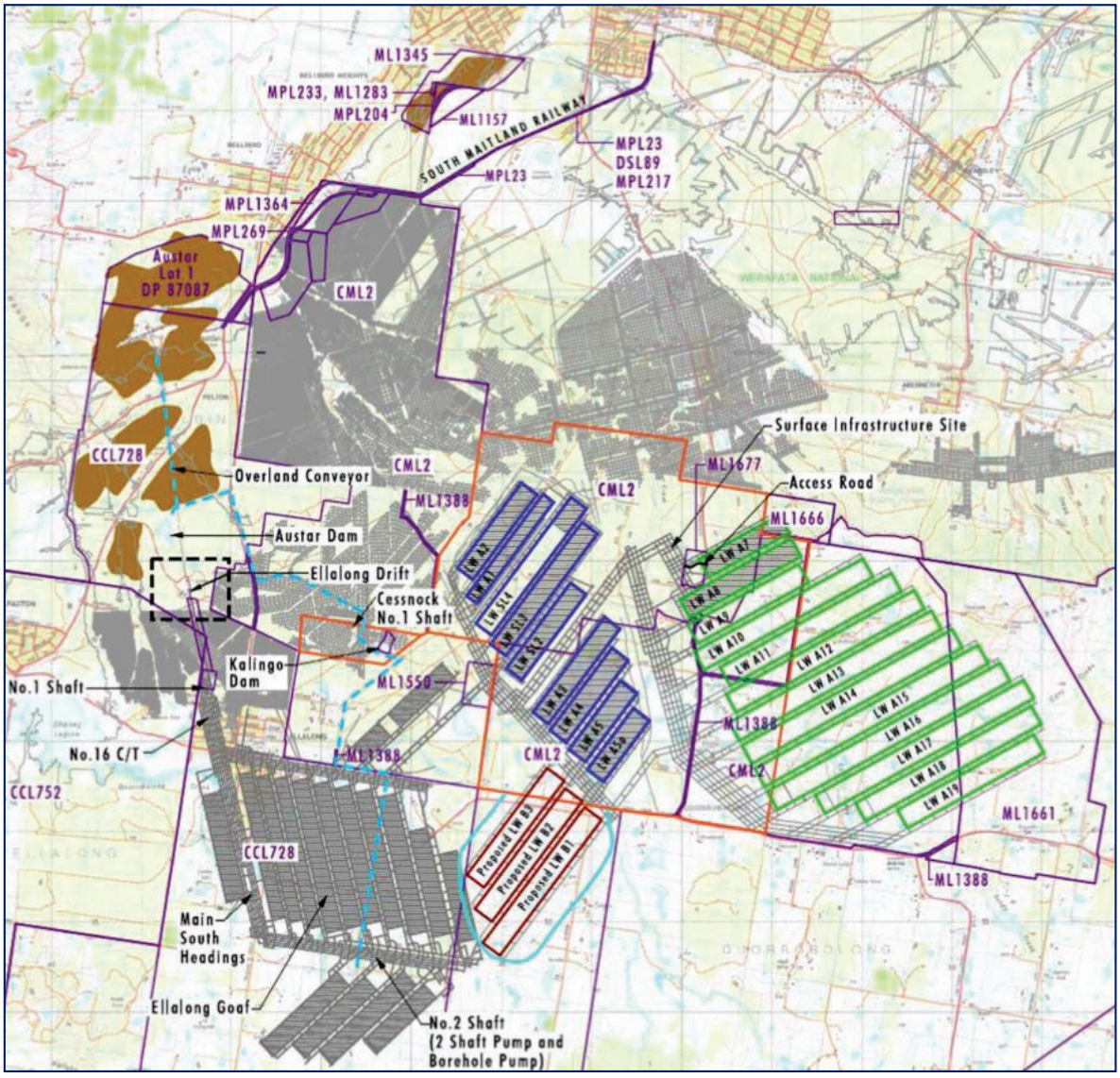


Image Sourced from Yancoal JORC 2017 Annual Coal Reserve for Austar_31 Dec 2017 - Final_Figure 1A

RPMGLOBAL

CLIENT

YANCOAL 兖煤澳大利亚有限公司

PROJECT

NAME

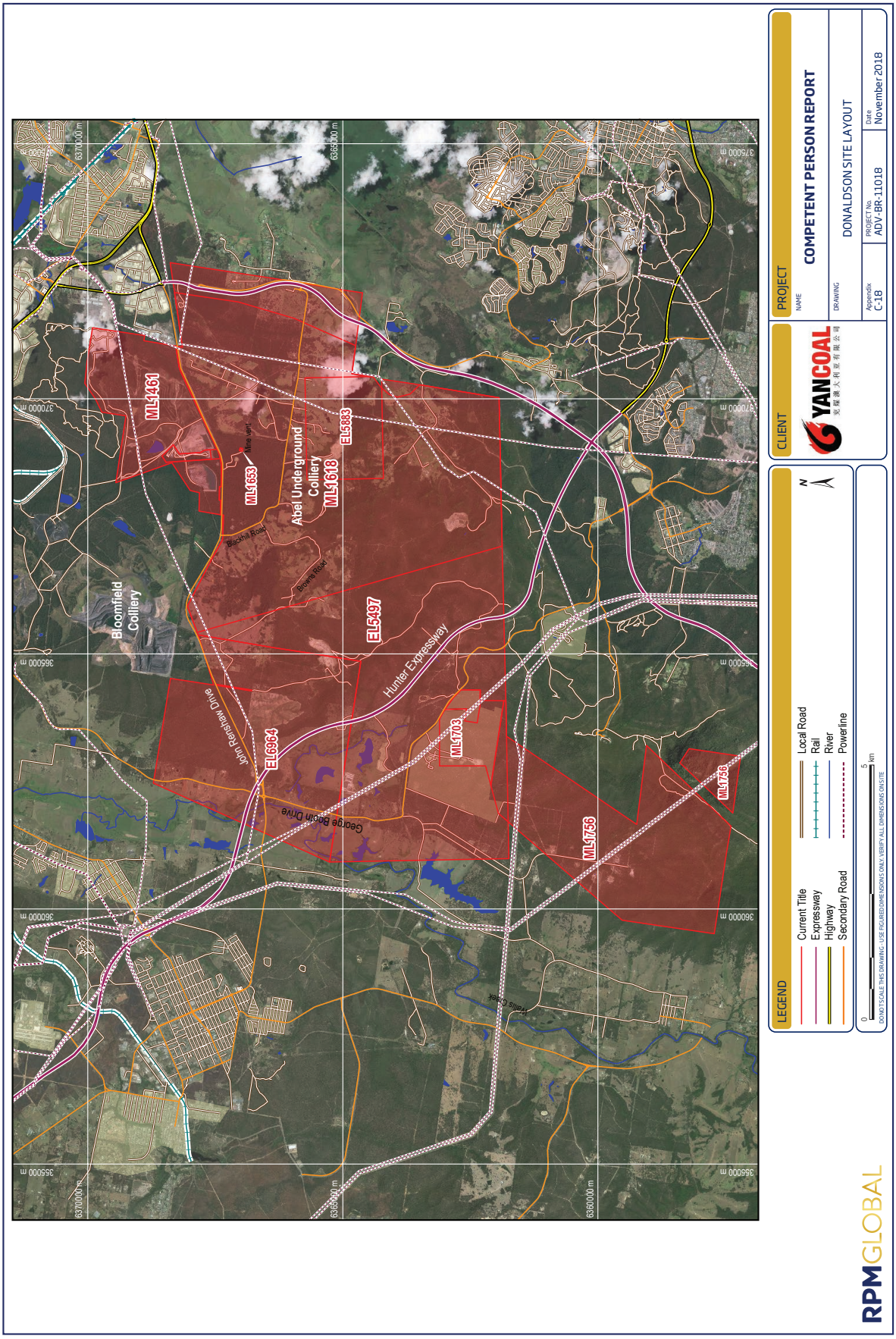
COMPETENT PERSON REPORT

DRAWING

AUSTAR MINING LIMITS

Appendix	PROJECT No.	Date
C-17	ADV-BR-11018	November 2018

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE


ML1461
ML1633
Mine vent
Abel Underground Colliery
ML1618
EL6333
Bloomfield Colliery
Bucktha Road
Browns Road
EL5497
Hunter Expressway
John Renshaw Drive
EL6964
George Booth Drive
ML1703
ML1756
ML1756
Pikes Creek
LEGEND
Current Title
Expressway
Highway
Secondary Road
Local Road
Rail
River
Powerline
N
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
DONALDSON SITE LAYOUT
Appendix
C-18
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL

RPMGLOBAL

LEGEND

- ML Boundary
- EPC Boundary
- MDL Boundary
- Road
- Local Road
- Rail
- River
- Powerline

N

0 5 km

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

YANCOAL 兖煤澳大利亚有限公司

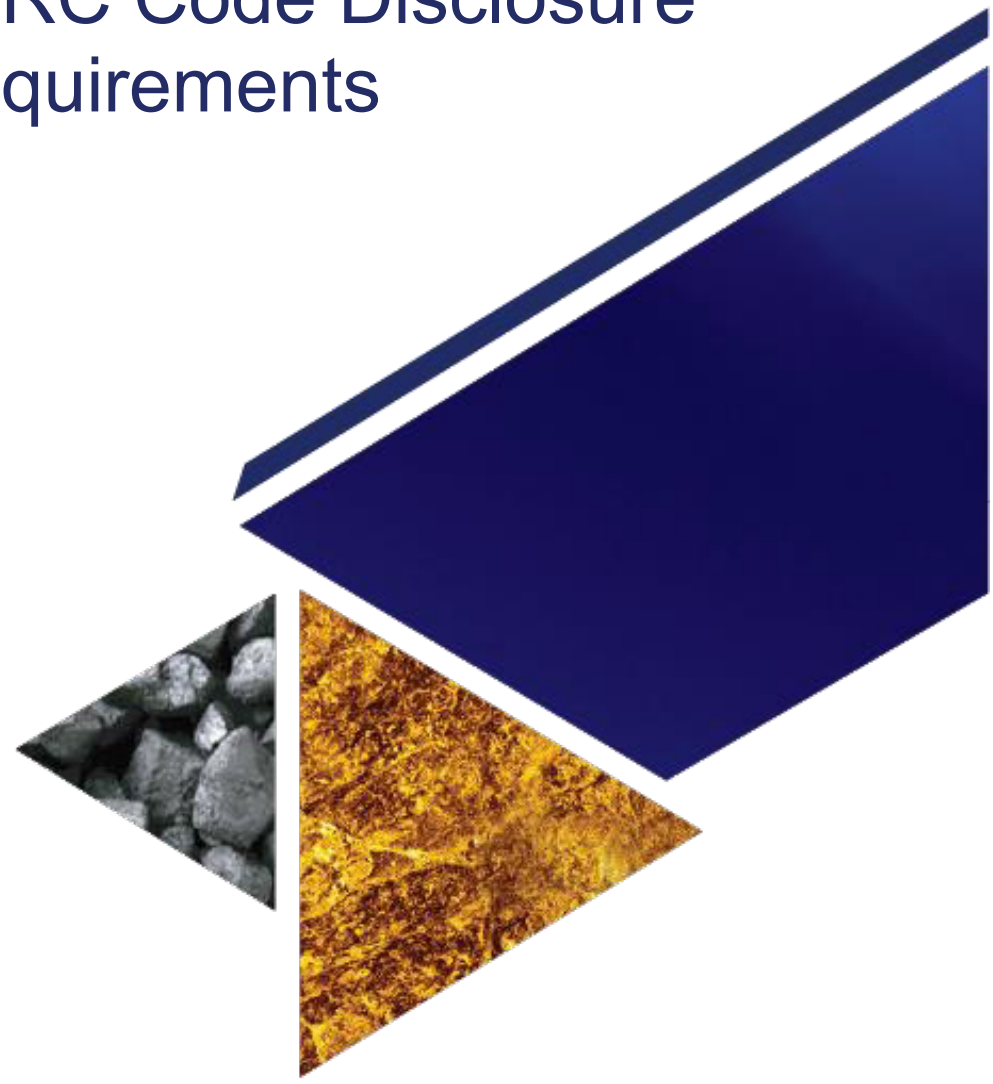
PROJECT

NAME: COMPETENT PERSON REPORT

DRAWING: MIDDLEMOUNT MINING LIMITS

Appendix	PROJECT No.	Date
C-19	ADV-BR-11018	November 2018

Appendix D.
JORC Code Disclosure Requirements



RPMGLOBAL

JORC Code Disclosure Requirements

HVO / MTW

RPMGLOBAL

JORC Code, 2012 Edition – Table 1 report template

The completed Table 1, Sections 1, 2 & 3 are in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person Mr Peter Ellis on behalf of RPM.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
Sampling techniques	▪ *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* ▪ *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* ▪ *Aspects of the determination of mineralisation that are Material to the Public Report.* ▪ *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	▪ A total of 9,557 boreholes (585,019 m) support the Resource estimate at HVO. Cored drilling represents 34% of the total metres and open hole drilling 66%. ▪ The boreholes are up to 616 m in depth and average 67 m. The boreholes were all nominally recorded as vertical. During RTCA ownership boreholes which deviated by more than 5% from vertical of the total boreholes length the borehole were redrilled. ▪ In addition a limited number of large diameter (LD) holes have been drilled: 103 holes at 100 mm (4") and six holes at 200 mm (8") diameter sizes. ▪ Each drill rig is managed and supervised by a qualified geologist who is normally a contract geologist, who works according to a set of site guidelines for data acquisition. ▪ Site geologists manage all of the site based exploration. ▪ Governance and overview is provided by the Yancoal corporate Resource Knowledge Department.	▪ A combination of open hole and cored holes for coal quality (CQ), geotechnical and gas sampling have been used at MTW ▪ A total of 2,628 boreholes (274,585 m) support the Resource estimate Cored drilling represents 45% of the total metres and open hole drilling 55%. ▪ The boreholes are up to 725 m in depth and average 92 m. The boreholes were all nominally recorded as vertical. During RTCA ownership boreholes that deviated by more than 5% were re-drilled by contractor. Coring has predominantly been done using a HQ3-sized (63 mm) and open hole drilling to an equivalent hole diameter size. ▪ In addition a number of large diameter (LD) holes have been drilled: seven holes at 150 mm (6") and 49 holes at 200 mm (8") diameter sizes for evaluation of detailed coal processing and preparation options.
Drilling techniques	▪ *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether*	▪ Industry standard drilling techniques are used. ▪ All drilling has been completed using vertical holes. No core orientation has been performed.	

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
	core is oriented and if so, by what method, etc).		
Drill sample recovery	▪ *Method of recording and assessing core and chip sample recoveries and results assessed.* ▪ *Measures taken to maximise sample recovery and ensure representative nature of the samples.* ▪ *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	▪ Core recovery is recorded by the rig geologist while logging the borehole. Actual recovered core lengths are measured by the rig geologist with a tape measure, and compared with the as drilled cored interval. Core loss is recorded in the geological logs, coal quality sample intervals and in the run by run drilling record field sheets. ▪ If core recovery for a coal ply is less than 95%, then that section of the hole is redrilled to ensure a representative sample is taken. ▪ As received and air dried sample masses are typically recorded and reported during analysis and provide a check for sample recovery where core diameter, sample intervals and density is known. This also provides a useful check where sample mix ups are suspected. ▪ Open hole chip samples are taken every 1 m of drill advance. Open hole chip recovery is assessed qualitatively by the rig geologist.	
Logging	▪ *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* ▪ *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* ▪ *The total length and percentage of the relevant intersections logged.*	▪ Standardised logging systems were followed by the previous owner for all drilling logging and sampling. All data is currently logged directly into Geobank via tablet computers. ▪ Core is geologically and geotechnically logged and open hole chip samples are taken every 1 m and logged for lithology changes. ▪ All holes have been lithologically logged by qualified geologists. Cored coal sections have been brightness logged. The logging of the chip and core samples is detailed and includes a record of the recovery of the total length and the cored length, rock type, stratigraphic unit and numerous adjectives to describe the sample in terms of colour, grainsize, bedding etc. all of which is sufficient to describe the various lithologies and coal samples to support the Coal Resource estimation from a geological, geotechnical and coal quality consideration. ▪ All bore core recovered during RTCA ownership is photographed on both the core table (0.5 m increment) and in a core tray on a nominal 5 m tray basis. ▪ Chip samples are photographed as laid out in 1 m intervals. ▪ All holes are logged using a comprehensive suite of industry standard downhole geophysics tools (caliper, gamma, density, neutron, deviation, and sonic), with the addition of acoustic scanner that is used for geotechnical assessment in cored holes.	
Sub-sampling techniques and sample preparation	▪ *If core, whether cut or sawn and whether quarter, half or all core taken.* ▪ *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* ▪ *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* ▪ *Quality control procedures adopted for all sub-sampling*	▪ Core sampling is completed at the drill site and follows standardised sampling documentation. Samples are bagged and tagged with a unique sample number at the drill site, and stored in a secure core storage area until being transported to the laboratory for analysis at the completion of each borehole.	

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
	stages to maximise representivity of samples. ▪ *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* ▪ *Whether sample sizes are appropriate to the grain size of the material being sampled.*	▪ Prior to May 2013 all core samples were analysed by the Australian Laboratory Services Steel River, Newcastle laboratory. Since that time coal testing has been performed by Bureau Veritas. ▪ The laboratories which completed the core sample testing are accredited by National Association of Testing Authorities certified laboratory (NATA). ▪ Coal testing is performed in accordance with the various Australian and or International Standards. ▪ The entire core samples only were dispatched to the laboratory for analysis. There is no splitting or halving of core. Only full core sample analyses were used to create the coal quality models. ▪ Laboratory sample preparation and subsampling has been performed at the coal testing laboratory following instructions made by RTCA. ▪ All samples are weighed, air dried and then re-weighed before being crushed to an 11.2 mm top size. A rotary splitter is used to divide the sample into portions for coal quality analysis. ▪ Coal quality analysis follows a three stage method involving raw analysis on all plies followed by stage 2 washability and stage 3 product testing on composite samples that are defined by the RTCA geologist in the laboratory instructions. ▪ All instructions issued to the laboratory follow a standard format that forms the basis for reporting the results of laboratory testing.	
Quality of assay data and laboratory tests	▪ *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* ▪ *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* ▪ *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	▪ Non-formalised quality assurance/quality control (QAQC) involving duplicate samples has been completed. ▪ Routine checks have been completed including laboratory round robin and basic reproducibility tests provided by the coal testing laboratory. ▪ All laboratory test results are assessed by site geologists by a number of techniques for precision and accuracy that includes but is not limited to: – Ensuring that all test work has been completed according to the issued testing instructions; ▪ Sample intervals are correctly reported; ▪ Sample intervals match the seam pick intervals; ▪ Sum of proximate and ultimate analysis equals 100%; and ▪ Sum of ash analysis is in the range 98 to 102%. – Crossplots of energy and ash, density and ash, energy and volatile matter, and basic statistics to identify outlier values.	

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
		▪ Responsibility for quality control and quality assurance for analyses is primarily the responsibility of the NATA approved laboratories which complete the testing according to the various Australian Standards. Tested samples had sufficient reserve sample to allow for check analyses to be completed when site determined from their QC procedures that the reported coal quality results were anomalous or inconsistent with the geological expectation. ▪ Data checks and check analyses are requested where YAL identifies outliers results in the reported analytical test results that cannot be explained by geological processes.	
Verification of sampling and assaying	▪ *The verification of significant intersections by either independent or alternative company personnel.* ▪ *The use of twinned holes.* ▪ *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* ▪ *Discuss any adjustment to assay data.*	▪ All CQ sampling and analysis is managed and checked by YAL personnel. ▪ Data transfer from MTW and HVO was covered by protocols. The system documents primary assaying data, data entry procedures, data verification, and data storage (physical and electronic) into the ABB GDB relational geological database. ▪ Coal quality data is loaded to the GDB database and is validated against load limits. Once loaded the data is not altered, with the exception of converting data to different basis, such as converting air dried relative density data to an in situ basis using the Preston Sanders equation. The original as reported laboratory data is still retained in the database, and the data calculated data is contained in additional calculated columns in the database. ▪ All data is contained in the GDB database, even that data which has been identified to be incorrect. The incorrect data is excluded from Resource model development by use of borehole templates or data flags.	
Location of data points	▪ *Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* ▪ *Specification of the grid system used.* ▪ *Quality and adequacy of topographic control.*	▪ The topographic surface for HVO is derived from a combination of Lands and Property Management Authority 10 m contours which originated from the early 1980s, and ▪ More recent (September 2008) 2 m contours derived from an airborne LiDAR survey. Borehole collars and mine survey data were also used. The digital terrain model was created with a 50 m × 50 m cell size triangulation at 0.2 m decimation. ▪ All surveyed coordinates are within Map Grid of Australia 1994 MGA (MGA94) Zone 56 projection using datum GDA94. ▪ Borehole collars were surveyed post drilling by licensed surveyors using differential global positioning systems with an accuracy of ±10 mm.	▪ The topographic surface is derived from a combination of 2 m and 5 m contour data digitised from topographic maps and 10m digitised data from the Bulga 1st edition topographic map covering the mined areas. Borehole collars and mine survey data were also used. The digital terrain model was created with a 20 m × 20 m cell size triangulation at 0.2 m decimation. ▪ All surveyed coordinates are within Map Grid of Australia 1994 MGA Zone 56. ▪ Borehole collars were surveyed post drilling by licensed surveyors using differential global positioning systems with an accuracy of ± 10mm. ▪ Downhole surveying has been undertaken using downhole verticality and caliper tools

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
		▪ Downhole surveying has been undertaken using downhole verticality and caliper tools since 2007, including attempted resurvey of earlier boreholes. Overall 84% of the diamond drilling metres have been surveyed downhole over the entire borehole length but only 40% of the total open hole drilling metres have been downhole surveyed.	since 2007, including attempted resurvey of earlier boreholes. Overall 84% of the diamond drilling metres have been surveyed downhole over the entire borehole length for MTW, but only 40% of the total open hole drilling metres have been downhole surveyed.
Data spacing and distribution	▪ *Data spacing for reporting of Exploration Results.* ▪ *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* ▪ *Whether sample compositing has been applied.*	▪ Borehole spacing for core holes is on an equilateral triangle grid of 500 m or less. For open holes spacing is on a 250 m or less equilateral triangle grid. ▪ All core samples are composited within defined seam boundaries.	▪ Borehole spacing for core holes is on an equilateral triangle grid of 250 m or less. For open holes spacing is on a 125 m or less equilateral triangle grid. ▪ All core samples are composited within defined seam boundaries.
Orientation of data in relation to geological structure	▪ *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* ▪ *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	▪ The coal measures show a relatively consistent layering and dip at 3° to 7°. ▪ The orientation of drilling is suitable for flat lying stratified deposits.	
Sample security	▪ *The measures taken to ensure sample security.*	▪ Core/chip samples were taken at the drill site by the qualified geologists and then transported daily to the locked MTW or HVO core shed for storage. The MTW core shed stores coal samples in a refrigerated unit. Once each borehole has been completed the samples are transported to the laboratory via a dedicated courier service. ▪ In light of the bulk commodity nature of coal, no higher level security measures are deemed necessary since it is very unlikely to be subject to material impact from sample tampering theft or loss.	
Audits or reviews	▪ *The results of any audits or reviews of sampling techniques and data.*	▪ MTW has had one audit completed in the past eight years. The audit was conducted in March 2010 by the Xstract Group (report: Resources and Reserves Internal Audit Report Executive Summary Mt Thorley Warkworth). The review concluded that the fundamental data collection techniques are appropriate.	

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
Mineral tenement and land tenure status	▪ *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* ▪ *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	▪ HVO was acquired by Yancoal Australia Ltd in a sale process that was completed on 1 September 2017. HVO is owned 51% by Yancoal Australia Ltd and 49% by Glencore, and will be operated by a JV management committee. ▪ HVO contains numerous leases and licenses (see Figure 1, note that this is schematic only): – one authorisations covering 454 ha; – two consolidated coal leases covering 1,743 ha; – five coal leases covering 247 ha; – one coal mining lease covering 2,162 ha; – six exploration leases covering 5,8783 ha; – 24 mining leases covering 7,380 ha; – five mining lease applications covering 56 ha; and – one assessment lease application covering 430 ha. ▪ All leases containing Resources are in good standing.	▪ MTW is an amalgamation of two previously independent mines – Mt Thorley Operations and Warkworth Mining Limited. Each mine was developed at approximately the same time and combined by Coal & Allied Limited (CNA) in 2004. ▪ Yancoal Australia Ltd acquired MTW after a sale process that was completed on 1 September 2017. ▪ MTW is operated by Yancoal on behalf of the joint venture (JV) participants. There are two JV partnerships – one for each of the formerly separate operations. Participants in the JVs are outlined below. ▪ Mount Thorley Operations (MTO) – Yancoal Australia Ltd (share: 80%); and – Posco Australia Pty Ltd (share: 20%). ▪ Warkworth Mining Limited (WML): – CNA Resources (a subsidiary of CNA) (share: 28.75%); – CNA Warkworth Australasia Pty Ltd (a subsidiary of CNA) (share: 26.82%); – Mitsubishi Development Pty Ltd (share: 28.9%); – Mitsubishi Materials (Australia) Pty Ltd (share: 6.000%); and – Nippon Steel (Australia) Pty Ltd (share: 9.53%). ▪ MTW contains numerous leases and licences including: – one consolidated coal lease covering 4,192 ha; – one coal lease covering 1,992 ha;

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
			– one exploration licence covering 1,988 ha; – three mining leases covering 29 ha; and – two mining lease applications covering 1,370 ha
Exploration done by other parties	▪ *Acknowledgment and appraisal of exploration by other parties.*	▪ HVO is an amalgamation of several previously independent mines: Howick, Hunter Valley, and Lemington. Each mine was developed at different times resulting in variable exploration summarised as follows: ▪ Howick open-cut (west pit) – exploration initiated in the 1940's and 1950's by the Joint Coal Board and the Bureau of Mineral Resources. Drilling at 200 m – 300 m spacing for cored holes and 50 m – 150 m spacing for open holes. ▪ Hunter Valley No.1 & 2 mines – exploration initiated in the 1960's and early 1970's by the New South Wales (NSW) Department of Mines. Drilling to 212 m spacing for cored holes and 100 m spacing for open holes. ▪ Lemington South open cut and underground mines – exploration initiated in the 1970's by the Joint Coal Board. Drilling to 200 m - 800 m spacing for cored holes.	▪ 1949 - 1950: Newly formed Joint Coal Board commence drilling shallow percussion boreholes (McMenamins and JCB Warkworth series). ▪ 1960s: Clutha Bargo explored the Whybrow Seam for coking coal potential. ▪ Early 1970's: Armco conducted diamond drilling in the Bulga area. ▪ 1970 - 1975: Department of Mines conducts fully cored hole drilling program (DM Warkworth and DM Doyles Creek series). ▪ 1976: Warkworth Consortium is formed (later established as WML) and awarded mining bid for Warkworth area. Commenced exploration program with 12 rigs drilling fully cored, HQ-size holes and large diameter (LD) core drilling in selected seams. ▪ 1976: Drilling program started at Mt Thorley site – similar to Warkworth drilling program. Main concentration of drilling was in the shallower, eastern parts of the lease. ▪ 1980s and 1990s: Main focus at Warkworth was open-hole drilling. Mt Thorley increased open holing with production, and a concerted effort at core drilling during the 1990's. ▪ 2002 - 2005: Little drilling was undertaken.

<table>
<tr><th rowspan="2">Criteria</th><th rowspan="2">JORC Code explanation</th><th colspan="2">Commentary</th></tr>
<tr><th>HVO</th><th>MTW</th></tr>
<tr><td></td><td></td><td></td><td>▪ 2006 - 2014: Pre-production and further exploration drilling was undertaken. Focus was on: improving borehole data density, testing in situ gas content, provide data for underground Resources, testing the geology of Abbey Green, and extending pre-production drilling 3 years ahead of mining (MTO and WML).
▪ Drilling data acquired on both sites (Warkworth and MTO) has been combined into a single geological database.</td></tr>
<tr><td>Geology</td><td>▪ Deposit type, geological setting and style of mineralisation.</td><td colspan="2">▪ MTW and HVO are located in the Permian age Hunter Coalfield in the northern part of the Sydney Basin.
▪ MTW exploits the coal seams contained within the Jerrys Plains Subgroup, (Whybrow to Bayswater seams).
▪ HVO exploits the coal seams of the Jerrys Plains and underlying Vane Subgroup which contains the Lemington to Hebden seams.
▪ The main rock types at MTW and HVO include sandstone, siltstone, sandstone and conglomerate, which occur with subordinate coal and tuffaceous claystone.</td></tr>
<tr><td>Drillhole Information</td><td>▪ A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:
– easting and northing of the drillhole collar
– elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar
– dip and azimuth of the hole
– down hole length and interception depth
– hole length.
▪ If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</td><td colspan="2">▪ All borehole data is stored within the ABB GDB database for both the Warkworth and MTO leases. A summary of borehole numbers completed by year since 2004 since consolidation of the Warkworth and MTO data is shown below:
<table><tr><th></th><th>2004</th><th>2005</th><th>2006</th><th>2007</th><th>2008</th><th>2009</th><th>2010</th><th>2011</th><th>2012</th><th>2013</th><th>2014</th><th>2015</th></tr><tr><td>Open holes</td><td>35</td><td>11</td><td>71</td><td>75</td><td>23</td><td>62</td><td>103</td><td>39</td><td>45</td><td>6</td><td>28</td><td>5</td></tr><tr><td>Cored holes</td><td>7</td><td>1</td><td>6</td><td>19</td><td>18</td><td>17</td><td>24</td><td>47</td><td>44</td><td>31</td><td>13</td><td>3</td></tr></table>▪ All borehole data is stored within the ABB GDB database for the HVO leases. A summary of borehole numbers completed by year since 2002 and consolidation of the Lemington, Howick and Hunter Valley mines into one operation (as HVO) is shown below:</td></tr>
</table>

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Criteria	JORC Code explanation	Commentary
		HVO / MTW

	Area/year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Open Holes	Carrington	43	20	31							11	102			
	Cheshunt	23	7	2	6	16	43		3	19	51		2	15	
	West	37			25		9	134	38			6	5	4	
	Mitchell	13										43			
	Riverview	84			8		29		26	14	47		24	33	
	Southern										12	25			
Cored Holes	Carrington		1	7				17	4		5	40			
	Cheshunt	10	1		5	5	8		4	8	8	4		2	
	West	4	7		8		3	7	4	4	3	9		2	
	Mitchell										5	1			
	Riverview				1	1			1	15	8	2			
	Auckland											18			6
	Southern										15				

Data aggregation methods	▪ *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* ▪ *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* ▪ *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	▪ Ply samples are combined to create composites (for washability and product coal analyses) that represent the mineable seam working sections. ▪ Individual ply samples have been weighted by thickness and density (mass weighting) to represent the mineable seam working sections. Laboratory determined air dried ARD has been used for the density weighting. Where no ARD data is available and ash data is available then an air dried ash to ARD regression has been used to assign individual sample ARDs prior to weighting. ▪ There are no metal equivalents used to report the Coal Resources. This is not a standard reporting practice for Coal Resources.
Relationship between mineralisation widths and intercept lengths	▪ *These relationships are particularly important in the reporting of Exploration Results.* ▪ *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* ▪ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	▪ The strata at MTW in general dip shallowly to the west at 4° to 6°. Boreholes are drilled vertically. ▪ The strata at HVO in general dip shallowly into the centrally located Bayswater syncline, which plunges to the south. ▪ Based on drilling techniques and seam dip, the coal seam intercepts therefore approximate the true coal thickness.

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
Diagrams	▪ *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	▪ All relevant figures depicting information considered material to the Coal Resources reported are contained within the JORC report associated with this Table 1.	
Balanced reporting	▪ *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	▪ Not applicable. There are no exploration results for the MTW and HVO areas.	
Other substantive exploration data	▪ *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	▪ Resistivity surveys, ground and airborne magnetic and 2D seismic surveys have been completed to identify faults, dykes, and alluvial limits in the HVO and MTW areas.	
Further work	▪ *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* ▪ *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	▪ Both pre-production drilling and strategic brownfields drilling is required down dip of the current MTO, WML and HVO highwalls. The drilling includes associated coal quality, geotechnical, gas and environmental testing and environmental monitoring. ▪ Brownfields exploration is required to support the MTW underground concept study which covers the areas of the present open cut pits and extending to the western extents of the MTW licence areas. ▪ Greenfields exploration at HVO includes investigations in the Auckland and Southern areas. In addition exploration and evaluation are being made to assess the underground potential of HVO and the adjoining areas of MTW.	

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in Section 1, and where relevant in Section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
Database integrity	▪ *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral*	▪ All borehole data has been migrated to Geobank which is located on a server in Sydney and is backed up daily.	

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
	Resource estimation purposes. ▪ *Data validation procedures used.*	▪ The ABB GDB database contains all hole surveys, drilling details, lithological data, and coal quality results and is the primary source for all such information. There is only one copy of the database and any data additions, changes to or edits of the data are made directly into the database. ▪ Where possible, all original geological field logs (scanned or hard copy), down-hole geophysics (LAS) files and hard copy logs, hole collar survey files, digital laboratory data and reports and other similar source data are maintained on the project server or library and referenced within the database to provide an audit trail to this original source data. ▪ Data is validated at the drill site and also prior to loading into the database by the responsible geologist. ▪ There are a number of underlying "business rules" built into the database that help ensure consistency and integrity of data including, but not limited to: – relational link between geological, down hole geophysical and coal quality data; – exclusion of overlapping geological intervals; – restriction of data entry to the interval of the defined hole depth; – use only of defined rock type and stratigraphic codes; and – basic coal quality integrity checks such ensuring data is within normal range limits, that proximate analyses add to 100 percent etc. ▪ Other checks performed either periodically or before export of data for model development include: – missing or unlogged geological intervals highlighted; – stratigraphic picks are out of correct stratigraphic sequence; – missing stratigraphic codes; and – missing, anomalous, non-zero thickness, multiple or inappropriate (e.g. within overlying stratigraphy rather than host stratigraphy). ▪ The database contains automated validation processes which are activated during data loading and prevent un-validated data from being loaded to the GDB database. ▪ Field geologist seam and stratigraphic picks and correlations are independently checked and rechecked by senior geological staff. After modelling anomalous seam and interburden structure and thicknesses are reviewed to determine if they have a geological explanation, or are errors which are iteratively corrected or removed from the database. ▪ It is highly unlikely that there is significant volume of corrupt data in the database, given the validation procedures that have been described above. Some errors may still pass through to the geological and coal quality models. Coal is a bulk commodity of relative even	

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
		consistency which combined with the large number of boreholes on which the Resource is based, such errors are unlikely to have a material impact on the Resource estimate.	
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ The RPM Resources Competent Person has visited MTW in January 2015, and both MTW and HVO in February 2017. In addition the RPM Resources Competent Person was employed by the previous owner (RTCA) from 2006 to 2013 as a Principal geologist and was responsible for governance over the operating RTCA mines.	
Geological interpretation	▪ *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* ▪ *Nature of the data used and of any assumptions made.* ▪ *The effect, if any, of alternative interpretations on Mineral Resource estimation.* ▪ *The use of geology in guiding and controlling Mineral Resource estimation.* ▪ *The factors affecting continuity both of grade and geology.*	▪ Detailed coal ply logging is completed by geological logging of open and fully cored holes supported by geophysical log data. ▪ Coal seam and ply correlation are relatively simple where drill spacing is adequate and are sufficient to establish the variability of interburden thicknesses. ▪ The geology of the MTW Resource is well known because it has been in production since the early 1980s. The coal plies predominantly have a tabular layer-cake disposition, however, interburden thicknesses are characterised by common rapid lateral thickness changes due to channel splays propagating from alluvial fan structures located to the north of the MTW area. The major channel structures appear to have a north – south orientation (parallel to strike), and are sinuous in nature. ▪ The geology of the HVO Resource is well known because it has been in production since 1969 at Howick, 1971 at Lemington and 1979 at Hunter Valley No. 1. ▪ The coal plies predominantly have a tabular layer-cake disposition, however, interburden thicknesses are characterised by common rapid lateral thickness changes due to channel splays propagating from alluvial fan structures located to the north of the HVO area. The major channel structures appear to have an east – west orientation (perpendicular to strike), and do not appear to have the sinuosity that is seen at MTW. ▪ Infill drilling and mining exposure and mapping has supported and refined the MTW and HVO models. The current geological interpretations are considered to be robust.	
Dimensions	▪ *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	▪ The MTW Resource area trends 8 km northwest to southeast and is 8.5 km in width. The deposit extends to a depth of 460 m below the topographic surface.	
Estimation and modelling techniques	▪ *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	▪ Coal Resources were estimated by the Competent Person using ABB Mincom software from a geological model developed by the previous owners. The geological model was updated in 2015 and is called HVO_1508_LOM.	▪ Coal Resources were estimated by the Competent Person using ABB Mincom software from a geological model developed by the previous owners. The geological model was updated in 2012 and is called MTW_1208_LOM.

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Criteria	JORC Code explanation	Commentary	
		HVO	MTW
	▪ *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* ▪ *The assumptions made regarding recovery of by-products.* ▪ *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* ▪ *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* ▪ *Any assumptions behind modelling of selective mining units.* ▪ *Any assumptions about correlation between variables.* ▪ *Description of how the geological interpretation was used to control the resource estimates.* ▪ *Discussion of basis for using or not using grade cutting or capping.* ▪ *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*		
Moisture	▪ *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	▪ All tonnages are estimated on an in situ moisture basis, following the practice of estimating in situ moisture as air dried moisture content plus 4%. This offset was derived by RTCA by comparing the difference between the average total moisture content of shipments of coal that have by-passed the coal plant, and the average air dried moisture content of that coal. ▪ The Competent Person considers that this approach is reasonable.	
Cut-off parameters	▪ *The basis of the adopted cut-off grade(s) or quality parameters applied.*	▪ Resources polygons are limited to the limit of oxidation, and tenement boundaries. ▪ Mined out surfaces are used as the upper surface. ▪ At MTW the Bayswater seam is the lowest seam for which Resources have been estimated. Tenure at MTO does not extend to the seams stratigraphically lower than the Bayswater. ▪ At HVO the Barrett seam is the lowest seam for which Resources have been estimated. ▪ No cut-off coal quality parameters or thickness limits have been applied to coal plies for Resource estimation because coal plies are aggregated during the Reserve estimation	

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
		process. It is during the Reserve estimation process that coal plies are assigned to Resource or waste based on the mining aggregation rules used.	
Mining factors or assumptions	▪ *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	▪ Open cut mining methods are currently used at both mining sites using both draglines and truck and shovel / excavator mining equipment. ▪ Potential underground mining areas have been identified at both sites.	
Metallurgical factors or assumptions	▪ *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	▪ MTW has two coal handling and preparation plants: North CHPP and South CHPP. Both plants are operational. North CHPP is capable of single product washing and South CHPP is capable of two-product washing. ▪ HVO has three CHPPs, Hunter Valley, West and Newdell. The Hunter Valley CHPP is located at Hunter Valley and the West CHPP handles ROM coal from the West pit. ▪ The processes used are standard for the coal industry and so are well tested technologies. All bore core samples are wash/cut-point tested and so the representativeness of test work undertaken is implicit in the Resource classification status. ▪ In-seam partings where they are included in the coal seam are included in the bore core samples tested. ▪ Coal Reserve estimation is based on existing product specifications. ▪ Nominally coal is washed to produce a semi-soft coking coal product at 9% air dried ash or to three types of thermal products (11% air dried ash, 13% air dried ash and 18% air dried ash). For all products, product moisture is at 9%. Air dried is quoted at a 2.5% moisture basis.	
Environmental factors or assumptions	▪ *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these*	▪ MTW has a number of current mining and exploration titles. ▪ All the various mining leases across MTW are defined by a 21 year consent limit. This consent limit is particular to each mining lease, and as such leases are constantly being renewed. There is a dedicated tenements manager to ensure the application for lease renewal occurs on time. ▪ An appeal of the project approval for Reserves west of Wallaby Scrub Road was upheld (disapproved) by the NSW Land and Environment Court in April 2013. A 350 m modification within this area was subsequently secured in January 2014 and Rio Tinto Coal Australia	

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
	potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	management worked through a process that resulted in further approvals being granted in November 2015. In September 2018, Wallaby Scrub Road was closed and ownership transferred to MTW. ▪ Coarse rejects are dumped within the mines overburden dumps, while the fines coal washery rejects are stored within dedicated tailings dams. Rejects material and completed tailings dams must be covered by at least 3 m of inert waste rock material. ▪ Overburden waste rock has low acid forming potential.	
Bulk density	▪ *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* ▪ *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* ▪ *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	▪ Certain boreholes samples have only true relative density ("RD") analysis; some have both apparent relative density ("ARD") and true RD, and most have ARD. Relationships between ARD and RD were determined from the paired sets of ARD and RD analyses. The relationships used to populate the ply by ply data with missing ARDs or RDs are: – RD (ad) = 1.0003 x ARD 1.0645, and ARD = 1.0045 x RD 0.9316. ▪ The in situ relative density (i.e. the density of materials at an in situ moisture basis) was calculated using the Preston Sanders equation: – RD2 = [RD1*(100-M1)] / [100+RD1*(M2-M1)-M2] – Where RD1 is true RD (ad), M1 is air dried moisture and M2 is the in situ moisture. (M1 +4) ▪ A regression of laboratory ARD measurements against raw ash was used for the in situ density when density values had not been determined in the laboratory, such as when coal plies were aggregated on a working section basis.	
Classification	▪ *The basis for the classification of the Mineral Resources into varying confidence categories.* ▪ *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.*	▪ The classification of the Coal Resources into varying confidence categories is based on a standardised process of utilising points of observation (PoO) according to their reliability. The PoOs are used to categorise quantity and quality continuity (or both) or support continuity. ▪ A quantity PoO has the following attributes: – open hole; – seam interval geophysically logged; and – reliable collar survey. ▪ A quality PoO has the following attributes: – cored hole in which 100% of the seam interval has been cored; – linear core recovery greater than 95%; – reliable collar survey; and – raw coal ash (can be used as a proxy for relative density).	

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
		▪ Support data for PoOs includes: – in-pit mapping data for faults and dykes; and – seam floor or roof survey data. ▪ The radii of influence for PoOs were determined by consideration of the following for each coal ply: – variability of seam thickness; – variability of interburden thickness; – seam splitting and coalescing patterns; are they sedimentary or due to seam correlation inconsistency between stages of exploration; – structural variability; – variability of coal quality; – understanding of relationship between raw coal quality and washed product coal quality; – relationship between overburden thickness variation and coal quality variability; – examining aerial distribution of data points, histograms and statistics of the ash content of seam groups; – review of as mined seam roof or floor survey data in conjunction with modelled roof and floor contours, and borehole intersections to assess reliability of input data and model output to assess; – the variability of the geology between boreholes; and – the reliability of borehole data. ▪ There are many coal plies at MTW and HVO, and in general seam groups (equivalent to the seam names) were used as the Resource entities. Where variability of plies within a seam group were identified and a single Resource entity for the seam group was not justified multiple Resource entities were categorised. The MTW Resource contains 15 seam groups, but Resources have been categorised for 28 seam entities. ▪ Previous Resource classifications of the MTW Resource have been based on the 15 primary seam groups, and at HVO the 17 primary seam groups. Detailed review of each of the MTW and HVO plies has shown that in general the lower plies of some seam groups have greater variability, or have less extensive or consistent lateral development than the upper plies of the seam group. As a consequence some seam groups have multiple coal plies categorised. ▪ Radii of influence were plotted around PoOs to produce maps of quantity and quality. ▪ Areas of low, medium, and high confidence are produced from these plots for structure (quantity) and coal quality for each Resource entity. The quantity and quality areas of	

<table>
<tr><th rowspan="2">Criteria</th><th rowspan="2">JORC Code explanation</th><th colspan="2">Commentary</th></tr>
<tr><th>HVO</th><th>MTW</th></tr>
<tr><td></td><td></td><td colspan="2">confidence are intersected to produce areas of Measured, Indicated and Inferred to categorise the Resource tonnage estimates.
▪ In summary quantity radii range:
– 100 m - 250 m for high confidence;
– 200 m - 500 m for medium confidence; and
– 400 m - 1,000 m for low confidence.
▪ In summary quality radii range:
– 200 m - 400 m for high confidence;
– 400 m - 1,000 m for medium confidence; and
– 800 m - 1,200 m for low confidence.
▪ The ranges reflect the variability within and between the fifteen seam groups modelled at MTW.
▪ The Competent Person is satisfied that the stated Coal Resource classification reflects the geological controls interpreted and the estimation constraints of the deposits.</td></tr>
<tr><td>Audits or reviews</td><td>▪ The results of any audits or reviews of Mineral Resource estimates.</td><td colspan="2">▪ MTW has had one external audit which was conducted in March 2010 by the Xstract Group as part of RTCA's internal compliance requirements.
▪ The outcome of this audit was an overall satisfactory rating with a number of recommendations made and acted upon by Rio Tinto Coal Australia.
▪ In September 2011 an audit into the modelling and Resource estimation process at HVO was completed (report: Rio Tinto Corporate Assurance Resources and Reserves Internal Audit Report. Hunter Valley Operations. 2.1).
▪ The outcome of this audit was overall a satisfactory rating with a number of recommendations made and acted upon by Rio Tinto Coal Australia.</td></tr>
<tr><td>Discussion of relative accuracy/ confidence</td><td>▪ Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.
▪ The statement should specify whether it relates to global or local estimates, and, if local, state the relevant</td><td colspan="2">▪ Reconciliation at MTW is performed on an annual rather than a spatial basis. The following is noted from the MTW 2015 Annual Reconciliation:
<table>
<tr><th rowspan="2"></th><th colspan="2">Unprocessed Coal ROM</th><th rowspan="2">Yield (%)</th><th rowspan="2">Waste</th><th rowspan="2">Strip Ratio</th><th rowspan="2">Product Coal</th><th rowspan="2">Product Strip Ratio</th></tr>
<tr><th>Mass(t)</th><th>Ash(%)</th><th>M m^3</th><th>bcm/t</th><th>Mass(t)</th><th>bcm/t</th></tr>
<tr><td>AOP</td><td>17,485</td><td>38.3</td><td>54.5</td><td>94,936</td><td>5.43</td><td>9,529</td><td>9.96</td></tr>
<tr><td>To Plant</td><td>16,576</td><td>24.3</td><td>66.9</td><td>99,333</td><td>5.99</td><td>11,089</td><td>8.96</td></tr>
<tr><td>Plant/AOP</td><td>95%</td><td>63%</td><td>123%</td><td>105%</td><td>110%</td><td>116%</td><td>90%</td></tr>
</table></td></tr>
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<table>
<tr><th rowspan="2">Criteria</th><th rowspan="2">JORC Code explanation</th><th colspan="2">Commentary</th></tr>
<tr><th>HVO</th><th>MTW</th></tr>
<tr><td></td><td>tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.
▪ These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</td><td colspan="2">▪ The Annual Operating Plan (“AOP”) underestimates:
– waste volume;
– yield;
– strip ratio; and
– product coal tonnes.
▪ The AOP overestimates:
– ROM tonnes; and
– ROM ash.
▪ In summary, the in situ structural and coal quality models, and the assumptions used to convert from in situ to ROM models show material difference between estimated and actual performance.
▪ The assessment of variability on a ply or seam basis at both HVO and MTW has not been performed geostatistically. The variability of seam and interburden thickness, seam structure and raw and product ash between adjacent boreholes was assessed by the RPM Competent Person to determine the PoO spacing used for the Resource categorisation and estimation at both HVO and MTW.
▪ Variability between adjacent boreholes was categorised by the following ranges, which represent high, moderate and low confidence spacing respectively:
– plus or minus 10%;
– plus or minus 10 to 20%; and
– plus or minus 20 to 40%.
▪ Reconciliation at HVO is performed on an annual rather than a spatial and temporal basis after each mining unit is completed. The following is noted from the MTW 2015 Annual Reconciliation:
<table><tr><td></td><td colspan="2">Unprocessed Coal ROM</td><td>Yield (%)</td><td>Waste</td><td>Strip Ratio</td><td>Product Coal</td><td>Product Strip</td></tr><tr><td></td><td>Mass(t)</td><td>Ash(%)</td><td></td><td>M m^3</td><td>bcm/t</td><td>Mass(t)</td><td>bcm/t</td></tr><tr><td>AOP</td><td>18,849</td><td>37.5</td><td>66.5</td><td>101,808</td><td>5.4</td><td>12,535</td><td>8.12</td></tr><tr><td>To Plant</td><td>16,709</td><td>26.8</td><td>77.3</td><td>101,072</td><td>6.05</td><td>12,916</td><td>7.83</td></tr><tr><td>Plant/AOP</td><td>89%</td><td>71%</td><td>116%</td><td>99%</td><td>112%</td><td>103%</td><td>96%</td></tr></table>▪ The results of the HVO annual reconciliation are similar to the findings of the MTW reconciliation, and the same comments made for MTW can apply to HVO.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
		▪ Resource estimates in this stratiform conformable deposit are directly dependent on three factors: the size (aerial extent) of the coal seam Resource polygons, the coal seam thickness and the coal density. The coal seam Resource polygons are limited by the modelled coal seam subcrops, mapped and interpreted faults and by the borehole distribution. The Resource polygons are not significantly extrapolated past the "last" borehole which is considered to be a conservative approach.	

Section 4 Estimation and Reporting of Ore Reserves

The completed Table 1, Sections 4 is in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person, Mr Doug Sillar on behalf of RPM.

(Criteria listed in Section 1, and where relevant in Sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
Mineral Resource estimate for conversion to Ore Reserves	▪ *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* ▪ *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	▪ The Coal Resource estimate used as the basis for this Coal Reserves Statement is described as part of this statement. The Resource estimate has been prepared by Mr. Peter Ellis. The Competent Person, Mr. Ellis, has sufficient expertise that is relevant to the style of mineralisation and type of deposit and activity to qualify as a Competent Person as specified under the JORC Code and is a member of the Australian Institute of Mining and Metallurgy . ▪ The Resources Statement was compiled in accordance with The JORC Code 2012 Edition. ▪ The Coal Resources reported are inclusive of the Coal Reserves. ▪ The same geological model has been used for the estimation of Resources and Reserves.	
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ A site visit to the MTW and HVO Mines was undertaken by a representative of RPM in January 2017. The Reserves Competent Person was unable to attend but interviewed the RPM representative who completed the site visit. The outcome of the site visit was a better understand of the location, environmental, social, groundwater and existing infrastructure considerations, and in particular the way the two sites managed to meet their license to operate obligations.	
Study status	▪ *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* ▪ *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is*	▪ MTW is an operating mine. The Reserves are located within an extension of the existing active mining pits. ▪ HVO is an operating mine consisting of a number of operating pits which will be expanded down dip and new future pits for expansion.	

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
	technically achievable and economically viable, and that material Modifying Factors have been considered.	▪ Reserves are based on the results of a life of mine plan prepared by Yancoal at MTW and Yancoal/RPM at HVO. Both LOM plans have been reviewed by RPM. The Modifying Factors are based on Yancoal's experience in operating similar mines and are considered reasonable by RPM. As such, the level of confidence in the data and assumptions exceed those of a Prefeasibility Study.	
Cut-off parameters	▪ *The basis of the cut-off grade(s) or quality parameters applied.*	▪ A 55% (ad) ROM ash cut off has been applied to the MTW model. ▪ At HVO a 55% (ad) ROM ash cut off is applied in the West, Wilton, Mitchell, Carrington West and Riverview pits. The cut off was not applied at Cheshunt, Southern, Auckland and Auckland South pits. RPM has reviewed and the impact is not material.	
Mining factors or assumptions	▪ *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* ▪ *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* ▪ *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* ▪ *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* ▪ *The mining dilution factors used.* ▪ *The mining recovery factors used.* ▪ *Any minimum mining widths used.* ▪ *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* ▪ *The infrastructure requirements of the selected mining methods.*	▪ A combination of Margin Ranking, Break Even Strip Ratio Analysis, pit design and LOM planning have been used as the basis of converting Coal Resources to Coal Reserves. ▪ The mining method at both Assets utilises draglines and truck and shovel for waste removal. Coal is mined by FEL / Excavator and hauled to ROM locations by rear dump trucks. This method is proven at the mine and considered appropriate for future planning based upon geology and strip ratio. Draglines will be phased out of operation when there are no longer suitable working areas. ▪ Pit designs use criteria based on operational knowledge as well as input and advice from external geotechnical consultants. All pit designs are based on those previously prepared by RTCA for the 2015 Reserves Statement. ▪ RTCA completed a pit optimisation in 2015. Yancoal then undertook a Marking Rank process in XPAC to confirm the economic limits of a number of pits at the Assets. The results of the margin rank indicate that the pits reviewed are economic and that there is potentially economic coal below the RTCA designed pit floors. RPM completed a break even strip ratio analysis as a basis for confirming the pit limits at HVO (Carrington Pits, Riverview East and Wilton/Mitchel/West pit extensions). ▪ The mining factors used were: – minimum coal working section mining thickness of 0.4 m; – minimum parting mining thickness of 0.3 m; – overall average coal losses of 10%; – dilution of 4%; – dilution ash assumed to be 80%; and – in situ moisture standardised to 6.5%. ROM moisture is assumed to be 6.5%. ▪ Inferred Coal has been included in the LOM Plan. ▪ All necessary infrastructure is in place and operational at both MTW and HVO.	

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
Metallurgical factors or assumptions	▪ *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* ▪ *Whether the metallurgical process is well-tested technology or novel in nature.* ▪ *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* ▪ *Any assumptions or allowances made for deleterious elements.* ▪ *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole.* ▪ *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	▪ HVO has three Coal Handling and Preparation Plants (CHPP); Hunter Valley CHPP, West Pit CHPP and the Newdell CHPP. Newdell is only used for coal handling purposes. The metallurgical process is appropriate for the mine. ▪ MTW has two Coal Handling and Preparation Plants; North CHPP and South CHPP. The South CHPP has two product washing. The metallurgical process is appropriate for the MTW mine. ▪ Discrepancies identified between historical yield performance data and mine plan estimates at HVO, with the actual yield higher than predicted. HVO do not record the ROM feed Ash % making analysis of the actual yield results difficult. ▪ Yancoal commissioned a coal quality expert to review production data and determine an estimate of current yield at Assets. Sufficient historical data available to produce a regression relationship between ROM Ash % and the product yield using MTW data. As the HVO pits are mining from the same coal measures it is reasonable to apply the MTW yield regression to the HVO model. ▪ Product logic based on the following: – Total product tonnes estimated from ROM tonnes and yield are derived from the ash / yield regression). – Semi soft coking coal tonnes are estimated from ROM tonnes and the F1.6 yield data in the model. – Total thermal product tonnes is the difference between the total product tonnes and the SSCC tonnes. – Thermal products further split into Low Ash, Mid Ash and High Ash products based on the annual LOM splits in the LOM plan. ▪ No bypass products assumed in the LOM plan though some minor quantities actually produced on site. ▪ No allowance has been made for deleterious elements.	
Environmental	▪ *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	▪ Environmental approval required for the Cheshunt Deep pit within the next five years. Yancoal advised that this is sufficient time to achieve this approval. All other primary approvals are in place for HVO for the short to medium term. ▪ Environmental Approval is required for the Southern and Auckland pits at HVO. ▪ Coarse rejects are placed within the mine overburden emplacements. Washery fines material is stored within specific tailings dams. When tailings dams are full they are dried and require 3 m of inert capping material. ▪ Overburden material has low acid forming potential.	

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
Infrastructure	▪ *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	▪ All necessary infrastructure is in place and operational for the current operations at Assets.	
Costs	▪ *The derivation of, or assumptions made, regarding projected capital costs in the study.* ▪ *The methodology used to estimate operating costs.* ▪ *Allowances made for the content of deleterious elements.* ▪ *The source of exchange rates used in the study.* ▪ *Derivation of transportation charges.* ▪ *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* ▪ *The allowances made for royalties payable, both Government and private.*	▪ All major infrastructure is in place. Capital forecasts have been included which represent the growth and sustaining requirements for the completion of the LOM plan. ▪ All operating costs are based on LOM planning estimates from Yancoal and have been reviewed by RPM. ▪ Current long-term exchange rate assumptions were provided by Yancoal. ▪ Transport charges based on actual contracted prices taking into account existing Take or Pay arrangements. ▪ NSW state government royalties are included in the estimate. ▪ RPM reviewed all costs and they are considered reasonable.	
Revenue factors	▪ *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* ▪ *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	▪ Long term product coal pricing assumptions have been provided by Yancoal Marketing and is based on independent third party research and reporting. ▪ The revenue factors are considered reasonable for the purposes of estimating Reserves.	
Market assessment	▪ *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* ▪ *A customer and competitor analysis along with the identification of likely market windows for the product.* ▪ *Price and volume forecasts and the basis for these forecasts.* ▪ *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	▪ A Marketing Study has not been reviewed however markets are well established for the mine's coal products. The projects typically produce up to four main products: – Three Thermal at approx. 12 - 15.5% ash (ad); and – SSCC at approx. 8 - 9% ash (ad). ▪ Based upon these products and specifications, RPM anticipates no foreseeable issues in demand for these products.	
Economic	▪ *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* ▪ *NPV ranges and sensitivity to variations in the significant*	▪ The inputs to the economic analysis are derived capital and operating cost estimates outlined in the "Costs" section of Table 1. The source of the inputs is real and the confidence satisfactory. The economic modelling is in real terms and a range of discount rates have been used in assessing NPV.	

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
	assumptions and inputs.	▪ The NPV results for the Project produced from economic modelling generated positive and acceptable NPV's for all discount rates and the Project is considered economic from an NPV stand-point. ▪ Sensitivity analysis has been completed on the Project over a range of variable. The Project is most sensitive to changes in exchange rate, revenue and operating costs.	
Social	▪ *The status of agreements with key stakeholders and matters leading to social licence to operate.*	▪ MTW has received development consents which authorise mining at Mt Thorley and Warkworth to 2036. Yancoal will need to continue to work with the local community to earn its social licence. ▪ Native Title has not been extinguished for some areas (including crown land, water ways and access roads) and Native Title may still exist. The majority of the Assets holdings are however not subject to native title and future material risk associated with currently approved projects is not anticipated as a result of the Native Title. It is noted no native title issues occur in the current LOM.	
Other	▪ *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* ▪ *Any identified material naturally occurring risks.* ▪ *The status of material legal agreements and marketing arrangements.* ▪ *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	▪ All mining projects operate in an environment of geological uncertainty. RPM is not aware of any other potential factors, legal, marketing or otherwise, that could affect the operation's viability. ▪ At HVO the LOM plan includes pits that are outside the current approvals limits. The pits are forecast for mining from 2021 which RPM believe is an acceptable amount of time to achieve approval. Updating of approvals is an ongoing process and it is reasonably expected that any modifications to existing agreements or additional agreements that may be required can be obtained in a timely manner.	
Classification	▪ *The basis for the classification of the Ore Reserves into varying confidence categories.* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.* ▪ *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	▪ Classification of Coal Reserves has been derived by considering the Measured and Indicated Resources and the level of mine planning. – At HVO the West, Wilton, Mitchell, Carrington West, Riverview and Cheshunt pits. Measured Coal Resources are classified as Proved Coal Reserves and Indicated Resources classified as Probable Coal Reserves, as the pits are either operating or the level of mine planning is considered adequate to support this level of certainty in the Reserves estimate. – The Carrington East, Auckland South, Southern and Auckland pits at HVO are classified as Probable for both Measured and Indicated Resources, as the pit is not currently	

Criteria	JORC Code explanation	Commentary	
		HVO	MTW
		operating, the level of mine planning is regarded as preliminary and approvals are not in place. – At MTW, Measured Coal Resources are classified as Proved Coal Reserves and Indicated Resources classified as Probable Coal Reserves, as the pits are operating and the level of mine planning is considered adequate to support this level of certainty in the Reserves estimate. ▪ The Inferred Coal Resources have been excluded from the Reserve estimates. ▪ The result reflects the Competent Persons view of the deposit.	
Audits or reviews	▪ *The results of any audits or reviews of Ore Reserve estimates.*	▪ Internal peer review of the Reserves Report has been completed.	
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* ▪ *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ The current active pits at HVO are supported by approximately 80% of Measured Coal Resources. ▪ The shells at MTW is supported by approximately 35% Measured Coal Resources. ▪ The basis of the estimate are actual operating costs and LOM planning. ▪ CHPP's and infrastructure are in place and operating at both MTW and HVO. ▪ Analysis of the coal quality has been undertaken by independent laboratories working under international standards of method and accuracy. Coal products from both MTW and HVO is produced from blended washed coal products. ▪ The level of accuracy will continue to be dependent on the ongoing update of the geological model and monitoring of the Modifying Factors affecting the coal estimate. ▪ Geotechnical studies have been completed for existing pits. Expansion pits will need geotechnical study prior to development.	

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JORC Code Disclosure Requirements

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JORC Code, 2012 Edition – Table 1 report template

The completed Table 1, Sections 1, 2 & 3 are in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person Mr Brendan Stats on behalf of RPM.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* ▪ *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* ▪ *Aspects of the determination of mineralisation that are Material to the Public Report.* ▪ *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	▪ The Moolarben Coal Complex ("MCC") area includes exploration drillholes identified as MC (MCD, MCR, MCL, MCX), MCOL, WD, WMLB, R and C series. Most WMLB, MC and MCOL holes were logged with downhole geophysical logs (density, caliper, gamma). R and C series were drilled by another mining operation (Ulan Coal Mines Ltd) and geophysical logs were not transferred when MCC was acquired. ▪ The majority of holes (MCD, MCOL, WMLB, WD and C series) are partially cored HQ size. The pre-collar sections from surface to 10 m - 20 m above the Ulan seam have been sampled at 1 m intervals which are logged by the field geologist and representative samples of each metre are sampled and stored. All core was logged by the field geologist and depth corrections using geophysical logs were undertaken. Each coal ply is sampled separately for analysis. ▪ MC and MCOL series coal core was sampled in plastic bags with sample tags inserted in the bags and the information also labelled on the bags with permanent markers. Coal core is not split when sampled and the entire cylindrical section of core per ply is bagged for later analysis by NATA approved coal quality laboratory. ▪ Rotary holes to define limit of oxidation (LOX) were drilled along the interpreted subcrops. These holes were lithologically logged every meter and coal samples were taken every 0.5 m.
Drilling techniques	▪ *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	▪ The MCC area includes more than 1,000 drillholes: – 517 core holes, most of these holes were pre-collared to within 20 m of the target Ulan seam and then diamond cored using triple tube (HQTT) to below the seam. Several holes have been fully cored to gather geological information on the full stratigraphic package and at least five large diameter holes (6") for full washability analysis. – 285 rotary holes. – 223 rotary air blast for limit of oxidation definition. ▪ All holes were drilled vertically which is considered the most appropriate given the flat lying nature of the deposit.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	▪ *Method of recording and assessing core and chip sample recoveries and results assessed.* ▪ *Measures taken to maximise sample recovery and ensure representative nature of the samples.* ▪ *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	▪ Chip sample recoveries are not relevant as these samples are only used to define limit of oxidation not to assign quality parameters to the coal seam. Core recoveries are calculated using geophysical logs and measured core lengths recorded in the lithology logs. ▪ Core recovery for the coal seams is generally very good (>95%). Core loss is infrequent in this deposit. Samples with core loss greater than 5% were excluded from the geological model and Resource estimation. No bias related to sample recovery has been identified and is considered very unlikely. The Ulan seam is a thick, consistent seam with thin partings (~0.03 m) dividing the plies, the only thick parting (CMK) is modelled separately and not included in the Resource estimate
Logging	▪ *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* ▪ *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* ▪ *The total length and percentage of the relevant intersections logged.*	▪ All holes have detailed lithological logging through the whole length of the hole (100%), which have been used for seam correlation supported by geophysical logs where available. ▪ Core holes include geotechnical logging, point loading tests and selected samples are sent to geotechnical labs to support mining studies. Most recent MC, MCOL and WMLB series holes (except redrills, some pilot holes and piezometer holes) have been geophysically logged to total depth and core has been photographed. ▪ The amount, type and detail of information collected from logging of the drillholes is considered appropriate to support the Resource Estimate.
Sub-sampling techniques and sample preparation	▪ *If core, whether cut or sawn and whether quarter, half or all core taken.* ▪ *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* ▪ *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* ▪ *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* ▪ *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* ▪ *Whether sample sizes are appropriate to the grain size of the material being sampled.*	▪ The entire cored section of each coal ply is placed in the sample bag. No splitting, subsampling or sawing takes place outside the laboratory. Coal quality analysis undertaken by NATA approved laboratories which comply with Australian Standards for coal sample preparation. ▪ Bureau Veritas and SGS Australia (for the latest samples) analysed the core samples from the MC, MCOL and some WMLB series holes. CCI Australia analysed earlier samples from WMLB holes. All laboratories followed similar treatment procedures. Coal samples undergo proximate analysis, relative density, total sulphur and specific energy; and selected plies (DTP and DWS) were tested for hardgrove grindability (HGI). The remaining sample undergoes float/sink testing and each density fraction is analysed for ash. Clean coal analysis has been undertaken for each ply at 1.50 g/cc or 1.60 g/cc density, including Proximate Analysis, sulphur, calorific value, HGI, phosphorous and ash analysis. ▪ Based on ply thickness and HQ core size the amount of sample available for testing is reasonable for the tests completed.
Quality of assay data and laboratory tests	▪ *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* ▪ *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation,*	▪ All coal core for the Ulan seam is sampled on a ply by ply basis. The sampling procedure has changed since last Resource report of 2014. Previously drill logs were corrected to downhole geophysical logs after sampling. Current procedure includes reconciliation of geophysical logs with actual core prior to the sampling process to ensure core loss is accurately reflected in the samples and ply sampling is consistent. Laboratory analysis of samples is conducted by NATA approved companies in accordance with Australian Standards.

Criteria	JORC Code explanation	Commentary
	etc. ▪ *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	▪ Groundsearch Australia Pty Ltd geophysically logged most of the holes. Groundsearch follows their calibration protocols for all the tools before using them on site. ▪ All coal quality results were checked and verified by Bureau Veritas before final reports were issued. Data was verified for obvious errors prior to loading into the geological model.
Verification of sampling and assaying	▪ *The verification of significant intersections by either independent or alternative company personnel.* ▪ *The use of twinned holes.* ▪ *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* ▪ *Discuss any adjustment to assay data.*	▪ No anomalous intersections have been identified. The Ulan seam has a consistent nature. ▪ Twinned holes are not a standard in the coal industry. A non-core prior to a core hole has been used in the past to ensure consistency with coal ply sampling as samples were taken before geophysical corrections. This practice ceased due a change in procedure (now sampling is carried out after reconciliation with geophysical logs). Where there are two closely spaced core holes it likely the later hole was drilled for core recovery purposes, only drilled for data verification if there was any uncertainty with the existing data. ▪ All quality data is checked by modeller for anomalous results and are investigated upon identification. Laboratories keep a reserve sample in case re-analysis is required as part of the standards. ▪ Laboratory raw coal and washability data is kept in digital format on site. Digital data is provided in MS Excel spreadsheets which is then loaded into Geobank. All data is also loaded into Minex and identified anomalies are subsequently reviewed by modeller and site geologist. ▪ Coal density is adjusted to in situ moisture, no other adjustments to quality data takes place.
Location of data points	▪ *Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* ▪ *Specification of the grid system used.* ▪ *Quality and adequacy of topographic control.*	▪ Drillhole collars and mined surfaces have been surveyed by registered surveyors using GPS equipment. ▪ The current grid system is GDA94 in Zone 55. ▪ A LiDAR topography survey was acquired in 2010 to an accuracy of +/- 0.1 m which is considered very accurate for the Resource estimation process and mined out areas are surveyed by registered site surveyors.
Data spacing and distribution	▪ *Data spacing for reporting of Exploration Results.* ▪ *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* ▪ *Whether sample compositing has been applied.*	▪ Drillhole spacing varies from <250 m to >1 km towards the edges of the lease. Drillhole data intersecting the Ulan seam exist outside the MCC tenements and two coal mines mining the Ulan seam (Ulan and Wilpinjong) are located adjacent to MCC. ▪ Resources were mostly extended to lease boundaries as drillholes and existing mine operations intersected and target the Ulan seam within and outside the MCC tenement boundaries. ▪ Samples may be composited in order to represent seams or plies as is standard.
Orientation of data in relation	▪ *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	▪ Strata generally maintain a north-westerly strike and dip approximately 1° - 3° northeast. No structures have been identified at MCC.

Criteria	JORC Code explanation	Commentary
to geological structure	▪ *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	▪ No sampling bias has taken place. All drillholes were drilled vertically. Sampling from vertical drillholes is perpendicular to the coal seams.
Sample security	▪ *The measures taken to ensure sample security.*	▪ All samples are sealed and marked appropriately with a tag inside and outside the plastic bag. Information is recorded on a third tag which is kept on site and on drillhole sampling schedule forms. Copies of the sampling schedule are despatched with the samples. Coal samples are sent by secured courier to the laboratory.
Audits or reviews	▪ *The results of any audits or reviews of sampling techniques and data.*	▪ Sampling techniques were reviewed by Mr. R. Dyson (Operations Manager – MBGS) in September 2015 and minor recommendations were reviewed by site. Coal quality data was reviewed by Bob Leach (Coal quality expert - BLPL).

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	▪ *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* ▪ *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	▪ MCC holds tenements covering an approximate area of 105 km^2 containing five mining leases (65 km^2) and three exploration leases (65 km^2) partially overlapping two mining leases (25 km^2). ▪ A mining purpose lease (MPL0315) held by Ulan Coal Mines Ltd (UCML) overlaps a small portion (approx. 0.3 km^2) of EL6288 in the northwest of the tenement. This MPL does not affect Coal Resources for MCC as it only provides surface rights for UCML to a depth of 15 m; Coal Resources in this area exist at depths greater than 50 m. ▪ Exploration leases cover mainly the northern and southern areas of MCC: EL6288, EL7073, EL7074 and Mining leases cover the central area and extent to the north under EL6288; where current mine plans exist: ML1605, ML1606, ML1628, ML1691 and ML1715. There are no known impediments for the majority of the area, except for a small sensitive area called The Drip, considered a local natural attraction located near the northeast boundary of EL6288. ▪ MCC is owned by Yancoal Australia Pty Ltd (81%), Kores Australia Moolarben Coal Pty Ltd (9%) and Sojitz Moolarben Resources Pty Ltd (10%).
Exploration done by other parties	▪ *Acknowledgment and appraisal of exploration by other parties.*	▪ Exploration in the area commenced in 1950 but historical mining at UCML (immediately west of MCC) has occurred since 1920's. A summary of key exploration periods completed by other parties is provided below: – The New South Wales Mines Department carried out initial exploration in 1950 with 6 core holes.

Criteria	JORC Code explanation	Commentary
		– In 1977 the Joint Coal Board drilled 21 core holes. – In the late 1970's the Energy Recycling Corporation drilled 33 core holes inside MCC leases and 41 core holes in the surrounding areas. – White Industries in early 1980's drilled 25 core holes. – In late 1980's Ulan Coal Mine drilled 38 holes (core and non-core). – Between 1999 - 2003 the Department of Mineral Resources drilled 47 holes (core and non-core) to define potential open cut areas. ▪ All drilling includes detailed lithological logging, the majority of holes include downhole geophysical logs and most core holes were analysed for quality parameters. Exploration in the area is to a good standard and appropriate for Resource estimation.
Geology	▪ *Deposit type, geological setting and style of mineralisation.*	▪ The MCC coal deposit is located on the western margin of the Sydney Basin's Western Coalfield. Sedimentary strata of Permian, Triassic and Jurassic age overlie Carboniferous granite and folded metamorphic basement and dip towards the northeast at 1° - 3°. The Permian strata contains the coal-bearing sequence (the Illawarra Coal Measures) and the underlying barren Shoalhaven Group, which in turn unconformably overlie the Lachlan Fold Belt basement rocks. Igneous activity occurred in the area during the Tertiary, manifesting as extrusive basalt flows, intrusive dykes, sills and plugs and explosive diatremes. The Illawarra Coal Measures contain the Ulan seam which is the main coal seam of economic significance in this part of the basin. MCC is currently a thermal open cut and underground coal operation.
Drillhole Information	▪ *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* – *easting and northing of the drillhole collar* – *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* – *dip and azimuth of the hole* – *down hole length and interception depth* – *hole length.* ▪ *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	▪ More than 1,000 holes have been drilled at MCC. Individual drillhole results are not tabulated and presented in this report as it is not considered material to understand the deposit. All drillhole data that pertains to MCC and surrounding area has been loaded and used to construct the geological computer model which was used to estimate Coal Resources. The drillhole locations are shown in Resource figures accompanying this report. Coal Resource tables also presented in this report present summary information on each ply of the Ulan seam including: – average thickness; – average in situ density; – average raw ash; – average sulphur; – average calorific value; and – depth range.
Data aggregation methods	▪ *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	▪ All laboratory data is loaded into the computer model and no data is excluded. No cut-offs have been applied to the loaded data or to the computer model.

Criteria	JORC Code explanation	Commentary
	▪ *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* ▪ *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	▪ The Ulan seam is sampled on a ply by ply basis. Weighted averages were used to show Coal Resources as working sections. Where compositing of coal quality samples is necessary, the coal quality variables are weighted by density and thickness.
Relationship between mineralisation widths and intercept lengths	▪ *These relationships are particularly important in the reporting of Exploration Results.* ▪ *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* ▪ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	▪ The Ulan seam extends across the MCC leases and through the Western Coalfields. Seam dip is close to horizontal. Verticality (Groundsearch hole deviation log) has been acquired in most recent holes and it has shown minimal deviation (<5% from vertically drilled holes). Due to the shallow dip of the seams and vertical nature of drilling, the seam thickness is considered to very close to the true thickness.
Diagrams	▪ *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	▪ All relevant figures depicting information considered material to the Coal Resources reported are contained within the JORC report associated with this Table 1.
Balanced reporting	▪ *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	▪ All drillhole results are checked prior to loading into the computer model. Laboratory coal quality results have been used as reported. The Moolarben Coal Resource table presents summarised average coal quality parameters and thickness of reported intervals. This coal deposit is consistent and presenting averaged data is considered representative of the deposit.
Other substantive exploration data	▪ *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	▪ An airborne magnetic survey was carried out over the planned underground longwalls (UG1 and UG2) to identify magnetic features. This survey identified a number of potential igneous bodies which may affect underground mining. Drilling targeted two main features and confirmed two diatremes. RIM borehole to borehole survey has been undertaken to define the size and shape of the diatremes at seam level but one of these features requires further investigation; long hole drilling across the first longwall panel was carried out. ▪ Several piezometers to monitor groundwater levels have been installed across the deposit at different stratigraphic horizons. ▪ Core holes include geotechnical testing and logging.
Further work	▪ *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* ▪ *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations*	▪ Recommended work includes infill drilling to increase Resource classification to measured status within the mine plan area (OC3 pit). ▪ Resource figures in this report show an area within a proposed open cut pit shell with Inferred status that require further exploration.

Criteria	JORC Code explanation	Commentary
	and future drilling areas, provided this information is not commercially sensitive.	

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
Database integrity	▪ *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* ▪ *Data validation procedures used.*	▪ Drillhole data is entered into Geobank and then depth corrected to downhole geophysical logs. Once the data is corrected it is flagged as completed and then requires special permissions to edit. Digital drill data is loaded into Minex for modelling and reporting. Seam thickness and ply correlations for each seam are checked in the Minex model via cross sectional analysis and contour plots. ▪ Prior to modelling, statistical reports are generated to check anomalies have not been introduced to the dataset. Any anomaly is reviewed against original logs and reports.	
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ The Competent Person has experience with several coal Assets in the Western coalfields. A site visit to MCC was carried out in April 2018, during which the open cut and underground operations where viewed as well as technical discussions with relevant personnel on site. The Competent Person also reviewed and discussed the geological data and geological model with the Geologist who built the geological model.	
Geological interpretation	▪ *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* ▪ *Nature of the data used and of any assumptions made.* ▪ *The effect, if any, of alternative interpretations on Mineral Resource estimation.* ▪ *The use of geology in guiding and controlling Mineral Resource estimation.* ▪ *The factors affecting continuity both of grade and geology.*	▪ Strata at MCC dips gently to the northeast at approximately 1° - 3°, as does the remaining Permian and Triassic sequence. This has been confirmed from drillhole data and adjacent mine operations (Ulan Coal Mines and Wilpinjong). ▪ No major structures within the mine plans have been identified; but two faults are interpreted from regional mapping and drillhole data in the north of the deposit. Small scale unidentified faults may exist but these will have little effect on the Resource estimate. The major risk to mining is unidentified igneous bodies disrupting the coal seam, however the effect on the Resource estimate will be minor compared with the total area of the deposit, as seen in adjacent operations. ▪ The Ulan seam and Triassic/Permian stratigraphy are highly consistent across the leases and beyond, the deposit geology is well understood. There is a high degree of confidence in the geological interpretation. ▪ Coal Resources reflect this confidence level with most of the MCC area considered a Measured Resource.	
Dimensions	▪ *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan*	▪ MCC leases cover a length of approximately 20 km (north-south) and up to 8 km wide (east-west). The Ulan seam is present over most of the area covered by the leases with exception	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
	width, and depth below surface to the upper and lower limits of the Mineral Resource.	towards the west boundary where the seam subcrops at the edge of the basin. Drillhole data outside the lease and in adjacent mine operations (north-west and east) proved continuity of the seam extending beyond the lease area. Overburden thickness ranges from surface to <400 m from southwest to northeast; but >90% of the deposit has a the depth of cover < 200 m. Coal Resources are not limited to any depth cut-off as the seam is thick enough (approx. 11 m) to be mined by either open cut or underground methods.	
Estimation and modelling techniques	▪ *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* ▪ *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* ▪ *The assumptions made regarding recovery of by-products.* ▪ *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* ▪ *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* ▪ *Any assumptions behind modelling of selective mining units.* ▪ *Any assumptions about correlation between variables.* ▪ *Description of how the geological interpretation was used to control the resource estimates.* ▪ *Discussion of basis for using or not using grade cutting or capping.* ▪ *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	▪ The MCC geological computer model was built using Minex software (version 6.5.2). The model was generated using Minex proprietary growth algorithms. Drillhole data was used to control the model and there is enough data within and outside the lease to avoid extrapolation for Resource estimation. Resource estimation was done in Minex using vertical sided polygons, seam thickness and in situ density. ▪ In situ density grids were produced at an estimated in situ moisture of 6%. ▪ Structural and quality grids were generated using 20 m mesh size mesh size. ▪ No assumptions are made regarding by-products. ▪ Resource classification and estimates are limited and based entirely on drillhole data and supported by existing data outside MCC. Resources were mostly extended to lease boundaries as drillholes and existing mine operations intersected and target the Ulan seam within and outside the MCC boundaries. Inferred and Indicated Resources on the western edge of OC3 and to the west of EL7073 were not extended beyond the last drillhole due to the lack of data to locate the seam subcrop and define seam continuity and character, which can rapidly change due to proximity to the edge of the basin. ▪ No coal quality cut-offs were used however the A2 ply is excluded from the Resource Estimate on account of quality. A2 plies have previously been mined and reported as a Resources, however currently the operation removes it as waste. The remaining Ulan seam plies are mined in the open cut pits and the quality of the plies means that applying a typical quality cut-off would have no material impact on the Resource Estimate. ▪ The process used by the previous Competent Person to develop the 2017 geological model used to estimate Resources was to load all drillhole data into a Minex database after validation of seam depth intervals and correlation has been undertaken with geophysical logs. Seam and sample statistics reports, cross sections and plots with drillhole annotations for each seam through the deposit are output from Minex and reviewed. At the end of 2015 the entire database was reviewed and seams above the Ulan seam were correlated. RPM reviewed the drillhole database and a selection of the drillhole records in order to understand and validate the drillhole data. ▪ Reconciliation with previous estimates and mine production was completed and the results support the confidence in the Resource. Resource estimates are completed using mined out surveyed topography as at 30 June 2018. Comparison with recent exploration supports the	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
		conclusion that any future exploration will have minimal impact on the current Resource estimate due to the consistent nature of the Ulan seam. Also the bulk of the Resource is contained within the Measured and Indicated classifications with large amount of control from close spaced drillhole data and unlikely to change with new data.	
Moisture	▪ *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	▪ Coal Resources were reported at in situ moisture of 6%. This was based on knowledge of the coal in the area and current operations. Other coal quality parameters were reported at air dried basis (adb).	
Cut-off parameters	▪ *The basis of the adopted cut-off grade(s) or quality parameters applied.*	▪ The small Resources associated with the Moorlaben and Glen Davies seam is only included in the Resource Estimate where the seams are coalesced and have a thickness of around 3.0m. ▪ No coal quality or thickness cut-off parameters were applied to the Ulan seam (apart from excluding the A2 ply) on the basis that the seam is thick and quality uniform and applying reasonable cut-offs for thickness or quality would have no material impact on the Resource Estimate.	
Mining factors or assumptions	▪ *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	▪ MCC contains an active open cut operation mining the Ulan Seam in working sections and has commenced underground longwall operations on the lower section of the Ulan seam. ▪ MCC mine plan considers open cut potential mostly where depth of cover is less than 100 m. Coal Resources for the uppermost ply of the Ulan seam (A1) is only reported at less than 100 m depth because it is considered that this ply only have economic potential if mined by open cut methods. The rest of the Ulan seam can be mined by either open cut or underground methods as it is currently mined at MCC and adjacent operations. It is noted that currently only a portion of the Ulan seam (DWS) is mined using the longwall, however the rest of the seam could be mined by incorporating Top Coal Caving. ▪ Other seams above the Ulan seam are present within the deposit but only Moolarben and Glen Davis seams are considered a Resource in some areas of the open cut pit OC4 where these two seams coalesced to a thickness of approximately 3 m. This report considers these two seams as an Inferred Resource at this stage due to lack of quality data to better define economic mining potential.	
Metallurgical factors or assumptions	▪ *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical*	▪ No metallurgical assumptions are made. MCC currently extracts the full Ulan seam and beneficiates to produce an export thermal product to market specifications.	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
	assumptions made.		
Environmental factors or assumptions	▪ *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	▪ Yancoal Australia maintains the MCC area complying with all mining and environmental conditions pertaining to the relevant leases. ▪ There are not known impediments for mining at MCC.	
Bulk density	▪ *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* ▪ *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* ▪ *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	▪ Relative density (RD) has been determined in most analysed samples on an air dry basis using Australian Standards. RD is then adjusted to in situ moisture basis using the Preston & Sanders equation at an estimated in situ moisture of 6%.	
Classification	▪ *The basis for the classification of the Mineral Resources into varying confidence categories.* ▪ *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.*	▪ The combination of all existing data within and outside MCC including regional drillhole data as well as surrounding mines (Ulan and Wilpinjong) confirms the presence of a very consistent Ulan seam across the area. – Measured Resources – supported by drillholes approximately 500 m apart but up to 900 m apart (south and north areas). The consistent nature and predictability of the Ulan seam and utilizing public information and knowledge of neighbouring operations provides confidence in Measured status Resources. – Indicated Resource – mainly towards the edge of the lease where there is supporting data outside the MCC tenements. Classification supported by drillholes up to 1.2 km. – Inferred Resources – supported by drillholes up to 2 km apart. Inferred Resources exist on the edges of the lease, classified using data outside the MCC tenements to extend Resources to the lease boundaries.	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
		▪ Inferred Resources on the western side of proposed open cut pit OC3, and to the west of EL7073 were not extended beyond drillholes to the western lease boundary due to lack of data defining the Ulan seam subcrop as it onlaps the Gulgong granite. ▪ Resource estimates exclude the A1 Ply on areas with depth of cover >100 m due to unlikely mining potential by underground methods. ▪ A2 plies are no longer reported as a Resource because the open cut operation is removing them as waste.	
Audits or reviews	▪ *The results of any audits or reviews of Mineral Resource estimates.*	▪ An updated geological model for 2017 Coal Resource estimation was generated in March 2017 - 48 new holes were added. The reconciliation with the geological model used for the previous Resource estimate showed a minor change (<1%) in Coal Resources due to model update. ▪ No external audits or reviews have been completed.	
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ Resources have been classified as either Measured, Indicated or Inferred depending mainly on the density of drillhole data and supported by existing mine operations. ▪ Prior to drilling, seam and horizon depth intervals predictions are generated from the geological model and after drilling the predictions are compared with the actual drilling results. The reliability of the predictions/differences support the level of confidence for each category determined by the Competent Person. ▪ Coal Resources were estimated for areas defined by drillhole data, an area of approximately 90 km^2. As single data points in a tabular coal environment such as this will have little or no effect on the total Coal Resource, the estimate is considered to be a global estimate.	

Section 4 Estimation and Reporting of Ore Reserves

The completed Table 1, Sections 4 is in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Persons, Mr Doug Sillar (Open Cut) and Mr Graeme Rigg (Underground) on behalf of RPM.

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
Mineral Resource estimate for conversion to Ore Reserves	▪ *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* ▪ *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	▪ The Coal Resource estimate used as the basis for this Coal Reserves Statement is described as part of this statement. The Resource estimate has been prepared by Mr. Brendan Stats. The Competent Person, Mr. Stats, has sufficient expertise that is relevant to the style of mineralisation and type of deposit and activity to qualify as a Competent Person as specified under the JORC Code and is a member of the Australian Institute of Mining and Metallurgy . ▪ The Resources Statement was compiled in accordance with The JORC Code 2012 Edition. ▪ The Coal Resources reported are inclusive of the Coal Reserves. ▪ The same geological model has been used for the estimation of Resources and Reserves.	
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ A site visit to the Moolarben Mine was undertaken by representatives of RPM in April 2018. The Reserves Competent Persons were unable to attend but interviewed the representative following the visit. The outcome of this visit was observation of the Asset area to better understand location, environmental, social, groundwater and existing infrastructure consideration.	
Study status	▪ *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* ▪ *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	▪ Moolarben is an operating mine. LOM studies undertaken during the project planning and design stages have now been complemented by actual operating experience and ongoing exploration and assessment. ▪ Yancoal completed a Life of Mine Plan in 2017. ▪ The level of detail in the LOM plan is sufficient to meet requirements of JORC.	
		▪ Moolarben is an operating mine consisting of a number of operating Open Cut pits (OC1, OC2 and OC4) and a planned pit (OC3).	▪ Moolarben is an operating mine consisting of an operating Underground mine (UG1) and planned undergrounds (UG2 and UG4).
Cut-off parameters	▪ *The basis of the cut-off grade(s) or quality parameters applied.*	▪ A thickness cut-off of 0.3 m and ash cut-off of 50% is applied to the A1 and ELW plies which are the top and bottom plies of the Ulan seam. ▪ The A2 plies are excluded from Resources and hence Reserves in all OC pits due to high ash content of the coal.	▪ There are no coal quality cut-off parameters used to eliminate the conversion of Coal Resources to Coal Reserves. LOM planning has been used to determine whether Coal Resources will convert to Coal Reserves.
Mining factors or assumptions	▪ *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* ▪ *The choice, nature and appropriateness of the selected*	▪ A combination of break-even strip ratio, pit design and LOM planning have been used as the basis of converting Coal Resources to Coal Reserves. RPM estimated a break even strip ratio and compared against each of the pit shells to confirm pit limits.	▪ LOM planning has been used as the basis of converting Coal Resources to Coal Reserves. ▪ The selected mining method is that in use in the operating mine, i.e. conventional

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
	mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. ▪ *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* ▪ *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* ▪ *The mining dilution factors used.* ▪ *The mining recovery factors used.* ▪ *Any minimum mining widths used.* ▪ *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* ▪ *The infrastructure requirements of the selected mining methods.*	▪ The OC mining method at Moolarben open cut is conventional truck and excavator with some dozer assist on waste. The operating method is well proven and suitable for the nature of the deposit. ▪ Pit slopes are based on practical and geotechnical criteria which include 12 – 15 m berm every 45 m vertical. Pit walls are typically pre-split with the exception of paleo channel areas at OC2 where an additional berm is required 50 m above the coal. ▪ The mining factors are based on reconciliations of production between 2013 and 2017. Assumptions used were: – Minimum coal mining thickness of 0.3 m; – Overall mining loss of 1%; – Loss and Dilution: ▪ coal roof loss of 0.055 m; ▪ coal floor loss of 0.055 m; ▪ coal roof dilution of 0.055 m; ▪ coal floor dilution of 0.055 m; and – The quality of diluting material is relative density of 2.4 t/m^3, and ash of 76% (ad). ▪ In situ moisture assumed to be 11 - 14%. ROM moisture is assumed to be 9.5%. Washed moisture is assumed to be 11.5%. ▪ A1 recovery of 55% and additional ash 13%. ▪ ELW recovery of 90%. ▪ WS1L recovery, total moisture of: – OC1 = 98% and 6.1%; – OC2 = 98% and 6.5%; – OC3 = 93% and 6.5%; and	longwall extraction with continuous miner development. ▪ Geotechnical studies were used to support the mine layout parameters. ▪ The mining factors used were: – Development roadways 5.4 m wide by 3.4 m high – Longwall operating height 3.0 m - 3.4 m – Longwall panel width 250 m - 300 m – It is assumed that a combined average of 100 mm of in situ working section will be lost from the roof and floor of the mineable coal sections during development and longwall extraction; – It is assumed that an average of 50 mm of higher ash material will be mined with both the roof and the floor of the coal seam during development and longwall operations, thereby diluting the in situ coal quality. – The quality defaults assigned to the UG1 roof were assumed to be relative density of 1.64 t/m^3, ash of 44%; – The quality defaults assigned to the UG1 floor were assumed to be relative density of 1.51 t/m^3, ash of 30%; – The quality defaults assigned to the UG4 roof were assumed to be relative density of 1.47 t/m^3, ash of 24%; – The quality defaults assigned to the UG4 floor were assumed to be relative density of 1.56 t/m^3, ash of 34%; – The quality defaults assigned to the UG2 roof were assumed to be relative density of 1.62 t/m^3, ash of 42%;

Criteria	JORC Code explanation	Commentary	
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		– OC4 = 97% and 6.1%. ▪ WS2L recovery and total moisture of: – OC1 = 98% and 7.5%; – OC2 = 98% and 8.3%; – OC3 = 95% and 8.3%; and – OC4 = 98% and 7.5%. ▪ WS1L dilution of -0.9%. ▪ WS2L dilution of 1.4%. ▪ Inferred Resources are not included in the estimate of Coal Reserves. Inferred Resources are included in the Life of Mine Plan however RPM anticipate that exclusion of this coal would not impact on the outcomes of the study.	– The quality defaults assigned to the UG2 floor were assumed to be relative density of 1.54 t/m^3, ash of 31%; – Relative density data in the geological model is based on assumed in-situ moisture of 6%, while all qualities are based on air-dried moisture gridded values; – Preston & Sanders has been used in the estimation of in situ moisture; and – RPM has assumed that ROM moisture will be 8%, and product moisture will be 9%. ▪ Inferred Resources does not exist within the UG LOM plan footprints.
		▪ All necessary infrastructure is in place and operational for the current planned operations. Additional haul roads will be required as the open cut mine advances.	
Metallurgical factors or assumptions	▪ *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* ▪ *Whether the metallurgical process is well-tested technology or novel in nature.* ▪ *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* ▪ *Any assumptions or allowances made for deleterious elements.* ▪ *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole.* ▪ *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	▪ All open cut coal at Moolarben is washed at a dedicated CHPP using dense medium cyclones, spirals and froth flotation. ▪ The coal processing plant has been in operation for six years and uses standard industry technology. ▪ Product coal quantities and quality is estimated based the results of slim core test work which is included in the quality model. The following factors are applied to modelled yield and product ash to allow for plant efficiencies: – 93% yield factor; and – 1.4% ash addition. ▪ Washed product moisture is based on shipping data collected at the port of Newcastle. For the washed open cut products the assumed moisture is:	▪ All underground coal at Moolarben bypasses the CHPP and is sold as an unwashed product. ▪ Underground ROM coal transferred to the surface is delivered to a 100,000 t ROM coal stockpile located to the north of the boxcut. Coal from the stockpile is transferred to the UG product stockpile via secondary and tertiary sizers at a nominal 50 mm top size.

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
		– 9.5% for WS1L and A1; and – 11% for WS2 and ELW. ▪ The six years of operational plant data supersedes bulk scale test work.	
		▪ No allowance has been made for deleterious elements.	
Environmental	▪ *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	▪ An Environmental Impact Statement has been prepared and the necessary environmental approvals obtained.	
		▪ All necessary approvals are in place for OC1, OC2, OC3 and OC4. ▪ Waste rock characterisation results and operational experience indicates that the waste rock is non-acid forming and does not require special placement requirements or procedures in the dumps. ▪ Coal reject produced from the coal washing process is buried in the pit with the open cut waste rock.	▪ Panel layout is impacted by the location of "The Drip" on the Goulburn River. The mine is further bounded by Ulan Road, Goulburn River National Park and the old Goulburn River Valley paleochannel. In particular the significance of "The Drip" has resulted in a 500 m standoff being required from the Goulburn River so that there are no subsidence impacts. ▪ Additionally, several archaeological sites are located above the workings. The approved design accounts for their locations, including the use of a mini-wall to negotiate a cliff line.
Infrastructure	▪ *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	▪ All the necessary infrastructure is in place and operational for the current operation and it is suitable for the current and future production projections. ▪ Additional haul road development may be required as the open cut mines progress	
Costs	▪ *The derivation of, or assumptions made, regarding projected capital costs in the study.* ▪ *The methodology used to estimate operating costs.* ▪ *Allowances made for the content of deleterious elements.* ▪ *The source of exchange rates used in the study.* ▪ *Derivation of transportation charges.* ▪ *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* ▪ *The allowances made for royalties payable, both Government and private.*	▪ All major infrastructure is in place. Capital forecasts have been included which represent the growth and sustaining requirements for the completion of the LOM plan. ▪ All operating costs are based on LOM planning estimates from Yancoal and have been reviewed by RPM. ▪ Current long-term exchange rate assumptions were provided by Yancoal. ▪ Transport charges based on actual contracted prices taking into account existing Take or Pay arrangements. ▪ State government royalties are included in the estimate. ▪ RPM reviewed all costs and they are considered reasonable.	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
Revenue factors	▪ *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* ▪ *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	▪ Long term product coal pricing assumptions have been provided by Yancoal Marketing and is based on independent third party research and reporting. ▪ The revenue factors are considered reasonable for the purposes of estimating Reserves.	
Market assessment	▪ *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* ▪ *A customer and competitor analysis along with the identification of likely market windows for the product.* ▪ *Price and volume forecasts and the basis for these forecasts.* ▪ *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	▪ A Marketing Study has not been reviewed however markets are well established for the mine's coal products. The projects typically produce a range of thermal coal products including: – Low Ash Thermal 18% ash (ad), and – High Ash Thermal 27% ash (ad). ▪ The Underground operation produces a bypass Low Ash Thermal product. ▪ Based upon these products and specifications, RPM anticipates no foreseeable issues in demand for these products	
Economic	▪ *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* ▪ *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	▪ The inputs to the economic analysis are derived capital and operating cost estimates outlined in the "Costs" section of Table 1. The source of the inputs is real and the confidence satisfactory. The economic modelling is in real terms and a range of discount rates have been used in assessing NPV. ▪ The NPV results for the Project produced from economic modelling generated positive and acceptable NPV's for all discount rates and the Project is considered economic from an NPV stand-point. ▪ Sensitivity analysis has been completed on the Project over a range of variable. The Project is most sensitive to changes in exchange rate, revenue and operating costs.	
Social	▪ *The status of agreements with key stakeholders and matters leading to social licence to operate.*	▪ Native Title has not been extinguished for some areas (including crown land and water ways) and Native Title may still exist. The majority of the Assets holdings are however not subject to native title and future material risk associated with currently approved projects is not anticipated as a result of Native Title. Moolarben has recently purchased land and now owns all land in the current proposed mining areas.	
Other	▪ *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* ▪ *Any identified material naturally occurring risks.* ▪ *The status of material legal agreements and marketing arrangements.*	▪ All mining projects operate in an environment of geological uncertainty. RPM is not aware of any other potential factors, legal, marketing or otherwise, that could affect the operation's viability.	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
	▪ *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*		
Classification	▪ *The basis for the classification of the Ore Reserves into varying confidence categories.* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.* ▪ *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	▪ Classification of Coal Reserves has been derived by considering the Measured and Indicated Resources and the level of mine planning. – For OC1, OC2 and OC4 pits, Measured Coal Resources are classified as Proved Coal Reserves and Indicated Resources classified as Probable Coal Reserves, as the pits are currently operating and the level of mine planning is considered adequate to support this level of certainty in the Reserves estimate. – At the southern end of OC3, all Coal Reserves are classified as Probable for both Measured and Indicated Resources, primarily due to limited sub-crop drilling. – For UG1 and UG4, Measured Coal Resources are classified as Proved Coal Reserves and Indicated Resources classified as Probable Coal Reserves, as the level of mine planning is considered adequate to support this level of certainty in the Reserves estimate. One small area in UG1 has Probable Coal Reserves derived from Measured Resources, due to potential igneous intrusion. This amounts to 0.4 Mt. – UG2 Coal Reserves are classified as Probable as there is only Indicated Resources in this area. ▪ The Inferred Coal Resources have been excluded from the Reserve estimates. ▪ The result reflects the Competent Persons' view of the deposit.	
Audits or reviews	▪ *The results of any audits or reviews of Ore Reserve estimates.*	▪ Internal peer review of the Reserves Report has been completed.	
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global*	▪ The pit shells are supported by a large proportion of Measured Coal Resources. ▪ The basis of the estimate are actual operating costs and LOM planning. ▪ CHPP and infrastructure are in place and operating. ▪ Analysis of the coal quality has been undertaken by independent laboratories working under international standards of method and accuracy. Open cut product coal is produced washed coal. ▪ The level of accuracy will continue to be dependent on the ongoing update of the geological model and monitoring of the Modifying Factors affecting the coal estimate. Moolarben has an	

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Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
	or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. ▪ *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* ▪ *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	ongoing reconciliation process aimed at testing the appropriateness of the assumed Modifying Factors for the mine. ▪ Geotechnical studies have been completed for the site.	

RPMGLOBAL

JORC Code Disclosure Requirements

Ashton

RPMGLOBAL

JORC Code, 2012 Edition – Table 1 report template

The completed Table 1, Sections 1, 2 & 3 are in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person Mr Brendan Stats on behalf of RPM.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* ▪ *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* ▪ *Aspects of the determination of mineralisation that are Material to the Public Report.* ▪ *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	▪ Industry standard HQ triple tube core holes (61 mm diameter) have been drilled from the surface, while intra-mine exploration interseam holes (IS series) coring from below the Pikes Gully seam and Upper Liddell seam mining horizons were completed using industry standard NMLC triple tube barrels (51.8 mm diameter) both employing wireline methods to recover whole cores of coal. ▪ Historically, in pre-Ashton Coal series drillholes, sampling strategies varied according to the series of holes drilled with core sampled into plies and working sections based on a systematic sampling strategy linked to the correlation of the individual seams named at that time. Recently, (from 2012 onwards) the core was sampled into coal and non-coal and instructions issued to the laboratory. In the recent holes drilled by Ashton Coal, White Mining Limited (WML) and White Mining Limited Core (WMLC) series the coal quality sampling was conducted in the field and the intervals selectively sampled. ▪ Open hole drilling acquired chips sampled in 1 m intervals. ▪ A standard suite of downhole geophysical logs were acquired in all holes used in the model (including; caliper, natural gamma and density), with some holes also logged with resistivity, sonic, neutron, borehole televiewer and verticality). ▪ Geophysical logs were acquired to supplement the geological description of the cores and to ensure that the core recoveries were satisfactory (>/= 95%) and to assist with correlation of the various seams present. All surface core holes and open holes used in the model have been geophysically logged. Historically, (prior to 2007) geophysical logs were acquired either by Wootmac or Rutherford. Since 2008, most drillholes have been geophysically logged by Groundsearch Australia. Regular calibration of geophysical logging tools is standard practice for logging companies. ▪ All intra-mine (IS series) core holes were not geophysically logged however core recovery is recorded in logging and core photos taken.
Drilling techniques	▪ *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	▪ Both wireline coring (HQTT – 61 mm diameter and NMLC – 51.8 mm diameter) and non-core slim hole drilling have been conducted across the deposit. Historically, WML primarily used rotary air blast with percussion hammer bits to drill the non-core holes and the pre-

Criteria	JORC Code explanation	Commentary
		collars sections of core holes, with some mud rotary drilling near areas containing shallow alluvial cover. ▪ All surface and intra-mine IS series exploration holes have been drilled and cored vertically with no HQTT or NMLC core oriented. However, deviation data has been acquired by geophysical logging but is only available for surface exploration holes. Maximum horizontal deviation in the Yancoal Australia Limited (Yancoal) series holes was up to 8.6 m over 250 m depth (in YancoalO-009). On this basis it was decided that the drill dataset did not require correction for verticality and all holes have been modelled vertically. ▪ The tenement area includes 297 holes of which 12 were drilled by Yancoal Australia Limited (Yancoal) (10 non-core holes and 2 core holes). Of the 285 historical drillholes drilled prior to Yancoal ownership, 142 were cored for coal quality, geotechnical studies and gas and 143 were non-core structure holes.
Drill sample recovery	▪ *Method of recording and assessing core and chip sample recoveries and results assessed.* ▪ *Measures taken to maximise sample recovery and ensure representative nature of the samples.* ▪ *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	▪ The documentation and reporting does not describe the methods of recording and assessing core recoveries, nor does it describe the measures taken to ensure sample representivity. Best practice in the coal industry requires that the coal core is matched to the geophysical logs and depth corrected prior to sampling ensuring that there are no depth misalignments and to establish core losses prior to sampling to determine if the core recovery is satisfactory (preferably >95% recovery) to sample and conduct coal quality testing. ▪ In selecting drillholes suitable for use in developing the 2014 geological model, Geos Mining conducted a review of the historical core data on a seam by seam basis, and some seam quality data was excluded where the sample did not meet minimum acceptable core recovery criteria of 80% volumetric or 95% linear recovery where sample mass information data was not available. ▪ For the IS series holes (no geophysics) spot checks of core photos to determine whether the mass recovery determined by the lab are acceptable were conducted by Geos Mining. Geos Mining commented that the mass recovery may have generally overstated the core loss sample intervals, and that these values become unacceptable in cases where the laboratory reported values of less than 80% volumetric recovery. Recommended compare the seam graphic section with surrounding geophysical logged holes to assess likely recovery of core relative to the stone partings to determine whether the core is valid. ▪ It is not expected that there is a sample bias due to preferential loss/gain of material. Coal seams range from bright banded to dull so preferential loss of bright coal could occur although drilling methods would try to minimise losses in these zones.
Logging	▪ *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* ▪ *Whether logging is qualitative or quantitative in nature.*	▪ All drill cuttings and core from the WML historical drillholes were qualitatively lithologically described on hand written geological record sheets and then later encoded into the computer using Prolog software initially by WML's geologists, then later by Earthdata personnel. The computer files were uploaded into computer geological databases for modelling. Yancoal have adopted a similar methodology.

Criteria	JORC Code explanation	Commentary
	Core (or costean, channel, etc) photography. ▪ *The total length and percentage of the relevant intersections logged.*	▪ Logging of chip and core samples is detailed and includes a record of the recovery of the total length and the drilled core length, lithology type, lithology descriptions to describe the sample in terms of colour, grainsize, bedding and bedding spacing, bedding dip, mechanical state, weathering, bedding relationship, structure, dip of structures, mineral forms and there associations, primary bedding forms, sedimentary contacts, defects and spacing, all of which is entirely sufficient to describe the various lithologies and coal samples to support the Coal Resource estimation from a geological, geotechnical and coal quality consideration. All Yancoal core was photographed. Geos Mining determined that 40 historical WML and WMLC core holes contain core photos and 30 do not. All of the WMLC300-series holes contain core photography. The lack of core photos for the earlier WMLC holes is not considered to have a material impact upon the Resource estimation. ▪ Assessment of the geological and geotechnical logs indicate they have been logged to a level of detail to support appropriate Coal Resource estimation and mining studies.
Sub-sampling techniques and sample preparation	▪ *If core, whether cut or sawn and whether quarter, half or all core taken.* ▪ *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* ▪ *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* ▪ *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* ▪ *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* ▪ *Whether sample sizes are appropriate to the grain size of the material being sampled.*	▪ The entire core thickness was used in sampling (sawing, quarter or half sampling of core is not a standard sampling technique in coal exploration). ▪ No non-core samples were used in the database/model/Resource estimate. ▪ The core sampling protocol followed by WML was to sample the "cleanest" coal intervals based on visual examination and sample stone partings separately using a 0.30 m minimum parting thickness limit. Roof and floor sub-samples were also taken. The nature, quality and appropriateness of these core sampling procedures was not documented but are expected to have been to an industry standard sampling the entire core section/ply/sub ply into plastic bags with some form of identification. No sample preparation takes place outside the laboratory. ▪ No coal core duplicates are taken as the analysis methods for coal require the whole cylindrical seam section for analysis. Sub-sampling of the sampled core is part of the treatment procedure at the laboratory where a portion of the sample is reserved for the purpose of sample analysis checks and or additional testing. The laboratories (SGS Australia, Carbon Consulting International Pty Ltd and currently Bureau Veritas) follow Australian Standards methods and are all NATA accredited. ▪ The core size of 61 mm for surface holes and 51.8 mm for intra-mine (IS series) provide sufficient sample to conduct the typical proposed testing program. Significantly the coal industry standard for core diameters suitable for the analysis of coal core has increased to typically 83 mm (PQTT) and 4" core (100 mm) where possible which tends to improve the recovery of the coal and the quality of the core recovered. Limitations exist for the underground drilling operations and the core size although not typically ideal is satisfactory where good core recoveries are achieved.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	▪ *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* ▪ *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* ▪ *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	▪ The types of testing undertaken historically including pre-Ashton holes, WML holes and Yancoal holes are industry standard tests used internationally as part of the analysis and assessment of hard black coal and conform to the Australian Standards. Historically, coal analytical testing varied from one explorer to the next although the fundamental tests conducted were the same. All core testing has been on the full core section whether it has been subdivided into plies and crushed and then subsampled. The sub samples are representative of the total section of the core interval. ▪ Inconsistencies in sampling procedures were identified, particularly in the sampling strategy extended over coal and stone parting intervals for laboratory testing. In addition Stage 2 Float/Sink testing was only conducted on plies containing <60% raw ash, with no raw or clean coal composite analyses undertaken at all on the >60% ash plies which might be part of the working sections. In such cases, default values of 0% yield mass and 90% ash for stone parting material have been applied in yield/ash models to account for the stone partings which were not analysed. This historic method of analysis is no longer appropriate for modelling of coal working sections. ▪ The laboratory testing for earlier WML cores was conducted by Carbon Consulting International Pty Ltd (now Bureau Veritas), while in more recent years, testing has been undertaken consistently by SGS Australia. All these laboratories are NATA accredited laboratory. ▪ The 2012 and 2013 analytical testing procedures for the analysis of coal plies at Ashton comprised two stages. – Stage 1 involved analyses of raw coal plies (<60% ash) crushed to -11.2 mm and analysed for proximate analysis (inherent moisture, ash content, volatile matter and fixed carbon), total sulphur ("TS"), calorific value ("CV"), and relative density ("RD") and apparent relative density ("ARD"). Selected composite samples were tested for trace elements. Stone plies (>60% raw ash ad) were analysed for inherent moisture ("IM"), raw ash, TS and RD. – Stage 2 (float/sink analysis of coal plies <60% raw ash ad) at float densities of FL1.30 to FL1.80 at 0.10 increments. Each fraction was crushed to -4 mm, riffle split to give -0.212 mm 'prep' and 4 mm 'reserve' portions. Each float-sink increment was tested for air-dried mass and ash content. Coking properties were not tested on individual float fractions. ▪ Additional clean coal composite testing was carried out in selected holes on specific working section intervals determined by Ashton geologists who provided the testing instructions to the laboratory. Coking coal composites have been tested sporadically at CF1.50, CF1.60 and CF1.70. The clean coal composites were tested for proximate, TS and CV, ash analysis ("AA"), ash fusion temperatures ("AFT") reducing conditions, Gieseler Plastometer analysis and dilatometry characteristics. ▪ The quality control procedures are inherent with NATA approved laboratories which undertake the testing to Australian Standard testing procedures and are subjected to regular

Criteria	JORC Code explanation	Commentary
		round robin testing to ensure consistency of method and results. The testing program procedures have sufficient reserve sampling in-built in the program to allow for checks of the analytical testing to be undertaken as required if the result is anomalous. External testing will be undertaken when required.
Verification of sampling and assaying	▪ *The verification of significant intersections by either independent or alternative company personnel.* ▪ *The use of twinned holes.* ▪ *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* ▪ *Discuss any adjustment to assay data.*	▪ No verification of the sampling has been conducted by the Competent Person as there was no opportunity to observe the sampling of the coal intervals. An audit comparing the coal quality database with original hard copy lab reports has not been conducted. ▪ No twinned holes have been drilled. ▪ Geos Mining geological model data was compiled into custom-designed tables within a Microsoft SQL Server 2008 database, hosted on dedicated hardware in Geos Mining's Sydney office. Following input of the newly acquired data, data validation was undertaken to exclude redundant and unreliable data from the Resource estimation, including holes without downhole geophysical data and core sample intervals that could not be reconciled with correlated seams/plies (i.e. misaligned with seam picks). ▪ Moisture holding capacity ("MHC") results for holes YAC-010 and YAC-011 were reviewed by Geos Mining and provisionally considered that an in situ moisture of 6.5% was reasonable. ▪ An in situ moisture of 6.5% has been assumed and used to determine to estimate In situ Density using the Preston and Sanders method. The Competent Person considers a 6.5% in situ moisture basis to be reasonable and appropriate based on the Moisture Holding Capacity data available and regional experience.
Location of data points	▪ *Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* ▪ *Specification of the grid system used.* ▪ *Quality and adequacy of topographic control.*	▪ All surveyed drillhole collar data provided by Ashton Coal was supplied in GDA 1994 co-ordinates, MGA Zone 56. ▪ Collar data for some historical holes were excluded from the data due to lack of confidence in their collar locations. ▪ The current topography DTM surface was supplied to Ashton Coal in September 2013 based on an aerial survey flown in January 2013. It appears satisfactory for the Resource modelling and estimation. ▪ The current underground surveyed face positions of the Upper Liddell (ULD) and Upper Lower Liddell (ULLD) seams at 30th September 2017 and the LOM plans were used to excise mined coal from the geological Resource model. The LOM plans have been used to determine the Coal Resources within and outside the current LOM. ▪ A check of collar heights against the Geos topography model grid derived from the DTM (TOPO_50 – 50 m mesh) showed several anomalies up to +/-30 m between collars and the surface topography. These large anomalies were identified as being the result of spoil emplacement above original topography, with the drillhole collar located on the original surface R.L. A check of a regional original topography grid, which included the Ashton

Criteria	JORC Code explanation	Commentary
		deposit, against collar showed differences of up to 4 m in the areas with spoil dumps, this is reasonable as the original topography was most likely based on historic 1:25,000 Lands Department topographic maps. Elsewhere differences between collars and the DTM were modest generally <+/-1.5 m from visual examination of DTM contours and drillhole plotted collar height.
Data spacing and distribution	▪ *Data spacing for reporting of Exploration Results.* ▪ *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* ▪ *Whether sample compositing has been applied.*	▪ Drillhole spacing is closest in the North East Open Cut area and the northern and central parts of the proposed South East Open Cut ("SEOC"), typically from 100 m to 200 m. In the underground area, hole spacing is less dense, typically 300 m to 500 m, increasing locally to approximately 600 m to 800 m apart. Drillholes are typically more widely spaced in the western/north-western portions of ML1533, ML1623 and the western portions of EL4918 and EL5860. ▪ This drillhole spacing and distribution is sufficient to confirm the geological continuity to determine the Resource categories. ▪ Only vertical sample compositing within a single hole has been undertaken to represent a "working section". No samples have been composited together from several holes over several sites to form a single composite sample of the deposit and analysed.
Orientation of data in relation to geological structure	▪ *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* ▪ *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	▪ All structure and stratigraphic drilling and coring has been undertaken using vertical holes. This is satisfactory given the general structure and stratiform nature of the Ashton deposit seams. The coal seams exhibit complex geological structure in localised areas near the asymmetric north-northwest trending Camberwell Anticline axis, which traverses the north-eastern portion of the area. The anticline dips at 9° to 18° on the eastern limb (in ML1529) and 6° to 9° on the western limb. The dip of the strata on the Camberwell Anticline is not uniform with the rock units gradually steepen up to 9° to the northeast around the nose of the anticline. To the southwest, the rock units flatten to approximately 4° towards the Bayswater Syncline. This drilling method will not bias the sampling as it is coring a complete section of the seam across the bedding creating a cylindrical cross section representative of the coal intervals in the drillhole. ▪ Borehole deviation was judged to be immaterial and verticality surveys were not incorporated into the model.
Sample security	▪ *The measures taken to ensure sample security.*	▪ Measures to ensure sample security were not documented and reported historically. It was not possible to validate sample security. ▪ The sample number, seam and ply number, depth interval and lithology type, were recorded in the digital sampling sheets. No documentation was available summarizing the "chain of custody" of the sample and the security systems established to ensure coal seam sample anonymity at the laboratory.
Audits or reviews	▪ *The results of any audits or reviews of sampling techniques and data.*	▪ No external reviews or audits have been completed.

RPMGLOBAL

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	▪ *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* ▪ *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	▪ The Ashton Project comprises two exploration licenses (EL4918 and EL5860) and three mining leases (ML1529, ML1533 and ML1623) whose outermost boundary totals 1,510 ha. (Note; some of the tenements overlap one another). The mining operation is located approximately 14 km northwest of the township of Singleton in the Hunter Valley, New South Wales. All tenements were granted under the Mining Act, 1992, and are wholly owned by White Mining (NSW) Pty Ltd, a wholly owned subsidiary of Yancoal Australia Ltd. ▪ EL4918 was due to expire on 17/12/15 and EL5860 was due to expire on the 21/5/15 and renewals have been sought for both areas. ML1529 is due to expire on 11/11/2021, ML1533 (expires on 25/2/24), and ML1623 (expiring on the 30/10/29), are all held by Yancoal. ▪ There are a number of 'environment and community' issues that may jeopardise Ashton Coal's ability to extract coal within the current mining tenements. Some such issues include nearby rivers and waterways and their associated alluvium, licensing restrictions, nearby residents, land access and ownership. Following a protracted legal dispute some privately held land remains in the SEOC proposal which has delayed the commencement of mining and restricted access for surface exploration including LOX drilling. ▪ Native title does not currently prevent access to Resources that are currently being extracted however there are potential native title issues relating to Crown Land within the SEOC project area.
Exploration done by other parties	▪ *Acknowledgment and appraisal of exploration by other parties.*	▪ Exploration commenced at Ashton 1969, when the Joint Coal Board, acting for Durham Holdings Limited, an affiliate of Renison Goldfields, carried out drilling over a portion of the current project area as well as adjoining areas. Durham Holding at that time acquired the coal mining royalty rights, through the purchase of private coal titles, to open cut mining operations about to commence in Ravensworth No.2, adjoining to the west of Ashton, for thermal fuel supply to the nearby Liddell Power Station. ▪ Prior exploration was conducted by Durham Holdings/Joint Coal Board, Southland and Maitland Main Collieries, Department of Mineral Resources, White Mining Limited and Ashton Coal Operations Pty Ltd.
Geology	▪ *Deposit type, geological setting and style of mineralisation.*	▪ The Ashton Mine area is located in the Hunter Coalfield in the Sydney Basin and contain the basal seams of the Burnamwood Formation in the Jerrys Plains Subgroup and all seams of the Foybrook Formation in the underlying Vane Subgroup. These subgroups exist within the Late Permian Wittingham Coal Measures. The Wittingham Coal Measures seams subcrop in sequential order from west to east on the western limb of the Camberwell Anticline. Due to progressive erosion towards the east, only the basal 70m have been preserved at the eastern boundary of EL5860. Marine sediments of the Saltwater Creek Formation, which underlie the Foybrook Formation, subcrop in the eastern extremity of EL5860 and are

Criteria	JORC Code explanation	Commentary
		exposed further east. The full sequence of the Foybrook Formation, generally about 250m thick, is present in the western half of the area, with the most economically significant seams (Lemington, Pikes Gully, Upper Liddell, Upper Lower Liddell, and Lower Barrett) occurring in the formation's lower 180m. The Jerrys Plains Subgroup and Archerfield Sandstone cover the westernmost portion of the area. ▪ Quaternary alluvium associated with the Hunter River, Bowmans Creek and Glennies Creek cover various parts of the area. ▪ The dominant structural feature is the north-northwest trending asymmetric Camberwell Anticline, whose axis traverses the north-eastern portion of the area. The eastern limb of the anticline (which is situated in ML1529) dips at 9° to 18° towards the axis of the south-southwest trending Glennies Creek Syncline, while the gently dipping western limb dips at 6° to 9° towards the axis of the curvilinear, generally north-south trending Bayswater Syncline which is situated to the immediate west of the area. ▪ Upper Liddell seam mining has been affected by northeast to southwest conglomerate/sandstone channels which occur in the ULD seam roof. Roof rolls are associated with the channels (due to compaction) and areas of associated top ply erosion are also exposed in gateroad development and longwall extraction. High frequency RIM surveys are routinely carried out to map the expected location of these channels across each longwall panel to assist with horizon control in these localities. Local thinning of the ULD seam from nominally 2.0 m - 2.1 m to approximately 1.75 m is generally expected. Conglomerate channels as predicted from gateroad geological mapping and RIM surveys impacted ULD seam in panels LW-103 to LW-105 and at the inbye end of LW106A towards the proposed installation roadway from midway between CT27 and CT28 of the maingate heading. Inbye CT 31 the immediate roof was predominantly mudstone. ▪ Faults identified in the underground workings predominantly striking north-south, with a subordinate set trending east-west and northeast-southwest did not have a significant impact during Pikes Gully extraction. Faults at Pikes Gully level are believed to have been generally <1 m vertical normal displacement, although some reverse thrusts were present. However, two larger north-south faults with throws ranging from 1.0 m - 2.5 m were identified in the southern portion of LW103 and the southern portion of the gateroad between LW105 and LW106A. These faults dislocate the PG Seam and the ULD Seam where developed and extracted to date and are expected to affect the underlying ULLD and Lower Barrett (LB) seams. The two faults are roughly parallel and are inferred to extend over a distance of several hundred metres, both southwards outside the ML1533 boundary, and dissipating northwards into fault and/or flexure zones. Faults were mapped in the original proposed installation roadway for LW105, dipping at 75° with throws of 1.3 m and 0.9 m. Additionally a number of close-spaced faults along the adjoining maingate and tailgate driveages, interpreted as two fault zones with one diminishing outbye and the other diminishing inbye, necessitated the shortening of LW105, resulting in sterilisation of some Resources at the outbye end of the panel. The decision to sterilise Resources was to avoid slow longwall production, potential for equipment damage mining through the fault zone and potential

Criteria	JORC Code explanation	Commentary
		dangerous mining conditions found when mining through a similar fault zone in LW103 Detailed mapping shows a mapped dyke swarm occurred at the tailgate end of the installation roadway for LW103. This fault zone occurred towards the centre of LW3 when Pikes Gully seam mining occurred but more difficult mining conditions occurred when these faults were mined at ULD level below the Pikes Gully goaf from LW3. These faults will persist at depth and one set (mapped in ULD MG105) will impact the proposed longwall extraction plan for Upper Lower Liddell (MG205). Mapped fault zones will also impact on the current underlying Barrett development heading layout (MG302, MG304A and MG305). ▪ A north-south trending igneous (teschenite) dyke affects the ULD seam in the eastern portion of ML1533. The same dyke system had previously been intersected in the overlying Pikes Gully Seam workings in LW1 and required pre-mining by road header and also shot-firing on the longwall face slowing production. RIM (Radio Imaging Method) survey and in-seam longhole and IS series drillhole data has mapped the dyke to enable mine planning to develop a strategy for the ULD Seam to pre-mine as much as possible of this dyke and its cinder zone. Where mined the dyke ranged in thickness from 0.7 m to 5 m (up to 8 m including the cinder zone) and was "generally very strong" (UCS ranging from 45 MPa to 214 MPa, testing by Strata Testing Services, Newcastle). The cindered coal cannot be beneficiated and is treated as waste material when mined.
Drillhole Information	▪ *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* – *easting and northing of the drillhole collar* – *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* – *dip and azimuth of the hole* – *down hole length and interception depth* – *hole length.* ▪ *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	▪ The inclusion of the collar co-ordinates and elevation, drillhole total depth, hole direction, hole inclination and the seam intervals is not material to this report. ▪ A total of 301 drillholes have been used in the geological model. Within the tenement boundary 153 open holes, 144 partly or full cored (of which 70 are inter-seam IS series holes) and 9 (historical explorers and government holes) are located. A total of 13 surface holes were drilled by Yancoal (11 non-core holes and 2 core holes). Of the 288 historical drillholes drilled prior to Yancoal ownership, 142 were cored for coal quality, geotechnical studies and gas and 145 were non-core structure holes. Of the 228 holes drilled from the surface 187 (82%) have geophysical logs. Recent interseam drilling from ULD to ULLD in MG106A has facilitated more confident reclassification of Resources inside the life of mine plan. ▪ Both the gas drainage holes and most of the piezometer holes were not used in the model. The piezometers weren't used because most are too shallow (i.e. <15 m total depth). ▪ The exclusion of this data set will not detract from the understanding of the deposit as the Resource figures present the location and types of drillholes in each of the areas to support the justification of the Resource category areas defined by the Competent Person. It is understood that there may be some holes drilled by White Industries and Durham Holdings that are not included in the model drillhole database for unknown reasons.
Data aggregation methods	▪ *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades*	▪ Average qualities have been weighted on mass and in situ density on volume.

Criteria	JORC Code explanation	Commentary
	are usually Material and should be stated. ▪ *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* ▪ *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	▪ Working section qualities (for underground "working section" seams) have been composited across various ply components and partings between the plies to give the average as reported. ▪ No coal quality cut-offs have been applied in the geological model. ▪ There are no metal equivalents used to report the Coal Resources. This is not a standard reporting requirement for coal.
Relationship between mineralisation widths and intercept lengths	▪ *These relationships are particularly important in the reporting of Exploration Results.* ▪ *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* ▪ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	▪ All coal thicknesses are 'down-hole' intersected thickness and represent an apparent thickness. Because there are very few verticality logs it is not possible to generate a true thickness model of the area. However, the grid modelling uses the apparent thickness to generate vertical thicknesses from these apparent thicknesses and models between the generated roof and floor surfaces to compute a volume which honours the seam. ▪ No depth adjustment is undertaken for any holes in the Ashton drillhole database.
Diagrams	▪ *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	▪ All relevant figures depicting information considered material to the Coal Resources reported are contained within the JORC report associated with this Table 1.
Balanced reporting	▪ *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	▪ All results have been included in the data used to estimate Coal Resources reported here. Average values for raw ash and CV have been reported for Resources shown here, and whilst some outlying values do exist the averages are considered representative of the Coal Resources.
Other substantive exploration data	▪ *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	▪ A RIM survey conducted April 2013, focused on mapping dyke intrusions in LW-102, roof conglomerate intrusions on the outbye-end of both LW-102 and LW-101 and the area between the underground Pikes Gully Mains and the surface with the objective of determining sterilised coal. High frequency RIM surveys are now done routinely in advance of mining to identify areas of conglomerate roof in the ULD where channel development and associated erosion of the upper coal plies as well as seam thinning from differential compaction may occur. ▪ Gas desorption testing was conducted on four ULLD seam samples taken from ISLL19A, ISLL20A, ISLL22 and an unknown inter-seam hole in MG102 Panel and one ULD seam sample from surface hole YancoalG-008 to assess the potential hazard which could affect Resources. Standardised results (at 15% ash and 1.5% moisture bases) indicated moderately gassy conditions exist, with the gas composition for all samples ranging 98%-99% CH4 with the remainder CO2.

Criteria	JORC Code explanation	Commentary
		▪ A report on spontaneous combustion propensity was undertaken in 2007 to assess the potential hazard.
Further work	▪ *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* ▪ *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	▪ The main objectives for proposed future exploration are summarised below: – Proposed exploration will include one large diameter holes for sized washability. – Several IS series interseam holes from the ULD-ULLD to refine seam thickness and known splitting for the structural model will be conducted ahead of mining to increase confidence for mine planning. – One or more surface holes to test the ULD-ULLD interseam thickness to locate the LW201 installation roadway as the interseam thins inbye. – Approximately ten holes to enable some seams with poor recovery to be elevated to Measured Resources and equivalent Reserves status.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in Section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
Database integrity	▪ *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* ▪ *Data validation procedures used.*	▪ Previous consultants have conducted extensive validation exercises prior to undertaking previous Resource estimations in 2012, 2013 and 2014. ▪ Geos Mining consolidated the data supplied by Ashton with the Palaris Minex Resource estimation model 2013 database exports. Data was compiled into custom-designed tables within a Microsoft SQL Server 2008 database and served as the primary data source. Lithological logs, wireline geophysical logs, coal quality results (checked against NATA laboratory reports where available) and coal intersection depths were reconciled by Geos Mining before modelling and Resource estimation in 2014. ▪ In 2017, MBGS directly used the collar survey and the coal quality databases provided by Geos Mining and incorporated updated geological and geophysical data provided by Ashton Mine. ▪ RPM completed a selective audit of drillhole data. Issues were identified with respect to sample intervals compared with seam intervals and where relevant were updated.	
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ No site visit has been completed by the Resource Competent Person, however discussion have been held with the Reserves Competent Person who visited the site in 2018. The Competent Person is familiar with the geological setting of the Ashton Project from experience in nearby operations.	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
Geological interpretation	▪ *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* ▪ *Nature of the data used and of any assumptions made.* ▪ *The effect, if any, of alternative interpretations on Mineral Resource estimation.* ▪ *The use of geology in guiding and controlling Mineral Resource estimation.* ▪ *The factors affecting continuity both of grade and geology.*	▪ Geology of the Ashton deposit is understood with a good level of confidence and it is believed that coal volume estimations are sound. Current drillhole spacing and coal quality data is sufficient to indicate seam continuity and consistency and imply grade continuity in some places whilst verifying it in others. ▪ Although exploration has identified several small-scale faults (up to 2.5 m throws), faults have not been modelled in the current assessment as they are considered to have no material impact upon Resources. The sterilisation of part of LW105A due to difficult mining conditions caused by two fault zones will require a review of expected impacts of these faults on ULLD and underlying Barrett seam Resources and Reserves. ▪ Seam subcrops are structurally controlled by the Camberwell Anticline and strike generally north-south throughout the project area to limit the extent of the Resources. ▪ The maximum dip of around 9° occurs near the axis of the Camberwell Anticline at the north-eastern extremity of EL4918, where a monoclinal structure is interpreted to exist. ▪ Correlation of consistent characteristic geophysical seam signatures help support seam interval continuity and grade where identified in conjunction with coal analytical results (where conducted) for both open cut or underground Resource criteria, in order to establish and/or constrain potential 'working sections'. ▪ The geological interpretation is based on the integration of all drillhole and coal quality data and comparing with previous interpretations.	
Dimensions	▪ *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	▪ The outermost boundary of the Ashton Coal Project tenements totals 1,510 ha. (Note: some of the tenements overlap one another). This represents an area of approximately 4 km from east to west, by 5 km from north to south.	
		▪ Open Cut Resources extend from below the base of weathering (nominally 14 m below surface) to a maximum depth of approximately 200 m.	▪ Underground Resources extend from the base of weathering (nominally 14 m below surface) to a maximum depth of less than 350 m.
Estimation and modelling techniques	▪ *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* ▪ *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such*	▪ The estimate of Resources is based on geological models built with the existing geological databases. ▪ The Ashton geological model was constructed by MBGS based on drillhole data to produce grids at a 50 m mesh size. The MBGS model used ECS Growth Technique algorithm for interpolation of data. ▪ Open Cut Resources for the SEOC area were generated from a Minescape Geological model developed by RPM based on an updated version of the MBGS drillhole database. ▪ The topography grid was produced from the same topographic DTM surface derived from an aerial survey flown in January 2013.	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
	data. ▪ *The assumptions made regarding recovery of by-products.* ▪ *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* ▪ *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* ▪ *Any assumptions behind modelling of selective mining units.* ▪ *Any assumptions about correlation between variables.* ▪ *Description of how the geological interpretation was used to control the resource estimates.* ▪ *Discussion of basis for using or not using grade cutting or capping.* ▪ *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	▪ There are no by-products from the processing and beneficiation of the coal to produce a thermal coal product. ▪ Only TS has been modelled as part of this statement. No estimation of other deleterious elements was undertaken as part of this statement. ▪ Selective mining 'working sections' were modelled. The seams were all modelled individually to minimise the risk of including stone partings in the thickness of the coal and overestimating the Coal Resources. ▪ No assumptions have been made about correlations between variables for this estimate. ▪ Where available, laboratory density measurements were used to derive Preston & Sanders in situ densities corrected to a nominal in situ moisture of 6.5%. ▪ The geological seam structure model is acceptable, although the faults have not been modelled. ▪ Resource category polygons for each seam ply and working section were defined. ▪ Resources were estimated using seam thickness, ash, in situ density, TS and CV from the geological models and limited by the seam subcrops, Resource and tenement limits and Resource category boundary polygons. ▪ A total of 301 drillholes were used in the modelling, of which 90 had coal quality data. ▪ Resources were limited to a maximum of 50% raw ash (ad). ▪ A comparison with previous estimates year shows only small differences and that any variations could be justified based on changes in criteria of the categories or where additional geological information has updated.	
Moisture	▪ *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	▪ Tonnes are estimated on an in situ moisture basis. ▪ Moisture holding capacity data from four 2013 boreholes (YAC-010, YAC-011, WMLC336 and WMLC337) has been used to estimate in situ moisture, using the equation devised by ACARP 10041C (2003) which confirmed the 6.5% in situ moisture as appropriate. ▪ The estimated 6.5% in situ moisture to adjust the in situ coal density using the Preston & Sanders formulae to undertake the Resource estimation. Air dried moisture averages on a seam group basis range from 2.7% to 3.8% for Open Cut Resources and 2.3% to 3.1% for Underground Resources.	
Cut-off parameters	▪ *The basis of the adopted cut-off grade(s) or quality parameters applied.*	▪ Ply Resources, no minimum coal thickness was used. It is noted that in particular the Lemington plies are numerous and thin and although theoretically able to be mined, the ability to recover the Lemington plies will	▪ For Underground Resources, the Ashton mine site supplied drillhole by drillhole working section seam picks in order to identify the combination of plies which could be considered as recoverable. There

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
		need to be considered in more detail in order to determine Reserves. The amount of Resources and Strip Ratio is not overly sensitive to thin (<300 mm) plies. ▪ A maximum 50% raw ash content (ad) for coal plies and potential open cut working sections was generally applied.	are some issues identified with the working sections nominated, which may result in the modelled working sections being thin and underquoting Resources. Nominating working sections can be an iterative process. A minimum thickness of 1.8 m for remaining underground Resources in the Pikes Gully Seam and minimum 1.5 m for underground Resources in all other seams was used.
Mining factors or assumptions	▪ *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	▪ Open Cut Resources are estimated to a nominal depth of 200 m. The strip ratio for the Open Cut Resources is well within the range of currently mined strip ratio's (<10:1) in the Hunter Valley. Open cut Resources have been excluded from within the Hunter River and Glennies Creek and associated alluvials, as it is considered very unlikely that open cut mining in the alluvials associated with either river will ever be allowed due to environmental regulations.	▪ Underground Resources are estimated to a nominal depth of 350 m. Portions of the coal will require washing to meet the target product market specification and considerable finesse will be required to mine the deposit and reduce the amount of stone that reports to the wash plant. Some significant areas identified as underground Resources are residual coal areas outside of historical or future mine plans. These areas may be recoverable by implementing different underground mining methods such as bord and pillar or may also have potential for open cut extraction.
Metallurgical factors or assumptions	▪ *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	▪ Raw coal is beneficiated in the CHPP, which comprises three circuits. The coarse fraction, (50 mm to +2 mm) is processed by a single HC dense medium cyclone ("DMC") circuit, the fine fraction, (-2 mm to +120 µm) is processed by spirals and an ultrafine fraction (-120 µm) is mechanically agitated flotation circuit was recently added to improve coking recovery. The plant has no bypass capability. ▪ The main seams in the LOM plan which are planned to, or are being extracted by either open cut or underground methods include PG, ULD, ULLD and LB. All have coking potential, which commands higher prices than thermal coal and justifies the recent upgrade of the CHPP to improve recovery of the ultrafine coking fraction. ▪ It is assumed that remaining seams with mining potential but which possess little or no coking properties, could potentially be blended or beneficiated with seams which possess coking properties, in order to render them a more commercial proposition for extraction. As a result, no maximum raw ash content (adb) has been applied to stone bands situated above or below recognised coal plies.	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
Environmental factors or assumptions	▪ *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	▪ Coarse and fine rejects are currently trucked to Northeast Open Cut void, while ultrafine material is pumped to a tailings dam. There are no known environmental issues with mine site CHPP co-disposal. ▪ Open Cut Resources are excluded from the currently mapped alluvials associated with the Hunter River and Glennies Creek. Underground Resources are not excluded, however it should be noted that any underground plans to mine beneath the alluvials would likely be impacted by conditions to prevent any impacts to the waterways.	▪ For the purposes of estimating Resources, it has been assumed that the Conservation Area located in the south of ML1533 (which will be an impediment to the proposed West Pit mining of the Lemington seams above the underground workings in ML1533) will be offset by another area to allow future open cut mining.
Bulk density	▪ *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* ▪ *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* ▪ *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	▪ Relative density which measures the coal density without the void space and ash measurements have been conducted systematically on many coal and stone core samples. The moisture holding capacity has also been tested on selected samples across the Ashton deposit which has enabled an assessment by Geos Mining using ACARP 10041C to determine the in situ moisture. An estimate of 6.5% for the coal was determined. In situ densities were adjusted using the Preston & Sanders formulae. ▪ In situ density grids were generated from adjusted density values derived using in situ moisture of 6.5%.	
Classification	▪ *The basis for the classification of the Mineral Resources into varying confidence categories.* ▪ *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.*	▪ Coal Resources have been classified into Measured, Indicated and Inferred Resources categories based on spacing of data and confidence in seam continuity and consistency, grade and predictability. Where drillhole data (both surface and IS series interseam holes) is closely spaced and supported by proximal underground workings and surrounding coal mine information adjacent to Ashton and confidence in coal seam continuity, grade and predictability is sufficient to allow these Resources to be classified as Measured and Indicated Resources. Where data spacing has increased, confidence in coal seam continuity and predictability decreases and Coal Resources in these areas are classified as Inferred Resources. Inferred Resources have been estimated to 350 m depth of cover. ▪ This method of Resource assessment is appropriate to represent the geological seam complexity and variation within the Ashton deposit.	
Audits or reviews	▪ *The results of any audits or reviews of Mineral Resource estimates.*	▪ No external audits or reviews have been completed.	
Discussion of relative	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate*	▪ The confidence in the Resources is reflected in the classifications. Based on the geological setting and type and amount of geological data, the Resources are reasonably defined.	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
accuracy/ confidence	*using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	However the factors that affect the accuracy of the Resource estimate include the modelled limit of the subcrop, the coal thickness and the density. ▪ Coal Resources for Ashton were estimated within polygons containing multiple drillholes, as such all estimates are considered global estimates.	

Section 4 Estimation and Reporting of Ore Reserves

The completed Table 1, Sections 4 is in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Persons, Mr Doug Sillar (OC) and Mr Graeme Rigg (UG) on behalf of RPM.

(Criteria listed in section 1, and where relevant in Sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
Mineral Resource estimate for conversion to Ore Reserves	▪ *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* ▪ *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	▪ The Coal Resource estimate used as the basis for this Coal Reserves Statement is described as part of this statement. The Resource estimate has been prepared by Mr. Brendan Stats. The Competent Person, Mr. Stats, has sufficient expertise that is relevant to the style of mineralisation and type of deposit and activity to qualify as a Competent Person as specified under the JORC Code and is a member of the Australian Institute of Mining and Metallurgy . ▪ The Resources Statement was compiled in accordance with The JORC Code 2012 Edition. ▪ The Coal Resources reported are inclusive of the Coal Reserves. ▪ The same geological model has been used for the estimation of Resources and Reserves.	
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	▪ A site visit to the Ashton underground was undertaken by the UG Reserves Competent Person in April 2018.	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
	▪ *If no site visits have been undertaken indicate why this is the case.*	▪ The proposed open cut is a Greenfields operation and hence any requirements in site visits was managed by the UG Competent Person. ▪ The outcome of this site visit was observation of site and mining conditions and discussion with site operating personnel regarding the operation and the determination of project parameters used in the Ashton underground planning process.	
Study status	▪ *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* ▪ *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	▪ A PFS level LOM report was prepared by a third party consultant in 2013. This report and previous JORC Reserve Estimates were the basis of the mine planning required for the proposed open cut operation.	▪ Ashton is an operating underground mine. LOM studies undertaken during the project planning and design stages have now been complemented by actual operating experience and ongoing exploration and assessment.
Cut-off parameters	▪ *The basis of the cut-off grade(s) or quality parameters applied.*	▪ There are no coal quality cut-off parameters used to eliminate the conversion of Coal Resources to Coal Reserves. LOM planning has been used to determine whether Coal Resources will convert to Coal Reserves.	
Mining factors or assumptions	▪ *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* ▪ *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* ▪ *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* ▪ *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* ▪ *The mining dilution factors used.* ▪ *The mining recovery factors used.* ▪ *Any minimum mining widths used.* ▪ *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* ▪ *The infrastructure requirements of the selected mining methods.*	▪ LOM planning has been used as the basis of converting Coal Resources to Coal Reserves. ▪ A haulback mining method with an initial boxcut is the selected mining method to optimise inpit dumping capability. ▪ The mining factors used were: – Minimum coal working section mining thickness of 0.3 m; – Minimum parting mining thickness of 0.3 m; – Roof coal losses of 0.075 m; – Roof dilution of 0.075 m; – Dilution RD assumed to be 2.2 g/cc; – Dilution ash assumed to be 80%; and – In situ moisture standardised to 6.5%. ROM moisture is assumed to be 8%. ▪ Preston & Sanders has been used in the estimation of in situ RD.	▪ LOM planning has been used as the basis of converting Coal Resources to Coal Reserves. ▪ The selected mining method is that in use in the operating mine, i.e. conventional longwall extraction with continuous miner development. ▪ Geotechnical studies were used as the basis for having offset longwall panels in the multi-seam environment. The offset layout strategy is consistent with contemporary practice for extracting from multiple seams. ▪ The mining factors used were: – Development roadways 5.4 m wide by 2.7 m high; – Longwall operating height 2.3 m - 2.8 m; – Longwall panel width 205 m; – It is assumed that no coal is lost from the roof or floor of the mineable coal

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
		▪ Pit limits were based on physical limits including seam crops, creeks, leases and roads. Application of these limits resulted in the proposed South East Open Cut (SEOC) pit. ▪ Inferred coal has been included in the LOM Plan.	sections during development or longwall extraction; – It is assumed that a combined minimum of 100 mm of higher ash material will be mined with the roof and the floor of the coal seam during development and longwall operations, thereby diluting the in situ coal quality; – The quality defaults assigned to the waste rock were assumed to be relative density of 2.34 t/m^3, ash of 85%, and specific energy of 0 kcal/kg; – Relative density data in the geological model is based on assumed in-situ moisture of 6.5%, while all qualities are based on air-dried moisture gridded values; – Preston & Sanders has been used in the estimation of in situ RD; and – RPM has assumed that ROM moisture will be 8.65%, and product moisture will be 8.5%. ▪ Inferred coal does not exist within the LOM Plan footprint. ▪ All necessary infrastructure is in place and operational.
Metallurgical factors or assumptions	▪ *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* ▪ *Whether the metallurgical process is well-tested technology or novel in nature.* ▪ *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* ▪ *Any assumptions or allowances made for deleterious elements.* ▪ *The existence of any bulk sample or pilot scale test work*	▪ The metallurgical process for washing the target seams is already in place and being used. The configuration of the CHPP includes dense media cyclone ("DMC"), Spirals, and Flotation processes. The current CHPP module was designed to process 600 tph of underground ROM coal but can operate at up to 800 tph if stone and moisture levels within the ROM coal are not excessive. ▪ The process generates a SSCC product from a low cut point that will produce a 9.5% ash product. The metallurgical process is appropriate for the Ashton mine. ▪ Yancoal commissioned a coal quality expert to review production data and determine an estimate of current yield at Ashton. ▪ No bypass products assumed in the LOM plan.	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
	and the degree to which such samples are considered representative of the ore body as a whole. ▪ *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	▪ No allowance has been made for deleterious elements.	
Environmental	▪ *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	▪ An Environmental Impact Statement has been prepared and the necessary environmental approvals obtained. ▪ Coarse rejects are placed within the open cut void. Washery fines material is pumped to an adjacent property owned by AGL, under an existing agreement.	
		▪ The SEOC pit is awaiting consent based on reaching a land access agreement or purchase of a property at the site. Once an agreement is reached, the conditions of the approval will be met. ▪ Waste material will be placed both inpit and expit.	▪ Current impacts to alluvial groundwater Resources are within the approved predictions and impacts. The previous extraction of LW6b in the Pikes Gully Seam resulted in higher peak inflows than what was estimated in the groundwater modelling. The groundwater model was revised in 2016 and the new model indicated that there are potential compliance risks with extracting the lower seam longwall panels around the Bowmans Creek alluvials. Assessment is ongoing and, in the interim, the longwall panel extraction sequence has been modified such that the first 5 longwall panels in the Upper Lower Liddell Seam will be extracted prior to the final 3 longwall panels in the Upper Liddell Seam being extracted. This permits further time to assess the potential groundwater issue but there remains the risk that some or all of the lower seam longwall panels around the Bowmans Creek alluvials will not be extracted. At worst, this could reduce Reserves by 10 Mt, and Marketable Reserves by 5 Mt.
Infrastructure	▪ *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	▪ All necessary infrastructure for underground operations is in place and operational for the current operations at the Asset. ▪ Additional infrastructure will be required with the commencement with the SEOC such as haul roads and potentially bridges across Glennies Creek.	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
Costs	▪ *The derivation of, or assumptions made, regarding projected capital costs in the study.* ▪ *The methodology used to estimate operating costs.* ▪ *Allowances made for the content of deleterious elements.* ▪ *The source of exchange rates used in the study.* ▪ *Derivation of transportation charges.* ▪ *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* ▪ *The allowances made for royalties payable, both Government and private.*	▪ All major infrastructure is in place. Capital forecasts have been included which represent the growth and sustaining requirements for the completion of the LOM plan. ▪ All operating costs are based on LOM planning estimates from Yancoal and have been reviewed by RPM. ▪ Current long-term exchange rate assumptions were provided by Yancoal. ▪ Transport charges based on actual contracted prices taking into account existing Take or Pay arrangements. ▪ NSW state government royalties are included in the estimate. ▪ RPM reviewed all costs and they are considered reasonable.	
Revenue factors	▪ *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* ▪ *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	▪ Long term product coal pricing assumptions have been provided by Yancoal Marketing and is based on independent third party research and reporting. ▪ The revenue factors are considered reasonable for the purposes of estimating Reserves.	
Market assessment	▪ *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* ▪ *A customer and competitor analysis along with the identification of likely market windows for the product.* ▪ *Price and volume forecasts and the basis for these forecasts.* ▪ *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	▪ A Marketing Study has not been reviewed however markets are well established for the mine's coal products. The Project typically produces one product: – SSCC at approx. 9.5% ash (ad). ▪ Based upon this product, RPM anticipates no foreseeable issues in demand for this product.	
Economic	▪ *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* ▪ *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	▪ The inputs to the economic analysis are derived capital and operating cost estimates outlined in the "Costs" section of Table 1. The source of the inputs is real and the confidence satisfactory. The economic modelling is in real terms and a range of discount rates have been used in assessing NPV. ▪ The NPV results for the Project produced from economic modelling generated positive and acceptable NPV's for all discount rates and the Project is considered economic from an NPV stand-point. ▪ Sensitivity analysis has been completed on the Project over a range of variable. The Project is most sensitive to changes in exchange rate, revenue and operating costs.	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
Social	▪ *The status of agreements with key stakeholders and matters leading to social licence to operate.*	▪ All key stakeholder agreements are in place, providing social license to operate underground operations. ▪ The SEOC pit is awaiting consent based on reaching a land access agreement or purchase of a property at the site. Once an agreement is reached, the conditions of the approval will be met. ▪ Native Title has not been extinguished for some areas (including crown land and water ways) and Native Title may still exist within the footprint of the South East Open Cut.	
Other	▪ *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* ▪ *Any identified material naturally occurring risks.* ▪ *The status of material legal agreements and marketing arrangements.* ▪ *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	▪ Extraction of the SEOC is contingent on reaching an agreement with a landowner. ▪ As mining proceeds it is reasonably expected any modifications to existing agreements or additional agreements that may be required can be obtained as required.	
Classification	▪ *The basis for the classification of the Ore Reserves into varying confidence categories.* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.* ▪ *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	▪ There are no Measured Resources at SEOC, hence all Reserves are classified as Probable. ▪ The Inferred Coal Resources have been excluded from the Reserve estimates.	▪ Coal Reserves that are supported by Measured Resources are generally classified as Proved Reserves and Coal Reserves supported by Indicated Resources are classified as Probable Reserves ▪ Approximately 10 Mt of Probable Reserves have been derived from Measured Resources. ▪ The Inferred Coal Resources have been excluded from the Reserve estimates. ▪ The result reflects the Competent Persons view of the deposit.
Audits or reviews	▪ *The results of any audits or reviews of Ore Reserve estimates.*	▪ Internal peer review of the Reserves Report has been completed.	

Criteria	JORC Code explanation	Commentary	
		Open Cut	Underground
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* ▪ *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ The basis of the estimate are actual operating costs and LOM planning. ▪ CHPP and infrastructure are in place and operating. ▪ Analysis of the coal quality has been undertaken by independent laboratories working under international standards of method and accuracy. ▪ The level of accuracy will continue to be dependent on the ongoing update of the geological model and monitoring of the Modifying Factors affecting the coal estimate. ▪ Geotechnical studies have been completed for existing underground operations. Expansion open cut pits will need more detailed geotechnical study prior to development. ▪ Additional studies are currently being undertaken to increase confidence levels in operating in the Lower Barrett Seam.	
		▪ There are no Measured Resources within the SEOC footprint. ▪ Actual production data is not available as the SEOC is not operational.	▪ The mine footprint is supported by approximately 60% of Measured Coal Resources. ▪ The major risk in not achieving the estimated Reserve extraction comes from the potential compliance risks with extracting the lower seam longwall panels around the Bowmans Creek alluvials, specifically how much water is drained from the alluvials, how well the workforce is able to maintain economic productivity levels with higher groundwater make into the underground workings, and any potential discharge issues associated with the higher water make.

RPMGLOBAL

JORC Code Disclosure Requirements

Yarrabee

RPMGLOBAL

JORC Code, 2012 Edition – Table 1 report template

The completed Table 1, Sections 1, 2 & 3 are in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person Mr Michael Johnson on behalf of RPM.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* ▪ *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* ▪ *Aspects of the determination of mineralisation that are Material to the Public Report.* ▪ *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	▪ The Yarrabee Mine has been in operation since 1982, initially producing a raw coal product until the coal handling and preparation plant (CHPP) was commissioned in June 2009. ▪ The Yarrabee Mine area contains some 10,388 boreholes which forms the knowledge basis of the coal deposit. ▪ Open hole drilling was used for structure control. ▪ Core drilling was used for coal quality and gas desorption sampling. ▪ Core drilling is typically by 100 mm diameter tungsten carbide drill bits and triple tube barrels which are standard industry practice. ▪ Core hole locations are selected based on the ability to fully represent the coal Resource at the particular location in the deposit taking the structural complexity into consideration. ▪ Core was sampled based on the Yarrabee Coal Company core logging procedure, which is based on industry standards. ▪ Open holes are sampled at 1 m intervals. ▪ Cored holes are typically sampled at 0.2 m intervals so that the quality of the seam can be characterised for raw coal ash and phosphorus. ▪ Samples were selected based on the coal brightness, lithology and geophysics from pilot holes, and provided with a unique sample number before being placed into double plastic bags and sealed. ▪ It is important that core samples are taken according to the lithology and brightness profiles of the core as the overarching control, which is followed by the 20 cm increment requirement. ▪ Raw coal ash and phosphorus characterisation is important because these parameters are used to determine the coal mining sections for bypass and washed coal products. ▪ The entire seam was sampled in each occasion. ▪ Roof and floor strata were also sampled and tested. ▪ Since 2008, all field geological data logging was entered directly into Geobank.

Criteria	JORC Code explanation	Commentary
		▪ All geological data is loaded to Geobank.
Drilling techniques	▪ *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	▪ Industry standard drilling techniques are used, with conventional rotary table drill rigs using air and water circulation. ▪ All drilling has been completed using vertical drill orientation. No core orientation has been performed. ▪ Blade/Hammer/PCD bits were used to drill open (chip) holes. ▪ Partially cored 4C (100 mm) core holes were drilled to obtain coal quality information. It is estimated by Yarrabee that 90% of core holes are 4C. ▪ Due to the extreme geological complexity at Yarrabee, 4C (100 mm) core barrels were used to maximise core recovery. Minimum core recovery for core holes used in the model was 90%. It is observed that the brightest, lowest ash, friable/brittle coal is more susceptible to core loss, especially in faulted areas. Core loss usually occurs between core runs, and thus the maximum 4C core barrel length of 4.5 m was used to minimise the number of core runs. ▪ Contractually, a redrill is required if less than 95% core recovery is obtained. Recovery less than 95% is occasionally accepted if the drilling environment is difficult, or the loss is deemed acceptable via comparing against geophysics density, and the position of the loss in the seam. ▪ The Pollux seam coring procedure is to stop the first core run in the middle of the Bypass Upper ply, 1 m into the Pollux seam. The second core run obtains the remainder of the seam. If any loss occurs between core runs, it is entirely confined within the Bypass Upper ply. The Bypass Upper ply has the most consistent quality and is almost always <9% ash, <0.60% sulphur, and <0.06% phosphorous. ▪ However, due to steep seam dips and the regional horizontal stress magnitude and direction boreholes deviate significantly at greater than 60 m depth.
Drill sample recovery	▪ *Method of recording and assessing core and chip sample recoveries and results assessed.* ▪ *Measures taken to maximise sample recovery and ensure representative nature of the samples.* ▪ *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	▪ The Yarrabee Coal Company coring instruction procedure, which is based on Industry standard methods of obtaining core samples is used by the rig geologists. ▪ Core recovery is recorded by the rig geologist at the time logging the bore hole, based on measurements taken of the cored interval and the core recovered and visual inspection of the core. Actual recovered core lengths are measured with a tape measure and any core loss is recorded in geological logs, coal quality sample intervals and in the run by run drilling record field sheets. ▪ Core loss is confirmed by the rig geologist after comparing the recovered core to the geophysical logs to determine which parts if any of the seam are missing due to core loss. ▪ Core loss is recorded and excluded from samples in accordance with the Yarrabee Core Logging procedure. It is estimated that 90% of the core holes in the database are compliant with the procedure.

Criteria	JORC Code explanation	Commentary
		▪ Historic boreholes do not comply with the Yarrabee core logging procedure. ▪ The database contains 1,316 parent seams with sample data. 92 seams (7%) have <90% recovery and have been excluded from the model. 73 seams (5%) have between 90% and 95% core recovery and have been used in the model. 1,151 seams (87%) have >95% recovery. ▪ If core recovery for a coal ply is less than 95%, then that section of the hole is redrilled to ensure a representative sample is taken, provided that the cored hole is not located in an area of high structural complexity, in which case lower core recovery is accepted. ▪ Open hole chip recovery is assessed qualitatively by the rig geologist.
Logging	▪ *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* ▪ *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* ▪ *The total length and percentage of the relevant intersections logged.*	▪ Standardised Yancoal logging systems and protocols are utilised for all drilling logging and sampling. ▪ Core is geologically logged and open hole chip samples are taken every 1 m and logged for lithology changes. ▪ All holes have been lithologically logged, with cored coal sections brightness logged. The logging of the chip and core samples is detailed and includes a record of the recovery of the total length and the cored length, rock type, stratigraphic unit and numerous adjectives to describe the sample in terms of colour, grainsize, bedding etc. all of which is sufficient to describe the various lithologies and coal samples to support the Coal Resource estimation from a geological and coal quality consideration. ▪ In general, geotechnical assessment is not performed based on bore core data because the structural deformation at Yarrabee can be classified between complex and severe for some of the mining areas. ▪ Geotechnical boreholes have been drilled vertically, and as a result do not intersect a significant number of defect structures, because joints and the like typically have subvertical orientation. ▪ Geotechnical drilling has been completed in the Yarrabee East South (YES) and Wilpeena areas. ▪ All bore core is photographed on both the core table (0.5 m increment). ▪ Chip samples are photographed as they are sampled and laid out in 1 m intervals. ▪ An estimated 90% of the Resource uses holes with digital geophysical logs. Some older holes only have paper copy geophysics. The holes without geophysics appear to have been corrected to geophysics, and reliability has been verified from newer drilling, and mining. Holes confirmed to be unreliable have been flagged in the Geobank database to avoid accidental use during modelling. In some areas these holes have been redrilled.

Criteria	JORC Code explanation	Commentary
		▪ The geophysical tools used were: short and long spaced density, natural gamma, calliper, and verticality. A sonic sonde is run on cored holes. ▪ Drillhole vertically data was used (when available) to orientate and locate the boreholes and the coal seams for inclusion in the structural model. An estimated 90% of the Resource was modelled using verticality data.
Sub-sampling techniques and sample preparation	▪ *If core, whether cut or sawn and whether quarter, half or all core taken.* ▪ *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* ▪ *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* ▪ *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* ▪ *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* ▪ *Whether sample sizes are appropriate to the grain size of the material being sampled.*	▪ Core sampling is completed at the drill site and is based on a set of standard criteria (determined by lithology and structure) that follows the Yarrabee sampling procedure. ▪ All samples were photographed, double bagged, and provided with a unique sample identifier prior to sending to the laboratory. ▪ Whole samples were used for quality analysis. ▪ All samples within the seam extents were analysed. ▪ Carbonaceous material, and all stone bands were sampled to ensure that full coverage of each seam was obtained. ▪ Seam extents were corrected to geophysics prior to coal quality analysis, and then corrected to quality after the analysis was completed (if necessary). ▪ Samples were weighed as received, dried and reweighed. Raw analysis samples were crushed to -4 mm and split into portions using a rotary splitter prior to coal quality analysis. ▪ Washability analysis was conducted in Resource areas containing no wash plant production data. The analysis was conducted in accordance with the Yarrabee Coal Company washability procedure.
Quality of assay data and laboratory tests	▪ *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* ▪ *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* ▪ *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	▪ Only core samples are used to obtain coal quality information. ▪ Only third party NATA certified labs were used for sample analysis. Labs conduct round robin validation checks to ensure a high standard of reporting is maintained. ▪ All samples were analysed for raw coal quality. ▪ Sample instructions were issued by Yarrabee Coal Company personnel. ▪ Yarrabee currently uses the SGS laboratory at Gladstone.
Verification of sampling and assaying	▪ *The verification of significant intersections by either independent or alternative company personnel.* ▪ *The use of twinned holes.* ▪ *Documentation of primary data, data entry procedures,*	▪ Sample results were validated in-house by Yancoal employees. ▪ No twinned core holes have been drilled. ▪ All coal quality data is stored in the Geobank Yarrabee database.

Criteria	JORC Code explanation	Commentary
	data verification, data storage (physical and electronic) protocols. ▪ *Discuss any adjustment to assay data.*	▪ The coal quality laboratories provide the results of coal quality testing to Yarrabee in a template which is directly uploaded into Geobank which eliminates transcription and key in errors arising from data transfer. ▪ Yarrabee has used a wide range of laboratory service providers over the years, and report no bias in the results of coal testing, with the exception of phosphorus in the DOM 2 South area. Yancoal believes that the pre-2007 phosphorus values reported for wet chemistry analytical methods for the DOM 2 South area were lower than the later values reported by XRF determinations. ▪ It is noted that the DOM 2 South area is mined out, and therefore will not impact future coal quality predictions. ▪ Validation is conducted before and after the data is loaded into the Geobank Yarrabee database. ▪ Geobank is used to check the data being loaded to the database according to a set of coal quality data load limits. Any data outside of these limits is flagged and is evaluated by the Yarrabee geologists to determine if the flagged data has been caused by error or due to geological variation. ▪ In the case of a geological variation the data is loaded to Geobank. ▪ In the case of error, the samples are reanalysed by the laboratory. ▪ Validation also occurs on each seam graphically by comparison with the geophysical log data. Ash for example is compared against the geophysical signature. ▪ Relative density is adjusted for Preston & Sanders, using the assumed bed (in situ) moisture of 5.5%, which is consistent for the rank of the coal present at Yarrabee.
Location of data points	▪ *Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* ▪ *Specification of the grid system used.* ▪ *Quality and adequacy of topographic control.*	▪ The initial borehole coordinates are obtained using handheld Garmin GPS by the site geologist using Aus Geoid 84 Zone 55. ▪ Final borehole collar survey is completed by the Yarrabee Coal Company personnel trained in surveying, using the Yarrabee Mine base station calibrated to AMG84_55. ▪ Geological models are developed from topographic data from AAM Hatch airborne LiDAR, using control points to correct to the local grid. LiDAR data is acquired annually and is therefore up to date. ▪ The topographic surface at Yarrabee is essentially flat lying. The topographic surface for the YES area has been developed from the borehole collars. ▪ Geobank validates the final borehole collar survey by flagging the hole if the final and estimated coordinates are more than 20 m different. This event has only occurred once at Yarrabee since 2007, and is therefore not material.

Criteria	JORC Code explanation	Commentary
		▪ Older boreholes have removed from the model if the collar does not match the topography, or the seams don't match the seam model. ▪ In general this is the data acquired by Thiess Brothers and CSR Limited. It appears that both entities controlled separate tenements, and used the same borehole numbers as each other. When the tenements were combined some boreholes were not unique which caused collar location issues that were resolved by Yancoal.
Data spacing and distribution	▪ *Data spacing for reporting of Exploration Results.* ▪ *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* ▪ *Whether sample compositing has been applied.*	▪ The geological levels of structural complexity at Yarrabee range between moderate and severe. Relatively close-spaced hole spacing was required to correlate the Resource to an acceptable level of confidence in complex and severe areas. ▪ Exploration drilling is initially performed on parallel drill lines that are located at the following distances: – 1,000 m; – 500 m; and – 250 m. ▪ The spacing of exploration drill lines is reduced as certainty of inclusion of Resources into the LOM increases. ▪ In general the spacing of open holes for pre-production drilling reduces to 125 m. ▪ Borehole spacing is not the overarching criteria for determining the spacing of exploration. Geological certainty is the prime requirement at the completion of exploration. In other words the greater the geological complexity, the closer the final borehole spacing. ▪ As a general rule of thumb, if bypass coal is required to be produced the borehole spacing is generally less than 150 m.
Orientation of data in relation to geological structure	▪ *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* ▪ *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	▪ Drillholes were oriented and drilled vertically. ▪ In areas of steep bedding dip, drillholes often have a high percentage of deviation. ▪ Verticality data was acquired during geophysical logging and has been used for unambiguous location of the coal seams for 90% of boreholes used for development of geological models. ▪ Core orientation has not been measured. Core holes have been oriented and drilled vertically. ▪ The use of downhole deviation for deviated boreholes is sufficient for unambiguous location of the coal seams and follows standard industry practices.
Sample security	▪ *The measures taken to ensure sample security.*	▪ Core samples are bagged by the geologist and dispatched through the Yarrabee Mine Stores for dispatch. Samples are transported to the laboratory by dedicated courier service. ▪ Sample instructions are provided to the laboratory.

Criteria	JORC Code explanation	Commentary
		▪ No samples have gone missing to date. ▪ In light of the bulk commodity nature of coal, no higher level security measures are deemed necessary since it is very unlikely to be subject to material impact from sample tampering theft or loss.
Audits or reviews	▪ *The results of any audits or reviews of sampling techniques and data.*	▪ No external audits have been performed.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	▪ *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* ▪ *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	▪ All Resources lie within mining leases held by YCC. There are no joint ventures, partnerships, overriding royalties, native title interests, historical sites or wilderness or national park and environmental settings over these mining leases. ▪ The mining lease status is listed in Table C1, and shown in the table below:
Exploration done by other parties	▪ *Acknowledgment and appraisal of exploration by other parties.*	▪ Approximately 40% of the exploration was completed by antecedents to Felix Resources who became the owner of Yarrabee in 2007. ▪ Approximately 60% of the holes have been drilled since 2007 when Felix Resources acquired Yarrabee.

Type	Number	Grant Date	Expiry Date	Hectare/sub-block	% Yarrabee Owned
ML	1770	9/03/1978	31/03/2022	1,292 ha	100%
ML	80049	24/06/1999	30/06/2019	133 ha	100%
ML	80050	1/10/1998	31/10/2018	1,223 ha	100%
ML	80096	20/06/2002	30/06/2020	100 ha	100%
ML	80104	4/09/2003	30/09/2023	648 ha	100%
ML	80172	4/10/2012	31/10/2042	1,987 ha	100%
ML	80195	1/04/2014	30/04/2044	2,356 ha	100%
ML	80196	1/04/2014	30/04/2044	80 ha	100%
ML	80197	7/05/2014	31/05/2044	413 ha	100%
ML	80198	1/04/2014	30/04/2044	50 ha	100%
MDL	160	1/04/1996	31/03/2022	742 ha	100%
EPC	621	29/10/1996	28/10/2019	28 ha	64%
EPC	717	28/08/2000	27/08/2022	4 ha	100%
EPC	1429	15/06/2010	14/06/2020	22 ha	64%
EPC	1684	12/03/2010	11/03/2022	8 ha	100%

Criteria	JORC Code explanation	Commentary
		▪ The previous Competent Person (Mr. Stuart Whyte) who has been employed at Yarrabee since 2007 has full knowledge of this post 2007 exploration, and has provided the current Competent Person with his personal insights. ▪ All known historical drilling has been incorporated into the Yarrabee geological database. The term 'historical drilling' used by Yarrabee, refers to all boreholes completed prior to 2007. ▪ No drilling is conducted on YCC mining leases by other parties.
Geology	▪ *Deposit type, geological setting and style of mineralisation.*	▪ The Yarrabee deposit is located within the Rangal Coal Measures of the Blackwater Group, and is located on the eastern edge of the Bowen Basin, adjacent to the Dawson tectonic Zone. ▪ The Yarrebee deposit is located between the Yarrabee fault on the east and the Jellinbah fault on the west, both faults being thrusts and up-thrown to the east. ▪ The Yarrabee Resource is located on an asymmetric syncline that plunges to the SSE. The western limb of the syncline is characterised by steep dips and significant crustal shortening due to over thrusting of strata. ▪ Secondary anticline and syncline structures are superimposed on the overarching syncline structure, with anticlines being subject to crustal shortening which is observed by thrust structures being located in close proximity to the axial structures of the anticlines. ▪ The Resource area is currently evaluated for open cut extraction only, because its structural complexity is currently perceived to preclude underground extraction. ▪ The deposit dimensions are approximately 15 km in length north-south, by 10 km in width west-east. ▪ Yarrabee product coal is a well-established, low volatile PCI coal brand.
Drillhole Information	▪ *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* – *easting and northing of the drillhole collar* – *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* – *dip and azimuth of the hole* – *down hole length and interception depth* – *hole length.* ▪ *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the*	▪ All borehole data is stored within the Yarrabee Geobank database. ▪ The database contains greater than 10,388 boreholes, of which 1,118 are cored holes of various diameters. ▪ A total of 4,575 boreholes are located in the mined out areas at Yarrabee. ▪ Mr. Stuart Whyte opines that approximately 90% of the cored holes in the database meet the requirements of the Yancoal core logging procedures. ▪ The majority of boreholes in the Resource area at Yarrabee is modern data that was acquired post-2007. ▪ DOM 6 and DOM 2S contain a high percentage of historic data, but it appears to match the post 2007 data closely and has been retained.

Criteria	JORC Code explanation	Commentary
	report, the Competent Person should clearly explain why this is the case.	▪ The YES area contains approximately 200 historic boreholes that also match the post-2007 data closely.
Data aggregation methods	▪ *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* ▪ *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* ▪ *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	▪ Ply samples are combined after raw coal analysis to create composites (for washability and product coal analyses) that represent the mineable seam working sections. ▪ Individual samples have been weighted by thickness and density (mass weighting). Laboratory determined air dried ARD has been used for the density weighting. Where no ARD data is available and ash data is available then an air dried ash to ARD regression has been used to assign individual sample ARDs prior to weighting. ▪ There are no metal equivalents used to report the Coal Resources. This is not a standard reporting practice for Coal Resources.
Relationship between mineralisation widths and intercept lengths	▪ *These relationships are particularly important in the reporting of Exploration Results.* ▪ *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* ▪ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	▪ All boreholes at Yarrabee are planned as vertical. However due to the bed dips the holes tend to deviate 'up-dip' so that with sufficient depth the hole is perpendicular to the seam. ▪ Down-hole deviation data is used to model the bore holes which provides a higher degree of certainty to the location of the coal seams in the boreholes.
Diagrams	▪ *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	▪ All relevant figures depicting information considered material to the Coal Resources reported are contained within the JORC report associated with this Table 1.
Balanced reporting	▪ *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	▪ Yancoal Australia has not specifically released exploration results for the Yarrabee coal Resource.
Other substantive exploration data	▪ *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	▪ Blast holes are used for short term exploration within the pits. The blast holes are used for the Resource model if they are geophysically logged and collars are surveyed. ▪ A magnetic survey was performed by Yarrabee in the third quarter of 2014, primarily in the Wilpeena area, and not the Yarrabee mine area. ▪ The intent of the magnetic survey was to locate faults, (in particular faults where coal seams were likely to be up-thrown) from the signatures generated by magnetic fluids on the fault planes. The results of the work were inconclusive, and did not achieve a positive outcome.
Further work	▪ *The nature and scale of planned further work (eg tests*	▪ Sufficient work has been completed to establish seam continuity in the planned LOM area.

Criteria	JORC Code explanation	Commentary
	for lateral extensions or depth extensions or large-scale step-out drilling). ▪ *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	▪ Pre-production drilling is completed to maintain a three years gap in advance of mine production. ▪ Pre-production work has not been performed since 2014 when this work had been completed to cater for doubling of production to 6 Mtpa during the last boom period. Production was never increased, and as a consequence pre-production drilling is well in advance of mining requirements, and is currently being consumed.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in Section 1, and where relevant in Section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	▪ *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* ▪ *Data validation procedures used.*	▪ Since 2008, data has been stored in Geobank software. Geobank is the master database, all required modifications are made in Geobank prior to being uploaded via ODBC to Minex for modelling. ▪ The Geobank database contains the following data types: – collar survey; – lithology; – geophysics; and – coal quality data. ▪ Core and chip sample photographs are stored separately on a server. ▪ Exploration data is entered into Geobank in the field using tablet computers. Geobank contains validation and other business rules to ensure only acceptable codes are entered. ▪ Coal quality data is loaded directly into Geobank from laboratory excel spreadsheets based on the template containing the requests for analysis. ▪ Some of the business rules contained in Geobank for validation of data include: – planned borehole coordinates are within 20m of the actual as drilled collar coordinates; – the borehole total depth matches the lithology depth and the drilled depth; – the lithology data uses the correct codes; – there are no negative thicknesses; and – plies are constrained by the parent seam roof and floor constraints. ▪ Coal quality data is validated within Geobank, according to a set of upper and lower data limits for each parameter. Other rules include: – proximate data must add to 100%;

Criteria	JORC Code explanation	Commentary
		– acceptable ranges; and – the sum of density fractions must sum to the raw mass. ▪ There is a three step process for data validation. ▪ The original data recorded by the geologist and the original files supplied by the laboratory are retained as a raw file and backed up. Subsequent upgrades to geological data in Geobank are made in the copies of the original data. ▪ The lithology data is corrected to geophysics and flagged as corrected in Geobank. ▪ The data is reviewed by a Senior geologist and flagged as finalised. ▪ The data uploaded into the database proper upon sign off by the Senior geologist. ▪ The boreholes are checked by the Resource geologist during the modelling process.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ Mr. Michael Johnson (Competent Person) visited the Yarrabee Mine in May 2018 to investigate the geology of the area, and to assess the mining methodology, coal preparation characteristics and infrastructure of the operation. ▪ Mr. Johnson completed an initial written report and with site photographs. ▪ Having visited the site, the Competent Person is familiar with the Yarrabee Resource and the in the Rangal Coal Measures after working at Newlands Southern Underground and, Newlands Northern, and Greater "NCA" Project (Newlands, Collinsville and Abbot Point) at an operational basis and various stages of Order of Magnitude, Preliminary Feasibility and Feasibility Study. ▪ The Competent person has spent time in discussion with Mr. Stuart Whyte who is the Yancoal Competent Person for the Yarrabee Resource for additional understanding of the Resource, and with several employees at the mine in the Geology Department.
Geological interpretation	▪ *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* ▪ *Nature of the data used and of any assumptions made.* ▪ *The effect, if any, of alternative interpretations on Mineral Resource estimation.* ▪ *The use of geology in guiding and controlling Mineral Resource estimation.* ▪ *The factors affecting continuity both of grade and geology.*	▪ Detailed coal ply logging is completed by geological logging of open and fully cored holes supported by geophysical log data. ▪ Coal seam and ply correlation are relatively simple where drill spacing is adequate and are sufficient to establish the structural thickening of seams, and structural dislocation due to faulting. ▪ The adequate borehole spacing at Yarrabee ranges from 20 m to 125 m depending on the structural complexity of any given Resource area. ▪ The coal seams of the Rangal Coal Measures at Yarrabee, namely in descending stratigraphic order: – Cancer; – Aries; – Castor Upper;

Criteria	JORC Code explanation	Commentary
		– Castor Lower; – Pollux; – Orion; and – Pisces. ▪ All coal seams have unique geophysical signatures that enables seam correlations to be made consistently and confidently. ▪ The Pisces seam is underlain by the Yarrabee Tuff which is a Basin wide marker interval and can be used to provide stratigraphic assurance to the seam picks. ▪ Other markers used to assist with seam identification at Yarrabee include; – the carbonaceous rider band that is present above the Aries seam; – typical seam thickness and geophysical signatures of the seams; – interburden thickness characteristics; – gamma response of the seam intervals; – the medial stone band that is present in the Pollux seam, (which is the same as the medial stone band in the Elphinstone seam / Leichardt seam in the northern parts of the Bowen Basin); – the high ash Pollux floor plies; and – the high phosphorus Pollux floor plies.
Dimensions	▪ *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	▪ Several large thrust faults exceeding 100 m vertical displacement cause discontinuity to the extent of the Yarrabee deposit. As a result, five disconnected domains are modelled separately. The combined Resource area is approximately 13 km long and 8 km wide and approximately 200 m maximum depth. Although depth of Resources is generally derived by economics.
Estimation and modelling techniques	▪ *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* ▪ *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* ▪ *The assumptions made regarding recovery of by-products.* ▪ *Estimation of deleterious elements or other non-grade*	▪ Modelling was undertaken using Geovia's Minex software (version 6.3). ▪ Four models were created for each of the disconnected Resource domains. ▪ The four model areas each have different structural complexities, although the structural complexity is greatest on the western limb of the syncline and in the northern nodal part of the syncline. ▪ Structure models were created at 10 m mesh size, and coal quality modelling created with a 50 m mesh size. The mesh sizes were selected to achieve the most representative models. ▪ Faults are modelled as vertical faults. This process is considered acceptable due to the fact that high coal losses occur during mining process in the vicinity of faults, and any repeat seams have relatively low coal recovery. Seam overlap on large faults has been modelled where the repeated seam is correlatable between multiple holes.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>variables of economic significance (eg sulphur for acid mine drainage characterisation).
▪ In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.
▪ Any assumptions behind modelling of selective mining units.
▪ Any assumptions about correlation between variables.
▪ Description of how the geological interpretation was used to control the resource estimates.
▪ Discussion of basis for using or not using grade cutting or capping.
▪ The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</td><td>▪ Trend strings were used to control the model in complex areas of tight folding, vertical seam dip, and fault displacement.
▪ Limits to data have been applied to coal quality and seam thickness grids. This limits the model thickness and coal quality attribute ranges to the maximum and minimum values within the data set.
▪ Fault thickened cored hole seam thicknesses have not been trimmed to the average seam thickness to ensure that the entire seam quality result can be composited and used in the model. Fault thickened cored hole seam are excluded from generating structure and thickness grids. Stuart Whyte estimates that less than 5% of cored hole seam intersections are fault affected.
▪ The pilot open hole at the site of the excluded cored hole is used to control seam thickness for the repeated seam section and the non-repeated seam section in the structural model.
▪ The names and details of the four models are shown in below.
<table>
<tr><th>Mine Area</th><th>JORC Structural Resource Model Name</th><th>Date of Release</th><th>JORC Quality Model Name</th></tr>
<tr><td>Yarrabee East (YEN Pit)</td><td>EAST_PLY_CUT_DEC15</td><td>23/12/2015</td><td>EAST_PLY_QUAL_FEB17.grd</td></tr>
<tr><td>Yarrabee East (YES Pit)</td><td>EAST_CUT_DEC15</td><td>18/12/2015</td><td>QUALITY_FEB17.grd</td></tr>
<tr><td>Domain 2 (Nth)</td><td>EAST_CUT_DEC15</td><td>18/12/2015</td><td>QUALITY_FEB17.grd</td></tr>
<tr><td>Domain 2 (Sth)</td><td>Dom2Sth_Cut_2017</td><td>23/03/2017</td><td>QUALITY_FEB17.grd</td></tr>
</table></td></tr>
<tr><td>Moisture</td><td>▪ Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</td><td>▪ There are no total moisture determinations for Yarrabee in situ coal. Air dried density has been adjusted to an in situ basis using the Preston & Sanders equation using an assumed in situ moisture of 5.5%, which is commensurate with the coal rank. The selection of a total moisture estimate of 4% to 6% will not make a material difference to the Resource tonnage estimate. Therefore the Competent Person considers that further discussion about changes of the total moisture assumption of 5.5% is not relevant. The biggest levers for Resource variability are structural.</td></tr>
<tr><td>Cut-off parameters</td><td>▪ The basis of the adopted cut-off grade(s) or quality parameters applied.</td><td>▪ Minimum seam thicknesses are determined by the structural complexity of each Resource domain, and in conjunction with practical mining limitations, as well as consultation with mine planning engineers. In areas of low structural complexity, seam thickness limit are as thin as 30 cm for the Castor Upper seam in the Yarrabee east area, but nominally a 0.5 m minimum thickness is used for the other seams. No seam thickness limit is applied where seams adjoin (coalesce) with other seams.
▪ 45% raw ash is used as an upper limit for raw coal quality, but it is extremely rare for raw ash to reach this limit.
▪ Resource cut off limits also include the 20:1 vertical in situ stripping ratio to the lowest mineable coal seam.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		▪ The lowest mineable coal seam in all areas is the Pollux seam, except for the YES area which mines to the Pisces seam.
Mining factors or assumptions	▪ *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	▪ Open cut mining methods using truck and shovel / excavator are considered to be the suitable method of operation. ▪ Underground extraction methods have not been considered at this stage of evaluation due to the structural complexity of the Resource area, and the large open cut Resource that is currently available.
Metallurgical factors or assumptions	▪ *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	▪ Yarrabee has a 10 year history of wash plant performance data available with which to calibrate product yield and ash based on bore core predictions. ▪ The Yarrabee CHPP consists of industry standard separation equipment such as: – dense media cyclones; – spirals; and – froth flotation. ▪ Washability testing is performed on 100 mm diameter core to simulate the feed to the separating equipment of the CHPP. Washability testing of bore core at Yarrabee has only been a feature of exploration since 2011, and after the CHPP was constructed. Testing follows the Washability Borecore Procedure '1' Dated 1 July 2012 which includes; ▪ Coal samples are sized to three fractions: – -50 mm + 1 mm; – -1 mm + 0.125 mm; and – -0.125 mm. ▪ Float sink testing is performed on the plus 1 mm and minus 1 mm by 0.125 mm size fractions at the following separation densities: – F1.30; – F1.35; – F1.40; – F1.45; – F1.50; – F1.55; – F1.60;

Criteria	JORC Code explanation	Commentary
		– F1.65; – F1.70; – F1.80; and – F1.90. ▪ Sequential tree froth flotation is performed on the minus 0.125 mm fraction. ▪ Clean coal composites are prepared and tested for the F1.55 and S1.55 fractions which are tested for the following: – proximate analysis; – relative density; – total sulphur; – specific energy; – phosphorus; and – Hardgrove Grindability Index. ▪ The following trace elements are also determined: – arsenic; – boron; – antimony; – selenium; – cadmium; – lead; – cobalt; – chromium; – copper; – molybdenum; – nickel; – tin; – zinc; – fluorine; – mercury; and – manganese. ▪ Washability and product coal testing follows accepted industry practice for metallurgical coal. ▪ Yarrabee Mine currently produces both thermal and PCI coal products.

Criteria	JORC Code explanation	Commentary
		▪ Thermal coal can be sold as a bypass product. ▪ PCI coal requires to be beneficiated in the CHPP. ▪ Comparison of predicted and actual yield on an annualised basis at Yarrabee can be misleading because the mine is operated to maximise revenue. ▪ The choice of producing thermal or PCI products is a trade-off between revenue and decreased yield. PCI coal requires to be beneficiated which decreases the overall yield of the mine, but PCI coal generally achieves a higher price than thermal coal. ▪ The choice to produce PCI coal in preference to thermal coal is made when the price differential between PCI and thermal products exceeds the loss in product tonnage of thermal coal by beneficiating the bypass thermal coal to PCI product.
Environmental factors or assumptions	▪ *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	▪ Current operations are conducted under an approved Environmental Authority ("EA"). All Resources are within mining leases. No issues are expected that would impact the Resource estimate.
Bulk density	▪ *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* ▪ *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* ▪ *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	▪ The Yarrabee Mine has been in operation since 1982. The density of the coal and its distribution within the seams is well known. ▪ The in situ density is estimated using laboratory air dried relative density and adjusted to in situ density using the Preston & Sanders method using the assumed in situ moisture of 5.5%. ▪ The Reserving process uses reconciled production numbers to assign coal recovery parameters.
Classification	▪ *The basis for the classification of the Mineral Resources into varying confidence categories.* ▪ *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity*	▪ The classification of the Coal Resources into varying confidence categories is based on a standardised process of utilising points of observation (PoO) according to their reliability. The PoOs are used to categorise quantity and quality continuity (or both) or support continuity.

Criteria	JORC Code explanation	Commentary
	and distribution of the data). ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.*	▪ Resource classification is based on the Competent Person's confidence of the seam continuity and coal quality variability within drillholes. ▪ Seam continuity is the key parameter in structurally complex deposits, which drives the drillhole spacing as well as the Resource classification made by the Competent Person. ▪ The overarching requirement for the Competent Person is that seam continuity can be demonstrated. ▪ A Quantity PoO has the following attributes: – open or cored hole; – seam interval geophysically logged, or Where geophysical data is missing for a seam(s), it is up to the Competent Person's discretion to determine if the seam level and thickness is consistent with nearest neighbour boreholes; – downhole survey data; and – reliable collar survey. ▪ A Quality PoO has the following attributes: – cored hole; – linear core recovery greater than 95%; – reliable collar survey; – cored hole in which 100% of the seam interval has been cored; – seam interval geophysically logged; – if no geophysics log data is available it is up to the Competent Person's discretion to determine if the seam level and thickness is consistent with nearest neighbour boreholes; – raw coal ash (can be used as a proxy for relative density and yield); and – phosphorus and fluorine are no longer required in the PoO definition because these restrictions have been relaxed in the markets that Yarrabee coal is sold in. ▪ Support Data for PoOs can include: – in pit mapping data for faults and dykes; and – seam floor or roof survey data. ▪ The radii of influence for PoOs were determined by consideration of the following for each coal ply: – seam continuity; – variability of seam thickness; – variability of interburden thickness; – structural variability;

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
– variability of coal quality; and
– review of the variability of the geology between boreholes and the reliability of borehole data.
▪ The nominal PoO spacing and radii of influence are shown in table below:
<table>
<tr><td rowspan="2">Measured Resource</td><td>Structure drill hole grid spacing</td><td>200m</td><td>Distance Radius</td><td>150m</td></tr>
<tr><td>Coal quality drill hole grid spacing</td><td>400m</td><td>Distance Radius</td><td>250m</td></tr>
<tr><td rowspan="2">Indicated Resource</td><td>Structure drill hole grid spacing</td><td>400m</td><td>Distance Radius</td><td>250m</td></tr>
<tr><td>Coal quality drill hole grid spacing</td><td>800m</td><td>Distance Radius</td><td>500m</td></tr>
<tr><td rowspan="2">Inferred Resource</td><td>Structure drill hole grid spacing</td><td>800m</td><td>Distance Radius</td><td>500m</td></tr>
<tr><td>Coal quality drill hole grid spacing</td><td>1,000m</td><td>Distance Radius</td><td>1,000m</td></tr>
</table>
▪ The Competent Person is satisfied that the stated Coal Resource classification reflects the geological controls interpreted and the estimation constraints of the deposits.
</td></tr>
<tr><td>Audits or reviews</td><td>▪ The results of any audits or reviews of Mineral Resource estimates.</td><td>▪ No external audits have been conducted.</td></tr>
<tr><td>Discussion of relative accuracy/ confidence</td><td>▪ Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.
▪ The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.
▪ These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</td><td>▪ The Yancoal Competent Person has been conducting the Resource modelling at Yarrabee Coal Mine since 2007.
▪ Due to the highly variable nature of the deposit due to faulting, this Competent Person considers that geostatistics is not an appropriate tool to assess deposit variability.
▪ The Yarrabee area has been modelled as a series of domains based on the Competent Person's opinion of the structural complexity within the Yarrabee mine area.
▪ The complexity of the Yarrabee Resource can change significantly over short distances the concept of borehole spacing for PoOs is used as a guide only.
▪ Annual reconciliations show ± 3% variance between planned mine recovery and model tonnage for the past 5 years. The target accuracy of Measured Resources is considered as ±10 % over annual periods.
▪ To maintain consistency when converting Resources to reserves, the same modelling methodology has been used since 2007.</td></tr>
</table>

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Section 4 Estimation and Reporting of Ore Reserves

The completed Table 1, Sections 4 is in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person, Mr Doug Sillar on behalf of RPM.

(Criteria listed in Section 1, and where relevant in Sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	▪ *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* ▪ *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	▪ The Coal Resource estimate used as the basis for this Coal Reserves Statement is described as part of this statement. The Resource estimate has been prepared by Mr. Michael Johnson. The Competent Person, Mr. Johnson, has sufficient expertise that is relevant to the style of mineralisation and type of deposit and activity to qualify as a Competent Person as specified under the JORC Code and is a member of the Australian Institute of Mining and Metallurgy and a member of the Australian Institute for Geoscientists. ▪ The Resources Statement was compiled in accordance with The JORC Code 2012 Edition. ▪ The Coal Resources reported are inclusive of the Coal Reserves. ▪ The same geological model has been used for the estimation of Resources and Reserves.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ A site visit to the Yarrabee Mine was undertaken by representatives of RPM in April 2018. The Reserves Competent Person was unable to attend but interviewed the representative following the visit. The outcome of this visit was observation of the Project area to better understand location, environmental, social, geological setting, groundwater and existing infrastructure consideration.
Study status	▪ *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* ▪ *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	▪ Yarrabee is an operating mine consisting of operating pits including DOM 2 north and YEN and planned pits YES, DOM2 South and DOM 6. ▪ Yancoal completed a Life of Mine Plan in 2017. Yancoal have undertaken ROM coal reconciliation studies and the results of this have been reflected in the LOM plan Modifying Factors. ▪ The level of detail in the LOM plan is sufficient to meet requirements of JORC. The costs and modifying factors are based on site performance and reconciliations.
Cut-off parameters	▪ *The basis of the cut-off grade(s) or quality parameters applied.*	▪ A minimum mining thickness of 0.5 m is applied to all seams at Yarrabee with the exception of the Castor Upper which is recovered to 0.3 m in flat lying areas of the deposit. ▪ A raw ash cut-off of 45% is applied to Resources. No further ash cut-off is applied to Reserves.
Mining factors or assumptions	▪ *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).*	▪ A combination of Pit Optimisation, pit design and LOM planning have been used as the basis of converting Coal Resources to Coal Reserves. RPM estimated a break even strip ratio and compared against each of the Company pit shells to confirm pit limits.

Criteria	JORC Code explanation	Commentary
	▪ *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* ▪ *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* ▪ *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* ▪ *The mining dilution factors used.* ▪ *The mining recovery factors used.* ▪ *Any minimum mining widths used.* ▪ *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* ▪ *The infrastructure requirements of the selected mining methods.*	▪ The mining method at Yarrabee open cut is conventional truck and excavator mining. The operating method is well proven and suitable for the complex nature of the deposit. ▪ Pit slope designs are based on an overall slope angle of 40 degrees. This is as per current practice in operations at the site. ▪ The following mining factors are based on reconciliations of production at the Yarrabee mine: – Minimum coal mining thickness of 0.5 m and 0.3 for Castor Upper seam. – ROM recovery is based on reconciliation data which indicates a recovery of 100% applies to all seams except the Aries seam whose coal recovery is set at 87% as this seam is through seam blasted and suffers higher losses as a result. – Preston & Sanders formula applied to adjust the coal RD to an in situ moisture basis of 5.5%. – Dilution for seams that are washed is based on seam dip and ranges from 3% to 9%. Structurally complex areas of the pit have a dilution multiplier which increases the assumed dilution. The dilution is assumed to have a density of 2.0 t/m3 and ash of 85%. – Dilution for bypass coal is also based on seam dip and ranges from 3% to 9%. Dilution multipliers are included in structurally complex areas. The dilution is assumed to be made up of higher ash "wash coal" and therefore has a density of 1.6 t/m3 and ash of 30%. – In situ, ROM and Product moisture assumed to be 5.5%. ▪ Inferred Resources are not included in the estimate of Coal Reserves. Inferred Resources are included in the Life of Mine. ▪ All necessary infrastructure is in place and operational. Existing haul roads will need to be extended as the mine advances.
Metallurgical factors or assumptions	▪ *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* ▪ *Whether the metallurgical process is well-tested technology or novel in nature.* ▪ *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* ▪ *Any assumptions or allowances made for deleterious elements.* ▪ *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole.*	▪ Product coal at Yarrabee is produced from run of mine bypass product coal and washed product coal. ▪ Yarrabee operates a coal handling and preparation plant based on industry standard dense media cyclones, spirals and froth floatation. This plant is operated on a campaign basis with feed stockpiles built to a target ash from usually one or two consistent seams. Washing is then batched for each ROM wash coal stockpile. ▪ Where ROM coal meets marketable product specifications it is crushed and sent to the train loadout. This is referred to as bypass coal. ▪ Blending of coal from these two processes produce's PCI and thermal coal products. ▪ Because of the campaign washing, wash plant yield is correlated with ROM ash on a seam basis. This correlation allows prediction of actual CHPP yields for each seam and ply from each pit. This method has been used for the estimation of Marketable Reserves.

Criteria	JORC Code explanation	Commentary
	▪ *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	▪ For all new seams not currently mined at Yarrabee, laboratory washability data is used to determine product yield and specifications. ▪ Washed product moisture is based on shipping data collected at the port. ▪ The operational plant data supersedes bulk scale test work. ▪ The Yarrabee deposit contains areas / seams with high fluorine and phosphorous content. This coal is currently sold as a thermal coal product.
Environmental	▪ *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	▪ All necessary approvals are in place for all mining areas at Yarrabee. ▪ Rejects will be managed on site as per current approvals. ▪ Water management will be managed on site as per current approvals. ▪ Waste residues will be stored in appropriate facilities and disposed of, or treated, in accordance with environmental approvals. ▪ Waste water will be stored in appropriate facilities and disposed of, or treated for recycling, in accordance with environmental approvals.
Infrastructure	▪ *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	▪ All the necessary infrastructure is in place and operational for the current operation and is it suitable for the current and future production projections. ▪ Some existing haul roads will be extended as the mine advances ▪ Water supply through rainwater, potable water delivery and pit dewatering is planned.
Costs	▪ *The derivation of, or assumptions made, regarding projected capital costs in the study.* ▪ *The methodology used to estimate operating costs.* ▪ *Allowances made for the content of deleterious elements.* ▪ *The source of exchange rates used in the study.* ▪ *Derivation of transportation charges.* ▪ *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* ▪ *The allowances made for royalties payable, both Government and private.*	▪ All major infrastructure is in place. Capital forecasts have been included which represent the growth and sustaining requirements for the completion of the LOM plan. ▪ All operating costs are based on LOM planning estimates from Yancoal and have been reviewed by RPM. ▪ Current long-term exchange rate assumptions were provided by Yancoal. ▪ Transport charges based on actual contracted prices taking into account existing Take or Pay arrangements. ▪ QLD state government royalties are included in the estimate. ▪ RPM reviewed all costs and they are considered reasonable.
Revenue factors	▪ *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* ▪ *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and*	▪ Long term product coal pricing assumptions have been provided by Yancoal Marketing and is based on independent third party research and reporting. ▪ The revenue factors are considered reasonable for the purposes of estimating Reserves.

Criteria	JORC Code explanation	Commentary
	co-products.	
Market assessment	▪ *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* ▪ *A customer and competitor analysis along with the identification of likely market windows for the product.* ▪ *Price and volume forecasts and the basis for these forecasts.* ▪ *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	▪ A Marketing Study has not been reviewed however markets are well established for the mine's coal products. The projects typically produce up to three main products: – Low Volatile PCI Coal with; Ash 9.5%, Sulphur 0.65%, Phosphorus 0.1%, referred in this report as "YP1". – Low Volatile PCI Coal with; Ash 12.0%, Sulphur 0.85%, Phosphorus 0.08% - >0.1%, referred in this report as "YP4". – Low Volatile Anthracite Coal with; Ash >20.0%, Sulphur 0.85%, Phosphorus >0.08%, known as "YP5". ▪ Based upon these products and specifications, RPM anticipates no foreseeable issues in demand for these products.
Economic	▪ *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* ▪ *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	▪ The inputs to the economic analysis are derived capital and operating cost estimates outlined in the "Costs" section of Table 1. The source of the inputs is real and the confidence satisfactory. The economic modelling is in real terms and a range of discount rates have been used in assessing NPV. ▪ The NPV results for the Project produced from economic modelling generated positive and acceptable NPV's for all discount rates and the Project is considered economic from an NPV stand-point. ▪ Sensitivity analysis has been completed on the Project over a range of variable. The Project is most sensitive to changes in exchange rate, revenue and operating costs.
Social	▪ *The status of agreements with key stakeholders and matters leading to social licence to operate.*	▪ The relationship with adjacent landowners is sound and the Project has the necessary key stakeholder agreements in place. ▪ There are no known issues in relation to cultural heritage or native title that would be considered material risks to the project based on the information available at the time of the assessment. ▪ Yarrabee owns all land in the current proposed mining areas.
Other	▪ *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* ▪ *Any identified material naturally occurring risks.* ▪ *The status of material legal agreements and marketing arrangements.* ▪ *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect*	▪ The topographical area of Yarrabee is flat lying and subject to flooding in cyclonic conditions. Appropriate flood mitigation is in place or planned to cover a 1 in 1000 year event. Levees and drains are existing to protect active pit areas. ▪ All mining projects operate in an environment of geological uncertainty. RPM is not aware of any other potential factors, legal, marketing or otherwise, that could affect the operation's viability.

Criteria	JORC Code explanation	Commentary
	that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	▪ *The basis for the classification of the Ore Reserves into varying confidence categories.* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.* ▪ *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	▪ Classification of Coal Reserves has been derived by considering the Measured and Indicated Resources and the level of mine planning. – For all pits with Reserves at Yarrabee, Measured Coal Resources are classified as Proved Coal Reserves and Indicated Resources classified as Probable Coal Reserves, as the pits are currently operating and the level of mine planning is considered adequate to support this level of certainty in the Reserves estimate. ▪ The Inferred Coal Resources have been excluded from the Reserve estimates. ▪ The result reflects the Competent Person's view of the deposit.
Audits or reviews	▪ *The results of any audits or reviews of Ore Reserve estimates.*	▪ Internal peer review of the Reserves Report has been completed.
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* ▪ *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ The basis of the estimate are actual operating costs and LOM planning. ▪ CHPP and infrastructure are in place and operating. ▪ Analysis of the coal quality has been undertaken by independent laboratories working under international standards of method and accuracy. Coal products from both MTW and HVO is produced from blended washed coal products. ▪ The level of accuracy will continue to be dependent on the ongoing update of the geological model and monitoring of the Modifying Factors affecting the coal estimate. ▪ Geotechnical studies have been completed by a consultant and reviewed biannually for all active pits. ▪ Yarrabee has an ongoing reconciliation process aimed at testing the appropriateness of the assumed Modifying Factors for the mine. ▪ The Reserves have been adjusted through application of the Modifying Factors to reflect the slope and faulting inherent in the deposit. The deposit is drilled in detail and additional short term drilling is done ahead of mining as the pits advance. ▪ Minor additional faulting can be expected during mining. This may locally increase the dilution however it will not adversely affect the Reserves as the faulted material is typically recovered with the additional dilution to maximize product coal recovery. ▪ There is some minor risk of flooding though site infrastructure is in place or is being constructed to protect against this.

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JORC Code Disclosure Requirements

Stratford Duralie

RPMGLOBAL

JORC Code, 2012 Edition – Table 1 report template

The completed Table 1, Sections 1, 2 & 3 are in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person Mr Brendan Stats on behalf of RPM.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* ▪ *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* ▪ *Aspects of the determination of mineralisation that are Material to the Public Report.* ▪ *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	▪ As a standard procedure all holes were geophysically logged with downhole geophysical tools. Holes not successfully logged with downhole geophysics generally had poor hole wall stability. Poor ground conditions can occur in this highly structured syncline/basin with steeply dipping coal seams. Holes without geophysical logs could not be used in the model as the data could not be validated. ▪ Holes have at least density/gamma/caliper logs run, a number of holes have sonic, verticality and/or acoustic scanner. The quality of some logs was poor, often related to the age or the company used. Weatherford, Ground Search and Coal Seam Wireline Services provided logging services. Presentation of the data varied between these logging companies and was at times poor. This made it difficult to consistently pick thin plies. During recent drilling at Duralie in 2015 - 2016, Weatherford undertook geophysical logging of approximately 20 drillholes (logging suite included density/gamma/caliper, vertically, sonic, neutron, dipmeter, acoustic scanner). ▪ Duralie – Coal core of seams at Duralie are generally sampled on a ply basis but some core was sampled on a sub ply or rarely combined ply basis. Sampling was undertaken on a correlatable ply basis to ensure that equivalent parts of seams were sampled across the deposit. For the Weismantel seam coal plies (W1-W4) were generally sampled on a ply basis (rare holes on a sub-ply basis) and stone partings (P1-P3) sampled separately or with the adjacent coal ply when very thin. The W2 ply was often sampled on a sub-ply basis due to the thickness of the ply. On the eastern limb, the Clareval seam was split and sampling was undertaken on a ply basis (2007 holes 1-5 m samples) or sub-ply basis using lithological boundaries (2009 - 2010 holes, 0.1 m - <2 m thick samples). On the western limb correlating plies in the thick coalesced Clareval seam was difficult, even with geophysical logs due to the uniform nature of the seam, so sampling was done on a sub-seam basis (2 m - 5 m thick samples). Stone partings or interbedded stone/coal sections were sampled separately where deemed thick (approximately >0.5 m). Finalisation of plies was undertaken at a later stage using geophysical logs and sometimes quality results (sulphur). ▪ Stratford and Grant & Chainey

Criteria	JORC Code explanation	Commentary
		– Coal core of seams at Stratford and Grant & Chainey are generally sampled on a ply basis but some core was sampled on a sub-ply or combined basis. Sampling was undertaken on a correlatable ply basis to ensure that equivalent parts of seams were sampled across the deposit. For older holes core was often sampled on a combined ply basis; not all of this data is now useful. If plies were sampled on a combined ply basis, the stone parting in between would be included in the sample. The Clareval Main seam at Stratford West was sampled on a sub-ply basis due to the thickness of this ply. ▪ Co-disposal – In the Co-disposal area bulk samples, in pit samples and slimes only samples have been taken. This is not 'in situ' material, but emplaced rejects. The co-disposal material is variable (consisting of varying quantities 'slimes' and 'coarse' material throughout the area, although now, largely slimes material remains).
Drilling techniques	▪ *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	▪ Duralie – Non-core structural and core drilling initially targeted the Weismantel seam with subsequent exploration targeting the more recently identified Cheerup and Clareval seams. Partially cored HMLC holes for Weismantel seam were drilled during a 1995 drilling program. Large diameter drillholes (8" core) were drilled in 2002 to obtain a bulk sample from the Weismantel seam. Approximately 20 LOX holes were drilled to define the seam sub-crop prior to mining. From 2005 onwards HQ and PQ partially cored holes were drilled to Weismantel, Cheerup and Clareval seams. – Exploration holes were drilled vertically. In the early-mid 2010's several holes were drilled inclined to provide pit/geotechnical wall information ahead of mining. In 2017, 12 blast holes were geophysically logged to assist with structural interpretation in the Clareval Bowl pit. ▪ Stratford and Grant & Chainey – Non-core structural drillholes have been drilled to depths generally ranging from 50 m - 250 m. Shallow limit of oxidation drilling (LOX) was completed to define pit low walls on now completed pit areas. Core hole drilling encompassed a number of diameter sizes: pre 2001 were 100 mm and 150 mm partially cored HMLC holes, post 2001 were HQ and PQ core size. Larger core sizes achieved better core recovery. In recent years (post 2009) core drilling has focused on PQ core size. – Holes were largely drilled vertically. The exception to this is drilling in 2014 - 2015 in the northeast of Stratford where exploration drilling in steeply dipping areas was inclined, targeting multiple intersections of seams. ▪ Co-disposal – No drillholes relate to the Co-disposal area – waste emplacement area.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	▪ *Method of recording and assessing core and chip sample recoveries and results assessed.* ▪ *Measures taken to maximise sample recovery and ensure representative nature of the samples.* ▪ *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	▪ Duralie, Stratford and Grant & Chainey – Core recovery was recorded by the field geologist at the drill rig (drilled length and core recovered), and drill depths were subsequently corrected using down-hole geophysical logs to accurately determine core loss. Varying core diameters have been used (largely HQ, PQ, and 100 mm). Pre 2001 holes appear to have better core recoveries due to >100 mm core diameters used. Post 2001 - HQ holes often suffered poor recovery. PQ holes were used post 2009 and generally achieved 90-95% core recoveries. – Coal seams in the Gloucester Basin have been subject to considerable tectonic compression which can result in poor ground conditions when drilling. Some holes with high core loss were sampled. Only those holes with coal core recovery of greater than 80% were used in reporting and gridding qualities. 80% recovery was used to maximise the data due to the large number of plies in the deposit. Core loss intervals were inserted into the quality database to ensure correct selection of data in Minex software for reporting, gridding and tonnage estimation/reporting. – The effect of core loss at Stratford Duralie is that analyses may underestimate the better qualities of the coal due to loss of the brighter parts of the sample (e.g. core loses could result in higher ash, higher density, lower CSN). ▪ Co-disposal – No drillholes relate to the Co-disposal area – waste emplacement area.
Logging	▪ *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* ▪ *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* ▪ *The total length and percentage of the relevant intersections logged.*	▪ Duralie, Stratford and Grant & Chainey – Core holes were lithologically logged, coal core brightness logged and some post 2001 holes were also logged geotechnically. Generally logging was undertaken in sufficient detail (measurement and description); however there were a number of holes drilled during approximately 2009 - 2010, of which some were very basically/poorly logged. These holes heavily relied on geophysical logs to confirm thickness and depths. – Core and non-core holes were depth corrected and correlated using downhole geophysical logs and are considered reliable points of observation. – Generally logging is qualitative (core logging to centimetric accuracy and non-core logging chip samples to metre accuracy). All core sections of drillholes were lithological logged. Most if not all non-core sections were also lithologically logged. Core photography is generally available for cored sections (largely for new holes not always available for pre 2001 holes). There are a number of holes drilled during approximately 2009 - 2010 some of which were very basically/poorly logged where coal core sections appear to have been logged on a broad lithological basis rather than detailed coal core logging. ▪ Co-disposal – No drillholes relate to the Co-disposal area – waste emplacement area.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	▪ *If core, whether cut or sawn and whether quarter, half or all core taken.* ▪ *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* ▪ *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* ▪ *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* ▪ *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* ▪ *Whether sample sizes are appropriate to the grain size of the material being sampled.*	▪ Duralie, Stratford and Grant & Chainey – No splitting or sawing of coal core took place (quarter or half sampling core is not standard in sampling of coal). – Non-core coal samples were analysed from a small number of early chip holes intersecting the Clareval seam to gain an initial understanding of basic coal quality parameters before a core rig was available to obtain standard core samples. No non-core samples were used in the database/model/Resource estimate. – For holes prior to 2001, specific sampling techniques are unknown but were sampled generally to plies, however some were on a sub-ply or combined ply basis. For post 2001 holes core of coal seams were generally sampled on a correlatable ply basis but with some combined ply samples taken on thin plies and sub-plies on very thick plies (e.g. W2, CLM). A small number of core holes were correlated at the time of sampling and some holes were re-correlated post sampling. The entire cored section of each sample was placed in the sample bag with identification tags for subsequent quality analysis. Some samples include stone partings and this would affect raw quality results. Parting plies of the Weismantel seam (P1, P2 and P3) were sampled and analysed. – No sample preparation took place outside the laboratory. Coal quality testing was undertaken at laboratories which comply with Australian Standards for sample preparation (including ACIRL laboratory at Maitland). – HQ, PQ and 100 mm core sizes are appropriate for raw coal quality testing and float/sink testing. Large diameter holes drilled prior to mining commencing at Duralie were suitable for the drop shatter/float/sink testing undertaken. The ply thickness of samples at Duralie provided adequate sample mass for testing. At Stratford and Grant & Chainey there can be thin coal intersections, and there is a potential that detailed float/sink analyses was undertaken in 2009 - 2010 holes on samples that were too thin. ▪ Co-disposal – Unsure how sampling was undertaken in the Co-disposal area. Bulk samples would provide an appropriate sample size for the material being sampled.
Quality of assay data and laboratory tests	▪ *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* ▪ *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* ▪ *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie*	▪ Varying analyses were undertaken for the drillhole series at Stratford Duralie. The tests undertaken are suitable for coking and thermal coals. ▪ Analyses were undertaken at accredited laboratories (including ACIRL Maitland and SGS laboratories). NATA accredited labs use standards, blanks, duplicates, external round robin checks and other routine checking procedures to ensure they meet the required accuracy for each test. ▪ Duralie – For the Weismantel seam drillholes prior to 2002, raw coal and float/sink data was compiled and validated by Quality Coal Consulting (QCC) for 15 of the 18 core holes.

Criteria	JORC Code explanation	Commentary
	lack of bias) and precision have been established.	Raw coal quality data for this seam comprised raw ash, density, moisture and total sulphur (ad moisture basis). Washed data was also available from these HMLC cored holes, including float/sink data and clean coal composite analyses. Large diameter drillholes, WC202-WC205 (drilled in 2002) provided a bulk sample of the Weismantel seam for detailed laboratory analysis (raw and washed). In 2005 to 2007 HQ and PQ core holes were drilled (approximately 20 drillholes from WC206C to WC225C), providing raw coal quality (including proximate, relative density and total sulphur) and float/sink data. – For the Clareval seam, preliminary exploration of non-core holes (chip samples) were analysed for relative density, proximate analyses, total sulphur and float/sink testing (at 1.35 and 1.60 density fractions). Once core data was available for this seam this data was no longer referenced. – Cheerup/Clareval seam holes pre 2009 were analysed for raw coal quality including relative density, proximate analyses and total sulphur (stone parting samples were analysed for relative density, raw ash and total sulphur only). Float/sink testing was undertaken on the samples for several density fractions between 1.30-1.60 for ash, sulphur and CSN. Further testing on composited samples was done and included proximate analyses, CSN, Giesler plastometer, sulphur, specific energy, Hardgrove index and phosphorus. Vitrinite reflectance and maceral analysis were undertaken on a few holes. PQ core holes drilled post 2009 were analysed for raw coal quality (ARD, relative density, proximate, total sulphur, CSN, specific energy, chlorine, forms of sulphur and ash analyses). Float/sink testing was undertaken on each of the samples at several density fractions (1.30-2.00) for moisture, ash, total sulphur and CSN. ▪ Stratford – There are some old core holes (including 100 mm SC core holes) with data on ARD, proximate, total sulphur, specific energy and clean coal analyses. 2007 to 2009 HQ core holes have raw analyses for relative density, proximate analyses and total sulphur. There is also float/sink data at two fraction sizes (1.35 and 1.60) for CSN, proximate analyses, HGI, total sulphur, specific energy, initial softening, fluidity, solidification, phosphorus, vitrinite reflectance and maceral analysis. 2009 to 2010 HQ and PQ core holes have raw analyses for relative density, proximate analyses and total sulphur. There is also float/sink data on several density fractions for moisture, ash and total sulphur (CSN also for F1.35 fraction). – Bulk ROM samples from seams mined in BRN and Roseville pits are available (testing includes proximate, total sulphur and float/sink for ash and sulphur). ▪ Grant & Chainey – 1980s core holes provided data on relative density, proximate analyses, total sulphur, CSN and specific energy. Also float/sink data at several density fractions providing information on moisture, ash and volatile matter. Ash analyses, HGI, ash fusion temperatures, maceral analyses and reflectance data were also available.

Criteria	JORC Code explanation	Commentary
		– Post 2005 HQ and PQ core holes (SS series holes and GC series holes up to GC029C) provided data on relative density, proximate analyses and total sulphur. Float/sink data was reported on up to several density fractions providing information on CSN, ash, sulphur, some proximate and some energy. Composite samples provided data on yield, proximate analysis, CSN, Giesler plastometer and phosphorus. Some maceral and reflectance data was also available. – Post 2010 (GC121C onwards) apparent relative density was analysed in addition to relative density, proximate analyses and total sulphur. Drop shatter wet tumble was undertaken on these PQ holes followed by washability at five density fractions, providing CSN, ash and sulphur information ▪ Co-disposal area – Analysis includes proximate analysis, total sulphur, specific energy, ultimates, chlorine, phosphorous, CSN, forms of sulphur, Geisler plastometer and ash analyses. Maceral and vitrinite reflectance data were also available. These analyses are appropriate for material to be included into coking and thermal blends.
Verification of sampling and assaying	▪ *The verification of significant intersections by either independent or alternative company personnel.* ▪ *The use of twinned holes.* ▪ *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* ▪ *Discuss any adjustment to assay data.*	▪ Duralie, Stratford and Grant & Chainey – Significant intersections and/or anomalous geological or coal quality values are checked as part of the data compilation process (e.g. thick or thin intersections checked to geophysical logs/logged core sections, high or low quality values checked to original reports). – Twinned holes are not standard in the coal industry. Where there are two closely spaced core holes it is likely the latter hole was drilled for core recovery purposes not for verification of results. – Raw coal quality data were compiled from original laboratory reports into a single spread sheet. Relevant data was standardised to a constant moisture basis of 2.5% (Stratford West, Avon North, Grant & Chainey) or 1.5% (Duralie and Stratford East). An ash versus density regression was developed (using RD at an estimated 6% in situ moisture) to enable generation of in situ density from raw ash data. An ash versus energy regression was also developed to generate energy data from all samples with raw ash data. – For Stratford and Grant & Chainey it was difficult to obtain original reports for pre-2001 holes and only a few are used in the data set. Sampling strategies pre-2001 often combined plies and inclusion of this data was difficult. For Weismantel seam core holes prior to 2001, raw coal and float/sink data was compiled and validated by Quality Coal Consulting (QCC). ▪ Co-disposal area – There is coal quality data for the co-disposal material available in laboratory reports. No adjustments have been made to the quality results of the co-disposal material.

Criteria	JORC Code explanation	Commentary
Location of data points	▪ *Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* ▪ *Specification of the grid system used.* ▪ *Quality and adequacy of topographic control.*	▪ The original data was in the ISG coordinate system (Zone 56/1) and was converted to GDA94 (Zone 56) in early 2004. Since then models were created in GDA94. ▪ Duralie – Good topographic control from digital terrain models (DTM), obtained pre 2000 and 2006. Drillhole collars were surveyed and are generally within 1 m of the DTMs (of approximately 900 holes approximately 100 holes are 1 m - 2 m from the DTM, 20 are 2 m - 5 m from the DTM and drillholes 1017R and 1165R are 23 m and 35 m respectively from the DTM). These two holes are located towards the centre of the syncline where Inferred Resources are estimated; the collar has not been altered as resurvey should be undertaken. Approximately 20 holes were drilled in 2015 - 2016 and 12 blast holes in 2017 in the mined Clareval Bowl area. These holes will show a discrepancy to the original topography and are acceptable. – Mine seam pick up data (up to April 2014) and pit survey (up to September 2017) is supplied by site surveyors and is of a good standard. ▪ Stratford and Grant & Chainey – Although mining has occurred at Stratford, the 'original' topographic surface supplied by Stratford Duralie was used as the topographic surface for the models at Stratford and Grant & Chainey. This surface provides good original topographic control (in a small area is not quite the original surface). For Resource and Reserve studies the current mined surface would be required. In Stratford West the mined surface for all pits (Roseville and Roseville Extension/West pits, Bowens Road West, Stratford Main pit and BRN pit) to the end of June 2014 was provided by mine site surveyors and is considered good quality data. This pit data was blended with the base of weathering grid and the resultant surface was used to limit seam Resources at Stratford. No mining has occurred at Avon North, Stratford East or Grant & Chainey. For Stratford East the original topographic surface was merged with the 2014 DTM where the original topographic surface did not extend far enough east (a 2014 DTM was available for the whole area, but was largely not used at this stage due to some data discrepancies). Original topographic surface was a combination of DTMs produced from aerial photography flown pre-2001, 2004, 2006 and 2014 (the majority of the area is covered by the 2006 DTM). – Drillhole collars were surveyed and generally agree with the DTM. Drillhole survey data are generally within <1 m - 2 m of the original DTM. In some cases collar RL's differed by 2 m - 5 m and in rare cases 20 m from the DTM (two holes were adjusted to comply with the DTM as this better fitted the surrounding structure). There are discrepancies between old drillhole collars and the original surface in the Co-disposal area where reject material was emplaced and in the north of Grant & Chainey due to mine rehabilitation. There are also discrepancies where holes were drilled in partly mined out areas (including some 8000 series drillholes drilled in BRN pit). These differences are acceptable.

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		▪ Co-disposal area – Original topographic DTM is of good quality. – End of June 2012 surface was created from end June 2012 aerial photography with historical pits and voids to end September 2012 cut in (the end September survey of pits did not cover Cells 1-3). I.e. the upper surface for the Co-disposal area is dated end June 2012.
Data spacing and distribution	▪ *Data spacing for reporting of Exploration Results.* ▪ *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* ▪ *Whether sample compositing has been applied.*	▪ Duralie, Stratford and Grant & Chainey – No JORC exploration results presented in this report. – Due to the orientation of the structure (north-south trending syncline), drillholes are located on generally east-west drill lines (often 200 m - 400 m apart). Drillhole spacing at Stratford Duralie is probably closer than most coal deposits elsewhere in Australia due to the complex geology. Due to the steep dip of strata, apparent seam thickness, faulting, folding, seam splitting and ply variability in places, holes along each drill line can be spaced quite closely (often in the range of 20 m - 300 m). The distance between data points are further apart for Inferred Resources but not excessively. Resource polygon shapes tend to be narrow and elongate (north-south) reflecting these issues. Coal quality data for a particular seam is usually available on a linear spacing (generally along strike where the seam is reasonably shallow). – The drillhole spacing provided adequate confidence for the Resource category in ply correlation, structural interpretation between holes and sufficient quality (sometimes supported by mined data or geophysical log trends). – Core holes may not provide data on all plies in an intersected/sampled seam, due to poor core recovery or lateral and/or vertical variability in a seam. Drillhole spacing for core data on particular plies can be sparse, but the overall seam information provides confidence in coal quality continuity (more relevant for Stratford and Grant & Chainey). – Any sample compositing was only undertaken on depth corrected and correlated data, in Minex software on a length by density weighting. ▪ Co-disposal area – No drillhole data relates to this material – waste emplacement area. Sampling has been undertaken on an as needs basis.
Orientation of data in relation to geological structure	▪ *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* ▪ *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	▪ Duralie, Stratford and Grant & Chainey – Most holes are drilled vertically (except several inclined holes in the Clareval Bowl pit drilled for pit wall information and holes drilled in Stratford North in 2014 - 2015 in areas where the seams potentially dip very steeply and little was known of the structure/geology). – Although the large majority of holes were drilled vertically they tend to 'walk' up dip in moderately to steeply dipping strata, especially with increased depth. Where digital borehole deviation geophysical logs have been available (generally for more recent

Criteria	JORC Code explanation	Commentary
		holes), drillhole vertically data has been loaded and incorporated into the model to better control seam floor. The combination of vertically drilled deviated and non-deviated holes has caused some 'kinking' in the structural model, however it has been observed to be more accurate to incorporate as much deviation data as possible. – The closely spaced holes over much of the area are adequate to interpret the main (and at times minor) structural features of east-west trending normal faults and north-south trending reverse faults and folds (although even with closely spaced holes the Clareval Bowl pit structural interpretation is difficult due to the complexity of the structure). Fault angles are moderate to steep (although may become shallower through the seam in the Clareval Bowl pit). – The orientation of drilling has not introduced a structural bias due to the closely spaced drillholes and understanding of the regional geology. ▪ Co-disposal area – N/A – waste emplacement area.
Sample security	▪ *The measures taken to ensure sample security.*	▪ Duralie, Stratford and Grant & Chainey – Security measures of samples prior to 1999 are unknown, however are expected to reasonably follow standard industry practices. – Core trays are generally taken to the core shed as soon as possible (usually at the end of the day) after measurement and lithological logging of the core at the drill rig. The core shed is a secure location at the mine site. Core is sampled (after geophysical logging/correction/ correlation/core photography), bagged and tagged. Usually a site geologist transports the samples to the laboratory. – There have been occasions when the time frame between coring and sampling was over a few months and the core was not refrigerated. The coal seams at Duralie, Grant & Chainey and Stratford appear to hold fluidity very well and may not be adversely affected by a lag in time between coring and sampling of a few months. ▪ Co-disposal area – Security measures for the Co-disposal area samples are not known.
Audits or reviews	▪ *The results of any audits or reviews of sampling techniques and data.*	▪ Duralie – Validation of seam data for the Weismantel seam was undertaken in 1996/97. A comprehensive review of seam correlation, ply nomenclature and compiled raw coal quality data was carried in early 2012 for the Weismantel-Clareval seams. Structural reviews and updates were undertaken in 2001, 2003, 2014 and 2016 by the previous Competent Person (MBGS). ▪ Stratford – Detailed reviews of seam correlation, seam depths and checks made of coal quality sample depth information: Bowen Road North - 2002, Avon North - 2003, Roseville West – 2004, 2008, 2011, Stratford East - 2012, Wenham Cox Road – 2011, Stratford

Criteria	JORC Code explanation	Commentary
		North/Avon North – 2015 - 2016 (seam correlation and seam depths only) by the previous Competent Person (MBGS). ▪ Grant & Chainey – A detailed review of the data and seam re-correlation was undertaken by MBGS in 2012. Only validated data was included in the database/model. This work resulted in a more consistent and structurally robust model later in 2012.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	▪ *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* ▪ *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	▪ All leases are controlled/owned by Yancoal (100%). ▪ A311, A315 and EL6904 – lease renewal has been lodged or in the process of being lodged. ▪ Duralie Mine – ML1427 – granted 6-Apr-1998 expiry date 5-Apr-2019 (CIM Duralie Pty Ltd, 762.5Ha) – ML1646 – granted 4-Jan-2011 expiry date 4-Jan-2032 (CIM Duralie Pty Ltd, renewed 4-Jan-2011, 180.3Ha) – AUTH315 – granted 27-Dec-1982 expiry date 28-Nov-2017 (Gloucester Coal Ltd, renewed 28-Nov-2012, 7430Ha) ▪ Stratford Mine – ML1360 - granted 21-Dec-1994 expires 21 Dec 2036 (CIM Stratford Pty Ltd, renewed 16-Sep-2015, 754.7 Ha) – ML1409 - granted 07-Jan-1997 expires 06-Jan-2018 (CIM Stratford Pty Ltd, renewed 07-Jan-1997, 87.32 Ha) – ML1447 - granted 01-Apr-1999 expires 31-Mar-2020 (CIM Stratford Pty Ltd, renewed 01-Apr-1999, 52.21 Ha) – ML1521 - granted 24-Sep-2002 expires 23-Sep-2023 (Gloucester Coal Ltd, renewed 24-Sep-2002, 4.5 Ha). – ML1528 - granted 20-Jan-2003 expires 19-Jan-2024 (CIM Stratford Pty Ltd, renewed 20-Jan-2003, 205.9 Ha) – ML1538 - granted 25-Jun-2003 expires 24-Jun-2024 (CIM Stratford Pty Ltd, renewed 25-Jun-2003, 1.031 Ha) – ML1577 - granted 01-Mar-2006 expires 28-Feb-2027 (Gloucester Coal Ltd, renewed 01-Mar-2006, 2.244 Ha)

Criteria	JORC Code explanation	Commentary
		– ML1733 - granted 08-Apr-2016 expires 08-Apr-2037 (CIM Stratford Pty Ltd, 84.5 Ha) – A311 - granted 17-Sep-1982 expires 28 Nov 2017 (Gloucester Coal Ltd, renewed 14-Oct-2013, 5120 Ha) – A315 - granted 27-Dec-1982 expires 28- Nov-2017 (Gloucester Coal Ltd, renewed 28-Nov-2012, 7430 Ha) – A315 – proposed MLA1 and proposed MLA2 areas – proposed MLA's part of the Stratford Extension Project, application currently not submitted, however MLA2 is expected to be submitted mid-November 2017. ▪ Grant & Chainey – ML1360 granted 21-Dec-1994 expires 21-Dec-2036 (CIM Stratford Pty Ltd, renewed 16-Sep-2015, 754.7 Ha) – Auth311 granted 17-Sep-1982 expires 28 Nov 2017 (Gloucester Coal Ltd, renewed 14-Oct-2013, 5120 Ha) – Auth315 granted 27-Dec-1982 expires 28- Nov-2017 (Gloucester Coal Ltd, renewed 28-Nov-2012, 7430 Ha) – EL6904 - granted 09-Oct-2007 expires 09-Oct-2017 (Gloucester Coal Ltd, renewed 16-Sep-2015, 880.2 Ha) is part of Grant & Chainey, but currently has minimal exploration and no Resources.
Exploration done by other parties	▪ *Acknowledgment and appraisal of exploration by other parties.*	▪ Stratford Duralie (Duralie, Stratford and Grant & Chainey) has been owned by several parties: – Noranda (1970s): Initial exploration drilling in the Gloucester Basin was completed by Noranda. – BMI Mining/Noranda (1977-1981): Undertook extensive exploration drilling programs in the Gloucester Basin concentrating on drilling Stratford (Stratford Main Pit area) and Duralie. – BMI Mining/ESSO 1981-1993): Commenced exploration drilling in Stratford North (including BRN). Completed a number of east-west and north-south 2-D seismic lines in 1982/83. – During the 1980s extensive surface mapping was undertaken by Malcom Lenox. – Excon: Unsure if any exploration was undertaken. – AGIP: Undertook no exploration. – Excel Mining (1993-1995): Drilled coal quality holes. Float/sink data in the Stratford Main Deposit was later considered unreliable. – CIM Resources (1995-2003): Mining commenced and the wash plant was upgraded. Exploration drilling was completed on target areas (such as BRN proposed pit area), but was minimal due to tight economic conditions.

Criteria	JORC Code explanation	Commentary
		– Pacific Power (1990s): Drilled nine deep stratigraphic holes to obtain data for their gas leases. – Gloucester Coal Ltd (2003-2015): Exploration drilling increased during the time of Gloucester Coal Ltd, targeting future areas in Stratford (Roseville West, Wenham Cox Road, Stratford South, Avon North/Stratford North, Clareval seam) Duralie (Weismantel seam coal quality and Clareval seam) and Grant & Chainey. 2D seismic data from the 1980s was reprocessed over Duralie - further defining the structure of the area and leading to the discovery of the Clareval seam. During 2009-2010, intense exploration drilling was undertaken with the quality of data sometimes compromised for quantity of drilling. 2D seismic undertaken in EL6904 in 2011. – AGL: completed 2D and 3D seismic surveys and airborne surveys (magnetic and radiometric) thought the Gloucester Basin. 2D survey undertaken in 2009 and 2012 and 3D survey over Stratford in 2010. Several deep stratigraphic drillholes were also undertaken by AGL throughout the basin. ▪ Gloucester Coal Ltd/CIM Stratford Pty Ltd/CIM Duralie Pty Ltd is currently owned by Yancoal Australia.
Geology	▪ *Deposit type, geological setting and style of mineralisation.*	▪ The Resource areas are located in the Permian aged, Gloucester Basin in NSW. ▪ Duralie – The deposit is contained within southern extent of the basin, where that portion of the syncline plunges to the north. There are two main seams at Duralie: Weismantel and Clareval and two minor seams: Duralie and Cheerup. The interburden between the Weismantel and Clareval seams is approximately 200 m, with the Clareval seam located near the base of the basin stratigraphy. – The plies of the Weismantel seam are reasonably consistent throughout the Duralie area. The Clareval seam is split on the eastern limb of the syncline (with splitting and thinning increasing northwards) whereas on the western limb of the syncline the Clareval seam is largely coalesced. – The deposit is characterised by steeply dipping seams on the limbs of the syncline (dips generally 40° - 70°). At the mined out nose of the syncline dips were shallower, generally 10° - 20°. For the deeper parts of the syncline in the Weismantel seam dips are shallower towards the axis of the syncline (<10° - 30°), however there is mid zone between the very steep limbs and the shallower axis area where the seam dips <30° - 40°. – Thrust faulting has been interpreted through the Duralie area. Thrust faults occur in the Weismantel seam in a north-south direction on each of the limbs of the syncline (towards seam sub-crop). In the Clareval seam, in an area at 6,428,500 N (the Clareval Bowl area) the seam is folded and faulted producing the Holmes Syncline and Cheerup Anticline. This area is intersected by several north south trending reverse faults which

Criteria	JORC Code explanation	Commentary
		have repeated the seam thickness by up to four times. Potential east-west and strike parallel faults have been indicated by seismic reinterpretation (late 2004). ▪ Stratford – This deposit is located on the eastern limb of the Gloucester Basin. The Stratford deposit contains approximately 20 coal seams which are divided into numerous plies (defined by stone partings and seam splitting). The coal seams in the Stratford Resource estimate are the Marker 7-Bowens Road seams (Stratford West), Glen View-Avon-Triple (Avon North), Cheerup-Clareval (Stratford East). Seams in the Resource estimate dip to the west between 15° - 70° with steep dips generally towards the eastern limits of the area. Seam splitting and changes in seam thickness and interburden are common. – Steeply dipping north-south trending reverse faults are found throughout the area, including several in Avon North, and a reverse faulted area under the Co-disposal area. East-west normal faults are present, including a growth fault located at the northern boundary of BRN pit (in the pit area the Bowens Road seam was approximately 10 m, north of this fault the seam is only 2 m - 3 m thick) and large normal fault with an offset in the order of 60 m at the northern limit of the completed Stratford Main pit). The mined out Stratford Main pit is located within a synclinal structure. ▪ Grant & Chainey – This deposit is largely located on the eastern limb of the basin/regional syncline. A small part of the area is located at the closure area of the seams at the centre of the syncline. There are approximately 15 coal seams in the area, of which Resources have been estimated for the Marker 3 to Parkers Road seams. Seam splitting and coalescing occurs through Grant & Chainey, especially in the Bowens Road seam. – Several east-west normal faults have been identified, ranging in offset from approximately 40 m - 150 m and are expected to be steeply dipping to vertical. In the north of Grant & Chainey reverse faults have been identified. Throughout the area several further thrust faults were identified but could not be laterally traced. Reverse faults are interpreted have vertical offsets in the order of 10 m - 50 m. Further reverse faulting is expected in Grant & Chainey. ▪ Co-disposal area – Reject material was emplaced into a topographic low area with bounding walls progressively built up as plant reject was emplaced. Capping waste material was originally emplaced over the reject material; none of the capping remains over the co-disposal material due to mining of the area. ▪ Igneous intrusions are rare in the Gloucester Basin.
Drillhole Information	▪ *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material*	▪ Duralie area is covered by approximately 900 drillholes. Approximately 20 holes and 12 blast holes were drilled in late 2015 - 2017 to obtain further information on Resource

Criteria	JORC Code explanation	Commentary
	drillholes: – *easting and northing of the drillhole collar* – *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* – *dip and azimuth of the hole* – *down hole length and interception depth* – *hole length.* ▪ *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	definition and geotechnical data in the Clareval Bowl pit. There are approximately 1,800 drillholes at Stratford and approximately 500 drillholes at Grant & Chainey. ▪ Drillholes intersecting each reported seam provide coal quality data (on at least one ply of the seam). Almost all holes in the Resources areas were drilled vertically. ▪ Detailed drillhole information has not been provided tabulated as exclusion of this data does not detract from the understanding of the Resource. Several hundred drillholes are located in now mined out areas. The mined areas support the geological understanding of the area and the interpretation/model of the deposit. ▪ The following item have been reported: – typical seam thickness – in situ density and other qualities (partly based on default values) – depth range ▪ Co-disposal area – N/A – no drillholes relate to this material – waste emplacement area.
Data aggregation methods	▪ *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* ▪ *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* ▪ *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	▪ Duralie, Stratford and Grant & Chainey – No exploration results are presented in this report. – Coal seams have been generally sampled on a correlatable ply by ply basis (using downhole geophysical logs to determine ply boundaries). Available laboratory data is loaded into the Minex database and no data is excluded (except for sampling/recovery problems or verification issues). No quality limits were applied to the modelling or Resource estimation process. Sample compositing (when compositing sub-ply data into ply data) was done on a weighted length/density basis using Minex software. Compositing of Resource estimate qualities was done on a weighted area/thickness/density basis, default coal quality data were incorporated where gridded laboratory data was not available. – No metal equivalents are reported. ▪ Co-disposal area – N/A – a default density value was applied to the co-disposal material.
Relationship between mineralisation widths and intercept lengths	▪ *These relationships are particularly important in the reporting of Exploration Results.* ▪ *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* ▪ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	▪ No JORC exploration results are presented in this report. ▪ Holes used in the model/estimate were largely drilled vertically. ▪ Coal seams at Duralie are located within the north plunging, southern extent of the Gloucester Syncline. Seams dip steeply on the limbs of the syncline (generally 40° - 70°) and less steeply towards the axis of the syncline (<10° - 30°). Coal seams at Stratford and Grant & Chainey are on the eastern limb of the Gloucester Syncline, except in the south at the synclinal closure for the seams at Grant & Chainey. Seams dip moderately-steeply (15°

Criteria	JORC Code explanation	Commentary
		- 70°) to the west. The deposit geometry of the Resource area is reasonably well understood. ▪ Coal thicknesses intersected will not be true thickness but an apparent vertical thickness. Thickness of the seams is most affected towards the limbs of the syncline where seam dip is steepest. Also due to reverse faulted structure, intersected seam thickness can be significantly greater than true thickness, largely where reverse faulting has not been modelled (this is expected to be in localised areas). ▪ Co-disposal area – N/A – no drillholes relate to this material – waste emplacement area. Thickness of the 'deposit' is controlled by the survey upper and lower surfaces.
Diagrams	▪ *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	▪ All relevant figures depicting information considered material to the Coal Resources reported are contained within the report associated with this Table 1.
Balanced reporting	▪ *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	▪ All validated data are loaded into the dataset and modelled. ▪ Typical thickness and quality parameters are reported. Whilst outlying values may exist, the averages are considered representative of the Coal Resources reported.
Other substantive exploration data	▪ *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	▪ Regionally – 2D seismic data acquired throughout the area in the 1980s is available. This data would have been used to assist defining initial targets. Several seismic lines crossing Duralie were reprocessed and reinterpreted by International Geophysical Consultants in the early 2000s. Reprocessed and reinterpreted seismic data was used to provide information on deposit geometry in the centre of the syncline where drillhole data is rare/absent. The results of this work at Duralie led to the discovery of the Clareval seam. Reprocessing data further to the north in Grant & Chainey was not successful and not pursued further at that time. – AGL have completed 2D seismic surveys and airborne geophysical (aeromagnetic and radiometric) surveys over the Gloucester Coal area and a 3D seismic survey over the Stratford area. Late 2015 this data was obtained by Stratford Duralie and recent works have commenced to review this data. Several deep regional holes drilled by AGL have not been included in the geological model at this stage as the data was not made available at the time of the most recent model update. – Regional aeromagnetic data sourced from Geoscience Australia is available (1,600 m line spacing). Geological interpretation map largely developed from field mapping and air photo interpretation produced in 1980s by Malcolm Lenox is available.

Criteria	JORC Code explanation	Commentary
		▪ Duralie – Seam pick-up data, provided by mine site surveyors, was available from Duralie open cut pit for the Weismantel seam. In the highly structured Clareval Bowl area an interpretation provided by then site geologist incorporated seam pick up data, drillhole data and in pit observations to provide a contour/structural interpretation of the pit area. This interpretation updated in 2016 due to further drilling with a more detailed structural interpretation controlling the faulting and seam thickness in the pit. This drilling also obtained geotechnical information for mine planning. In 2017, the structural interpretation was updated with the addition of 12 geophysically logged blast holes. – Geochemical data is available for the PAF/NAF material above/below the seams. ▪ Stratford – Mining operations have been completed in Stratford Main, Roseville, Roseville Extension and BRN pits and are currently on hold in Roseville West. These pits have mined the Bindaboo, Deards, Cloverdale, Roseville, Marker 3, Marker 8, Marker 1, Bowens Road, Avon and Triple seams. Survey pick-up data has been available in the past and at times included in the model. Recent models have not included the pick-up data due to issues with identifying correct plies in the Roseville pit. – Data from nine deep Pacific Power stratigraphic holes – PP series (up to several hundred metres deep) were available and incorporated in to the geological model. ▪ Grant & Chainey – Drillholes intersecting the Weismantel and Clareval seams have been drilled in Grant & Chainey in the eastern limits of the area. This data is not currently sufficient to allow Resource estimation for these seams in this area. ▪ Co-disposal area – Mining of Cells 1-3 has successfully been incorporated in the blending process of the wash plant feed for several years. – Aerial photography was flown the Stratford area, including the Co-disposal area, end June 2012, June 2014 and June 2015. Since March 2016 a flyover of just the Co-disposal area (by CalCo Surveyors), has been undertaken on a semi-regular basis. This has been utilised to provide more accurate mined tonnages. – Inpit mapping of coarse and slimes material by site superintendent/senior site geologist – Todd Hutchings was undertaken (October 2012)
Further work	▪ *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* ▪ *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not*	▪ Regional – Geophysical interpretation of the recently acquired basin wide data from AGL. ▪ Duralie – Continued PAF/NAF, geotechnical monitoring and mine definition drilling as required.

Criteria	JORC Code explanation	Commentary
	commercially sensitive.	– For potential underground Resources drilling is required to evaluate the Weismantel seam in the deeper central portion of the Gloucester Syncline. Much of these Resources are currently classified as Inferred. ▪ Stratford – Potential works include update of the coal quality database/model over Stratford. Also further exploration to improve definition of Resource/Reserve (Avon North and Stratford East), including additional coal quality data, further definition of structure. ▪ Grant & Chainey – Further work planned includes reviewing the geophysical data recently obtained. Other works could include defining the Weismantel and Clareval seams through the Grant & Chainey area, on the eastern limb of the syncline ▪ Co-disposal area – Ongoing survey. Wash plant coal quality analysis as required.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in Section 1, and where relevant in Section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	▪ *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* ▪ *Data validation procedures used.*	▪ Duralie, Stratford and Grant & Chainey – Drillhole data is corrected and correlated using downhole geophysical logs. Before a model is run the new data is checked or an entire seam correlation/data review is undertaken. Some unreviewed ply correlation data was loaded into the Minex borehole database in to Stratford in areas which are not within Resource areas. – Data validation processes in Minex software were used to validate the data, including: checking load errors, stratigraphic order errors, reporting for negative thickness and interburdens. Ply data statistics were reported and reviewed. Cross sections were reviewed. ▪ Co-disposal area – The information for the Co-disposal area is based on survey data, mapping and plant trial results. The survey data was loaded into a Minex database and compared against other DTM data in the database.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ A site visit was undertaken by a representative of RPM in April 2018. The Resources Competent Person was unable to attend but interviewed the RPM representative who completed the site visit. The outcome of the site visit was to better understand of the location, geological data, environment and site procedures.

Criteria	JORC Code explanation	Commentary
Geological interpretation	▪ *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* ▪ *Nature of the data used and of any assumptions made.* ▪ *The effect, if any, of alternative interpretations on Mineral Resource estimation.* ▪ *The use of geology in guiding and controlling Mineral Resource estimation.* ▪ *The factors affecting continuity both of grade and geology.*	▪ Due to closely spaced drillholes on east-west trending drill lines which are generally 100 m - 300 m apart there is reasonable confidence in the geological interpretation in the Resource areas, including seam correlation, seam dip and main faulted structures. ▪ Duralie – Uncertainties in the geological model are associated with the north-south trending reverse faults. Drillhole density is not adequate to trace reverse faults in the model further north of approximately 6,426,750N for the Weismantel seam. There are numerous reverse faults and folds in the Clareval Bowl area, of which five faults have been modelled as steeply inclined faults, but further faults exist. The thickness of the Clareval and Weismantel seam is reasonably consistent – large variations to seam thickness over short distances would be due to reverse faulting. – In the deeper central portion of the syncline there is limited drillhole data. Reprocessed seismic data was used to control the shape of the syncline in the model. This data is reasonable for the purpose/classification but could be in the order of 25 m (or more) out towards the deeper parts of the syncline and could affect interpreted seam dip. East-west faulting indicated by seismic data is not well understood. – There is limited coal quality data for some of the minor plies; however the tonnages associated with these are not likely to be significant. – Alterations to the geological interpretation are unlikely to alter the Resource estimate. ▪ Stratford and Grant & Chainey – For some seams the coal plies can vary in thickness over short distances. The interpretation between drillholes could vary from the in situ. – Uncertainties in the geological models are associated with the north-south trending reverse faults in the highly structured area in Stratford West (near the Co-disposal area) and in the north of Grant & Chainey. Normal and reverse faults have been intersected in all areas and those identified are reasonably understood. Other faults may exist but they are unlikely to be major features. Avon North Resources are now based on the Stratford 2015 model and due to the new data and updated structural interpretation, confidence in the structural interpretation in this area has increased. – The sill in the Avon seam in Grant & Chainey is intersected by a number of holes and is thought to be reasonably understood, however there could be irregularities between holes. – There is limited coal quality data for a number of plies and some areas. Default values were sometimes heavily relied upon for the Resource estimate. – The Coal Resource is variable at Stratford and Grant & Chainey due to changes in seam thickness, seam splitting, faults (reverse, normal and growth) and changes in seam dip. With the amount of drillhole data in the area and the information from mined areas it is not likely there is an alternative structural interpretation in the Resource

Criteria	JORC Code explanation	Commentary
		areas; the exception to this is in Grant & Chainey if new coal quality data showed very poor results. ▪ Co-disposal area – There is confidence in the interpretation of the volume/area. This material was emplaced onto a known surface (original topography) and accurate survey of the upper mined surface is undertaken at intervals. Mapping of the Resource was undertaken by the site superintendent/senior site geologist in 2012. The uncertainty of the interpretation lies in the consistency of the quality and amounts of coarse versus slimes material. The model makes no distinction between coarse co-disposal and slime material. Both these materials can be used in the plant feed, but in different ways.
Dimensions	▪ *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	▪ Duralie – The area is approximately 6 km long by 3 km at its widest and 750 m wide at the southern end of the syncline where the nose of the fold is present. Resources were estimated below base of weathering or to the mined surface/tonnes (end September 2017). The Weismantel seam Resources were estimated to depths of 500 m below the surface. Resources for the Cheerup and Clareval seams are generally < 200 m except for the Clareval Bowl area, where Resources are <300 m. ▪ Stratford – The area is approximately 4 km wide by 6 km long. A thin south-eastern strip (Clareval seam) extends a further 2 km into the Grant & Chainey area but is historically part of Stratford. Resources are limited to below the base of weathering or the mined surface as at 30 June 2014 (from June 2014 to December 2017 mining at Stratford largely occurred in the Co-disposal area, where Resources were updated by depletion of mined tonnes). Resources at depth are limited to 150 m or 200 m below the original topography surface (largely controlled by drillhole data). ▪ Grant & Chainey – The area covers a north-south strike length of approximately 11 km with an east-west width of approximately 1 km, from the southern limit of Stratford to the Avon seam crop at the nose of the syncline. The upper limit of Resources is the base of weathering surface (no mining has occurred at Grant & Chainey) and the lower limit is a maximum depth of 200 m depth below topography (largely controlled by drillhole data). – There is much variability across the Resources due to changes in seam thickness, seam splitting, faults and changes in seam dip. ▪ Co-disposal area – Covers an area of approximately 500 m wide 800 m long. The Resource is limited at depth by the original topographic surface (approximately <20 m below the current surface).

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	▪ *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* ▪ *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* ▪ *The assumptions made regarding recovery of by-products.* ▪ *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* ▪ *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* ▪ *Any assumptions behind modelling of selective mining units.* ▪ *Any assumptions about correlation between variables.* ▪ *Description of how the geological interpretation was used to control the Resource estimates.* ▪ *Discussion of basis for using or not using grade cutting or capping.* ▪ *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	▪ Duralie – The geological model for Duralie (DUR_0614) was produced in 2014, using Minex software (Version 6.3). The computer model was created using drillhole intersections, seismic information reprocessed in 2004 and pit pick up data for the Weismantel seam (to April 2014). Largely reverse faults were not specifically modelled but reasonably closely spaced drillhole data allowed control of gridding. This model was used for most of the Duralie Resource area. In 2016 an updated model was produced over the LOM area to incorporate new drilling and update the structural interpretation. This model (DURmicro16) was used for this Resource and Reserve estimation. – Resources were estimated in Minex software using thickness grids and in situ density grids (or default density values where gridded data was not available) from the uncut model (DUR_0614 or DURmicro16). Coal seams were limited to below base of weathering grid combined with the end of September 2017 mined surface within vertical sided polygons. To update Resources to December 2017, forecast tonnes from October 2017 to December 2017 were subtracted from the Resource estimate. – Clareval seam Resources were limited to a maximum depth of 300 m (<300 m west limb and <200 m east limb, largely controlled by drillhole data). Weismantel seam Resources were limited to 500 m depth of cover. Resources are not extrapolated beyond drillhole data. – Seam thickness grids were gridded on a 5 m (DURmicro16) or 10 m mesh (DUR_0614) using Minex growth techniques. Raw quality grids were gridded on a 50 m mesh using inverse distance squared gridding methods. – No minimum seam thickness was applied to the Weismantel seam as this seam is generally a 10 m - 12 m thick seam across the deposit. A minimum seam thickness was applied to the Cheerup and Clareval seam of 0.1 m (this would only exclude minimal tonnes). No quality limits were applied to the Resource as current mine practices wash all coal from Duralie and blend if required at the Stratford CHPP. ▪ Stratford – The computer models for Stratford West (WCR0811), Avon North (STRAT0315) and Stratford East (SE0512) were generated using Minex software. The computer models were created using drillhole intersections, fault interpretations (although a number of faults were not modelled due to minor offset or limited interpreted extent) and trend lines to control the synclinal structure. Not all faults in Resource areas were specifically modelled but the drillhole data allowed to control the seam elevations (there could be some discrepancies between drillholes and grids but the overall tonnage is reasonable). Faults in WCR0811 model were modelled as vertical faults. STRAT0315 (Avon North) reverse fault were modelled using 3D faulting software and modelled as steeply inclined reverse faults or vertical normal faults. For Stratford East, no faulting was incorporated into the model, however faults are expected (probably minor in extent and offset and/or insufficient data to interpret laterally).

Criteria	JORC Code explanation	Commentary
		– Resources were estimated in Minex software using thickness grids and in situ density grids (or default density values where gridded data was not available) from the current models (WCR0811, STRAT0315 and SE0512). Coal seams were limited to below base of weathering grid combined with the end of June 2014 mined surface, within vertical sided polygons. Essentially no mining has occurred in Roseville West and Bowens Road North pits since July 2014. – Resources were limited to a maximum depth of 150 m (Stratford West) or 200 m (Avon North, Stratford East) (largely controlled by drillhole data). Resources were not extrapolated beyond drillhole data. – Seam thickness grids were gridded on mesh sizes of 10 (WCR0811) or 15 m (STRAT0315 and SE0512), depending on average drillhole spacing or structure, using Minex growth techniques. Raw coal quality grids were modelled on 50 (SE0512) or 100 m (WCR0811) mesh sizes, extrapolated 250 m from drillhole data. No raw coal quality grids have been developed for the STRAT0315 model at this time (default values are used for the Avon North Resource estimate). – No minimum seam thickness was applied to the estimate to allow maximisation of the Reserve estimate (due to the numerous plies in the deposit/splitting and coalescing, applying a minimum ply thickness in previous works limited Reserve studies from accessing all potential coal). No quality limits were applied to the Resource as current mining practices mine coal thick enough for the equipment being used and the coal is washed and potentially blended. ▪ Grant & Chainey – The Minex computer model generated in August 2012 (GC_0812), incorporating all current drillhole data in the Resource areas, was used for Resource estimation. No mining has occurred in the area (in the northern limit of the area there is a portion covered by mine rehabilitation) and the original topography surface was used. The base of weathering was developed from visual base of weathering in drillholes. – The model was produced using drillhole seam intersections, the current fault interpretation and trends lines to assist modelling the syncline structure. Not all faults were specifically modelled but the drillhole data allowed to control the seam elevations. Any faults modelled were modelled as vertical faults. Confidence is highest in the Bowens Road and Avon seams due to the number of drillhole intersections. Structural grids were gridded on a 20 m mesh and quality on a 100 m mesh. – Resources were estimated in Minex software using thickness grids from the uncut model (GC_0812) limited to below base of weathering and in situ density grids or default density values where gridded data was not available. Resources were estimated within vertical sided polygons, to a maximum depth of 200 m below topography. Resources are not extrapolated beyond drillhole data. – No minimum seam thickness was applied to the estimate to allow for maximisation of the Reserve estimate. No quality limits were applied to the Resource as current mining

Criteria	JORC Code explanation	Commentary
		practices mine coal thick enough for the equipment being used and all coal is wash and, if required, blended. ▪ Co-disposal area – The computer model for the Co-disposal area is not a traditional geological model, due to the nature of the material. The model was generated in Minex software (version 6.1) in late 2012. The model consists of upper and lower triangulated surfaces of the reject emplacement area. The basal triangulation surface covering Cells 1-3 was produced from the original topography surface (onto which the material was deposited). The upper triangulation surface was produced from a DTM based on the end of June 2012 aerial photography. – The Resource estimate was undertaken by estimating the volume between the triangulated end of June 2012 surface and original topography surface within vertical sided polygons defining the boundaries of Cells 1-3. A deduction of 10% was applied to the northern area of – Cell 2 to account for waste material included in this area. A default density value of 1.10 g/cc was applied to the volume estimate to produce a tonnage. Originally the cells were capped with waste material and previous estimates accounted for waste capping in surveyed surfaces. No capping material remains covering the cells. – The 2012 and 2009 Resource estimates were reconciled to mined tonnes and other changes and provided confidence in the estimate and parameters used (largely the default density value). See below AUDITS AND REVIEWS. For 2014 - 2017, the Resource estimate was updated by depletion of mined tonnes.
Moisture	▪ *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	▪ Duralie, Stratford and Grant & Chainey – Coal tonnages were estimated at an in situ moisture basis (estimated to be at 6% moisture). Reported qualities are at a constant moisture basis (standardised estimate of air dried moisture) of: ○ 1.5% for Duralie and Stratford East (Weismantel-Clareval seams). ○ 2.5% for Stratford West, Avon North, and Grant & Chainey (Marker 7-Parkers Road seams). ▪ Co-disposal area – The co-disposal material was emplaced. The Resources were estimated using a default density for wash plant reject material. The moisture basis would equivalent to in situ.
Cut-off parameters	▪ *The basis of the adopted cut-off grade(s) or quality parameters applied.*	▪ All areas – No coal quality limitations were applied to any of the Resource areas. Current mining practices take most coal sections thick enough for the equipment being used and the coal is washed and, if required, blended mined coals to produce a variety of products (including coking/ thermal, low/moderate/high sulphur products).

Criteria	JORC Code explanation	Commentary
		▪ Duralie – No minimum seam thickness was applied to the model. For Resource estimation a minimum seam thickness is not relevant for the Weismantel seam, as at Duralie this seam has a thickness in the order of 10 m - 12 m. For the Cheerup and Clareval seams a minimum seam thickness of 0.1 m was applied to the Resource estimate. This would only exclude a small tonnage of coal. This limit may be removed in future Resource statements to bring in line with other Stratford Duralie sites (Stratford and Grant & Chainey). ▪ Stratford and Grant & Chainey – No minimum seam thickness was applied to the model or Resource estimate. Previous Resource estimates used a minimum seam thickness of 0.1 m (the thin limitation was based on thin seam mining which had been used in Roseville West Pit). No minimum seam thickness was used in this current Resource estimate. This was to allow Reserve studies to maximise the Resource, which can have closely spaced, thin bands of coal or thin bands of coal near thick intersections of coal. The removal of this minimum thickness limitation was requested by the 2017 Reserves Competent Person. Removing this limitation increased the Resource estimate by <2%, which is not considered material. ▪ Co-disposal area – No cut off-parameters were applied to the Resource estimate; however a deduction was applied to Cell 2 to account for waste material in this area.
Mining factors or assumptions	▪ *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	▪ Duralie – Currently open cut mining methods are used at Duralie in the Weismantel, Cheerup and Clareval seams. Current mining depths are 115 m below original topography in the Weismantel seam pit and 150 m in the Clareval Bowl area. It is expected this method will continue for 'shallow' Coal Resources. The actual limit of open cut mining is a Reserve issue, depending on coal price and geotechnical issues. For Resources in the deeper parts of Weismantel seam, it is assumed mining will be by underground mining methods, including bord and pillar, hydraulic mining, etc. taking into account the relative steep dip of the seam. – Clareval seam Resources at Duralie are limited to depths of 200 m - 300 m below original topographic surface (largely controlled by drillhole data). With strip ratios in the order of 8:1, to depths of 200 m, it is possible that in the future (<50 years) these Resources will be viable. – The Weismantel seam is mined in two passes (approximately top 3 m - high sulphur pass, lower part of the seam (several metres) - low sulphur pass). Stone parting plies are included in the Resource estimate of this seam as the generally thin parting plies are mined as part of the ROM coal. The Clareval seam is also mined in two passes (top 3 m - 4 m - high sulphur pass (difficult to determine for in the Clareval Bowl pit),

Criteria	JORC Code explanation	Commentary
		lower part of the seam - low sulphur pass). Dilution in mining the Clareval seam in the Bowl area is expected due to the highly structured nature of the seam. ▪ Stratford – Mining at Stratford has been by open cut mining methods. It is assumed remaining coal Resources at Stratford will be extracted by open cut methods. Resources at Stratford are limited to depths of 150 m (Stratford West) or 200 m (Avon North and Stratford East) below original topographic surface (largely controlled by drillhole data). Mining depths reached in the Stratford Main pit and Bowens Road pit were 125 m and 120 m from topography respectively. Approximate strip ratios in the order of 6:1-10:1 indicate it may be possible that Resources to depths of 200 m may be economic in the future (<50 years). – In Roseville Extension and Roseville West pits, thin seam mining was used to extract the coal plies (coal bands down to 0.15 m thick were mined). Small mining equipment was used to achieve this. In BRN Pit the Marker plies were mined at thicknesses down to 0.2-0.3 m. Due to the nature and coking quality of the coal a lot of care was taken in recovering the coal. – Resources are estimated for in situ coal seams that occur beneath the co-disposal material. It is assumed the co-disposal material will be completely extracted before mining the underlying seams. The geological model for Stratford West used the base of weathering below the original topographic surface in this area for Resource estimation. – Coal Resources have been limited by the mined surface as at the end of June 2014. In areas around some of the completed pits (e.g. Roseville Pit, Bowens Road West Pit) Resources have been estimated below/adjacent to the pits. No buffer zone was applied to allow mining studies to determine Reserve limitations and future mining opportunities. – Mine infrastructure, such as the Stratford East Dam over some of Stratford East, was not used to limit Resources to allow mining studies to determine viability. The exception to this was coal under the main Stratford mine infrastructure (the wash plant, stock piles, ROM pad, and coal handling facilities). This exclusion zone has removed approximately 1.5 Mt of potential Indicated and 0.8 Mt of potential Inferred Resources from the Marker 3 - Bowens Road seams. ▪ Grant & Chainey – The same coal seams and similar geology occur at Grant & Chainey as Stratford Mine and it is assumed Coal Resources at Grant & Chainey will be extracted by open cut mining methods, as at Stratford Mine. Resources at Grant & Chainey are limited to depths of 200 m below original topographic surface (largely controlled by drillhole data). Approximate strip ratios in the order of 10:1 indicate it that Resources to depths of 200 m may be viable in the future (<50 years).

Criteria	JORC Code explanation	Commentary
		▪ Co-disposal area – The material in the Co-disposal area has been mined by open cut methods and incorporated into the plant feed at Stratford CHPP for more than 15 years. Due to the depths of the material (<20 m from surface) it is expected this mining method will continue with the remaining Resource.
Metallurgical factors or assumptions	▪ *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	▪ Duralie – Coal at Duralie is currently mined in separate passes so that washing can produce a combination of washed moderate and high sulphur thermal and coking products. The Weismantel and Clareval seams have similar quality properties – high sulphur section at top of seam (approximately a third to a quarter of the seam) with generally moderate sulphur in the lower section of the seam. This coal can be blended with low sulphur co-disposal material from Stratford mine site. ▪ Stratford and Grant & Chainey – A combination of washed low/moderate sulphur coking and thermal products have been produced from Stratford Mine coal seams, and they can be blended with Duralie coal seams to reduce sulphur on Duralie coal. Many of the seams occurring at Grant & Chainey have been mined at Stratford (including Marker 3 - Bowens Road seams and Avon - Triple seams). – Raw and float/sink coal quality results from drillhole data indicate both coking and thermal coal products can be derived from the Coal Resources. It is assumed that all coal mined at Stratford and Grant & Chainey will be washed at the Stratford CHPP and if required blended to produce a variety of products. – The Marker 7 - Marker 1 and Avon - Parkers Road seams are expected to (and those mined in the past have) produce low/moderate sulphur coking products with a secondary low/moderate sulphur thermal product. The Bowens Road seam is largely a thermal coal but the lower plies have produced a coking product in the past. Data for the Cheerup and Clareval seams at Stratford indicate they will yield coking and thermal coals with moderate sulphur (some rare high sulphur). ▪ Co-disposal area – In the computer model no distinction was made between Coarse CODAM and slime material. These products are incorporated differently to the plant feed – slimes can be drip fed into all blends and coarse material blended with thermal coal.
Environmental factors or assumptions	▪ *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts,*	▪ Mammy Johnsons River is a significant waterway. A 60 m buffer zone from this river was used to limit Resources to depths of 100 m (2.2 Mt of potential Indicated Resources were excluded from the Resource estimate). At depths greater than 100 m no buffer zone was used to allow mining studies to determine limitations and possible underground mining methods, including bord and pillar extraction.

Criteria	JORC Code explanation	Commentary
	particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	▪ In general, environmental and infrastructure features such as waterways, roads, power lines, etc., have not been used to limit Resources at Gloucester Coal to allow mining studies at the time to determine the limits for Reserves and potential mining opportunities. At Duralie, a creek diversion was completed to extract the Weismantel seam and in the future this same process may be undertaken at Stratford or Grant & Chainey. Wenham Cox Road was diverted around BRN pit and in the Weismantel Pit at Duralie, the 132 kV power lines were raised to allow continuation of mining underneath. ▪ The Main Northern Railway line runs through the centre of the Duralie area. Through most of the area the railway would cross potential underground Resources of the Weismantel seam. In the southern most area of Duralie, the railway line crosses potential open cut Resources in the Weismantel seam (for a distance of approximately 400 m). While it is not likely that this line would be diverted, the railway line was not used as a limit to Resources, to allow mining studies to determine buffer zones. At Grant & Chainey, a small Resource area in the south occurs under the Main Northern Railway Line (approximately 600 m along the railway). If a 50 m buffer zone around the railway was used to limit Resources it would reduce Resources by approximately 0.6 Mt of Indicated and 0.1 Mt of Inferred (not considered material for this Resource estimate). ▪ Roads such as the Buckets Way, Duralie, Johnsons Creek, Terreel, Bowens and Wenham Cox roads were not used to limit Resources. While it may not be likely that the Buckets Way would be diverted, a limit was not used to allow mining studies to determine limiting parameters. The only Resources estimated under the Buckets Way are a small area of Inferred Weismantel Resources (approximately 400 m along the Buckets Way) in the north of the Duralie area and a small area containing 0.5 Mt of Inferred Marker 1 and Bowens Road Resources at Grant & Chainey. ▪ Creeks including Avondale Creek and Dog Trap Creek (Stratford) and Wards River (Grant & Chainey) were not used as limits to Resources. Nor the mine dams at Duralie or Stratford. ▪ At Duralie, a 132 kV transmission line trends north-south in the eastern edge of the Resource and then cuts across the area to the west and a 35 kV transmission line cuts a small area of Inferred Weismantel Resources at the north of Duralie. At Stratford, a 132 kV transmission line runs north-south partly through Stratford East Resources. ▪ Stratford Resources for the upper seams, (i.e. along the western limit), are located over 1 km from the centre of Stratford hamlet. A small area of Resources occurs under the Craven township. This is now a very small hamlet, where Gloucester Coal owns most of the properties. ▪ Biodiversity areas occur in the south and in a small area in the west of Duralie. The Biodiversity area in the south covers part of the potential sub-crop of the Clareval seam. There is no drillhole data in this southern area and so Resources have not been estimated. Proposed biodiversity areas have been determined as part of the Stratford Extension

Criteria	JORC Code explanation	Commentary
		Project (SEP). These areas extend over Resources in the northern part of Grant & Chainey and a small area of Stratford East.
Bulk density	▪ *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* ▪ *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* ▪ *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	▪ Duralie, Stratford and Grant & Chainey – A mixture of Relative density and Apparent Relative density data was available from laboratory analyses. Only Relative density data was used in the database/gridding/Resource estimate. Relative density data was converted to an in situ moisture basis (estimated at 6% moisture) to account for loss of void spaces during testing. An ash versus density regression was determined to enable estimation of in situ density for all plies with raw ash data. – Where sufficient data was available in situ density grids were generated. Default in situ density values were determined for each ply from the available data to use where gridded data was not available. Default density values range from 1.35-1.60 g/cc. For stone parting plies of the Weismantel seam default density values used (when gridded data was not available) ranged from 1.80-2.1 g/cc. ▪ Co-disposal area – A default density of 1.10 g/cc was used as a reasonable density estimate for emplaced wash plan reject material.
Classification	▪ *The basis for the classification of the Mineral Resources into varying confidence categories.* ▪ *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.*	▪ Core and non-core drillholes with downhole geophysical logs were considered points of observation for confidence in the deposit in conjunction with information from mined areas and supporting information from seismic data. ▪ The classification of Coal Resources in this report used the classification of Measured, Indicated and Inferred used in the previous Resource Estimate. The Resources classification from the previous Resource estimate was reviewed by reviewing the drillhole data, geological models, reconciliation data and detailed discussions with relevant site personnel and the previous 2017 Resources Competent Person. The conclusion of the review is that the previous Resource classification was appropriate. ▪ The classification in the previous Resource Estimate was based on the previous Competent Persons confidence in the estimate. The previous Competent Person has been heavily involved in the data checking and ply correlation process, structural interpretation, and construction of the geological models and compilation of the coal quality data for over 15 years at Stratford Duralie. Also involved in exploration data collection/supervision and in-pit work. The estimate classification is based on the confidence to identify coal plies between holes, understanding the changes/variability of the coal seams, the interpreted structure and how the computer model manages to 'model' the structure. In some structurally complex areas the model has not defined the faulted structure specifically (such as the Clareval Bowl or structurally complex area in Stratford West or Rombo/Parkers Road seams in the north of Grant & Chainey, where drillhole seam intersections were allowed to control seam elevation/thickness); however the drillhole spacing was sufficient to show coal seam continuity and reasonable confidence in tonnages to support the classification category. An

Criteria	JORC Code explanation	Commentary
		example of this is the Clareval Bowl area at Duralie. This is an extremely complex small synclinal structured area with numerous reverse faults and folds. In the early years of mining none of the faults had been modelled specifically; allowing the closely spaced drillholes to control the geology. Mining found on a day to day basis there were differences between the model and the actual structure encountered, but overall mined tonnes reconciled with modelled tonnes. From discussions with the Duralie site geologist at the time, the model underestimated the tonnage slightly as a result of repetition of coal seams because of thrust faulting. This area is covered by approximately 100 m spaced drill lines with holes averaging 50 m along these lines (supported by coal quality data). The confidence in this estimate is Measured. ▪ Often the availability of coal quality data on a ply basis is variable per seam due to core recovery or the ply not existing in the hole (minor upper and lower plies have rare quality data due to fewer drillhole intersections due to variability of these plies). In the absence of drillhole coal quality data, a history of nearby mining or geophysical log trends were used to support the classification. Sometimes the estimate of particular plies depended on default quality values. This was more common for Inferred Resources, but also used for Measured and Indicated Resources. Core holes often do not provide data on all plies in an intersected/sampled seam, due to either core recovery or variability in a seam. ▪ Duralie – **Measured Resources** – typical drilling density involved 100 m spaced east-west drill lines (range from 50 m - 150 m) with drillholes along these drill lines averaging 50 m spacing. Some fault delineation drilling down to 15 m spacing may be present. Cored holes are spaced approximately 200 m - 500 m apart. – **Indicated Resources** – 200 m - 500 m spaced east-west drill lines, with drillholes along the drill lines up to 300 m. Core holes are located generally 400 m - 1,000 m apart. – **Inferred Resources** – for Weismantel seam drillhole data is generally located at the edges of Inferred areas, rare data within these areas (up to 1,500 m apart). Core holes are rare in Inferred Resource areas however are generally adjacent/nearby to areas with core data. ▪ Stratford – **Measured Resources**: there is a small Measured Resource at Stratford in the Bowens Road seam (this is a consistent seam, which was mined extensively immediately north of the measured area). Holes are located on approximately 100 m spaced drill lines with holes along these lines 75 m - 100 m apart and with coal quality data available from holes or previous mining within 500 m. – **Indicated Resources**: holes were located on 200-300 m spaced east-west drill lines with holes along the lines 20 m - 200 m apart. For Avon North the holes were spaced on 100 m drill lines but were classified Indicated due to seam complexity and quality

Criteria	JORC Code explanation	Commentary
		data limitations. Core holes were 150 m to approximately 1,000 m apart or near mined areas of those seams. – **Inferred Resources**: drillholes up to 800 m apart with rare coal quality data. Some areas had far more closely spaced holes but quality data rare/absent. ▪ Grant & Chainey – **Measured Resources**: Drillholes are located on 100 m - 150 m spaced east west drill lines. Holes along drill lines are spaced 20-150 m. Core holes are located up to 400 m apart along strike due to the steeply dipping nature of seams. – **Indicated Resources**: Drillholes are located generally on 200 m spaced east west drill lines. Holes along these drill lines are 40 m - 150 m apart. Core holes are located generally 400 m - 800 m apart, but can be up to 1.5 km apart (often along strike due to the steeply dipping seams). At the nose of the seam sub-crops in the south, there is no coal quality data, however the spacing and grid of drillholes, coal quality data available in nearby areas on certain seams (including Bowens Road and Avon seams) and consistency of coal seam character determined from downhole geophysical logs, has enabled these Resources to be classified as Indicated Resources. – **Inferred Resources**: For some minor seams, drillholes are located as close as 200 m spaced east-west drill lines, however there may be little up-dip/down-dip data on the seam or inconsistency of the plies. For major seams, holes are spaced on drill lines up to 2 km apart. Core data is 500 m apart to rare on some minor seams, and sparse to rare for major seams (including Bowens Road and Avon seams). ▪ Co-disposal area – These Resources were classified as Indicated Resources due to the good quality of survey and mapping data, continuous emplacement of wash plant reject material into these cells from 1995 - 1999, a history and continued use of this material as feed to the Stratford Mine wash plant and coal quality results indicating usable products.
Audits or reviews	▪ *The results of any audits or reviews of Mineral Resource estimates.*	▪ No external review or audit of this Resource estimate.
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global*	▪ Duralie, Stratford and Grant & Chainey – Due to the steep dip of strata, apparent seam thickness, faulting, folding, seam splitting and ply variability in places, holes are usually quite closely (often 50 m - 300 m apart). Quality data for a particular seam is usually available on a linear spacing (often along strike, where the seam is shallower). Drillhole spacing at Stratford Duralie is probably closer than most coal deposits elsewhere in Australia, due to the complex geology. – Although the structure can be variable the closely spaced drillholes and the confidence in the seam correlation and interpreted geology provide confidence in the tonnage estimates. Due to the structural complexity of this deposit, the experience of the previous Competent Person in relation to understanding the data, geology, exploration and mining at Gloucester Coal is a critical factor in the assessment of Resource

Criteria	JORC Code explanation	Commentary
	or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. ▪ *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	confidence categorisation. The previous 2017 Competent Person was able to communicate that understanding the Competent Person for this Report and that understanding was consistent with the review completed. – The estimates are considered to be a global estimate. Coal Resources were estimated for areas populated with numerous drillholes, all data were used and a single data point would have little or no effect on the total Resource estimate. – All tonnages would be relevant to a technical and economic evaluation, however there could be coal with thin ply thickness which, in places, is relatively isolated in the stratigraphy pile with no economic value but included in the Resource estimate to allow for maximisation of the Reserve estimate (i.e. allow thin plies near other plies in the stratigraphic pile to be included). Working sections were not developed due to the number of plies/complex spitting/number of possible working section combinations and Reserve determination should be allowed to use coal price and the equipment selected to determine minimum ply thickness and interburden limits. In total coal <0.1 m at Stratford and Grant & Chainey is approximately 2% of the Resource estimate. – For the Duralie 2016 estimate, Resources reconciled reasonably well to 2015 Resource estimate, where the main difference in the estimate were mined tonnes, updates in the computer model and taking into account mining losses and dilution. For 2017 Resources where updated by depletion of mined tonnes, taking into account mining losses and dilution. – For Stratford, Coal Resources in 2014 were reconciled to previous Resource estimates, taking into account coal mined during that period. 2015 - 2017 no mining occurred at Stratford West, Avon North or Stratford East to compare production tonnes to the estimate. There has been no mining at Grant & Chainey. ▪ Co-disposal area – The Competent Person has reasonable confidence in the estimate of the Indicated Resource. The surveyed surfaced on which the tonnage is based is accurate and the material has a proven record of being incorporated into the plant feed. For 2014 - 2017 Resources were updated by depletion of mined tonnes, however for previous estimates the mined surface was reconciled with mined tonnes and compared well. – The estimate is considered a global estimate as the surfaces used in the estimate cover the entire area.

Section 4 Estimation and Reporting of Ore Reserves

The completed Table 1, Sections 4 is in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person, Mr Doug Sillar on behalf of RPM.

(Criteria listed in Section 1, and where relevant in Sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary		
		Stratford	Grant and Chainey	Duralie
Mineral Resource estimate for conversion to Ore Reserves	▪ *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* ▪ *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	▪ The Coal Resource estimate used as the basis for this Coal Reserves Statement is described as part of this statement. The Resource estimate has been prepared by Mr. Brendan Stats. The Competent Person, Mr. Stats, has sufficient expertise that is relevant to the style of mineralisation and type of deposit and activity to qualify as a Competent Person as specified under the JORC Code and is a member of the Australian Institute of Mining and Metallurgy . ▪ The Resources Statement was compiled in accordance with The JORC Code 2012 Edition. ▪ The Coal Resources reported are inclusive of the Coal Reserves. ▪ The same geological model has been used for the estimation of Resources and Reserves.		
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ A site visit was undertaken by representatives of RPM in April 2018. The Reserves Competent Person was unable to attend but interviewed the representative following the visit. The outcome of this visit was observation of the Asset area to better understand location, environmental, social, groundwater and existing infrastructure consideration. ▪ The site visit included a tour of both the Stratford and Duralie existing pits and proposed areas for development. ▪ The site visit also included discussion with Stratford Duralie personnel and handover and discussion of key mine planning information used for this report.		
Study status	▪ *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* ▪ *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	▪ Coal is currently produced from the Duralie Mine with operations in the Stratford Mine about to recommence. Information such as loss and dilution, operating costs, revenue, coal yield and coal product qualities and offsite costs are all based on actual information. The mining data from site is at a level of detail equal to or greater than that required of a PFS. ▪ A report titled 'Gloucester Coal Basin Mine Planning Study" completed by RPM in 2014 is to a PFS level of details and generally represents planned operations. ▪ For areas where proposed pits are included in the Reserves, a life of mine plan has been completed using site actual data as a guide. The mine plan is considered by the Competent Person to be technically achievable and economically viable using the actual site inputs.		
Cut-off parameters	▪ *The basis of the cut-off grade(s) or quality parameters applied.*	▪ Gemcom Minex Pit Optimiser software was used to estimate the open cut economic pit limits in 2017 by the previous Competent Person. Cost inputs were based on existing Duralie operations. Yancoal provided input into cost, revenue and exchange rate assumptions. RPM have confirmed these pits shells are representative of the economic coal based on a break-even strip ratio analysis. The break-even strip ratio is variable by pit and typically ranges from 9-10 bcm:t.		
Mining factors or assumptions	▪ *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or*	▪ The selected mining method is a conventional truck and excavator mining method based on the targeted mine production and strip ratio of the deposit, with expit and inpit dumping of waste. This method is considered appropriate based upon geology and strip ratio and is the mining method currently used at the operational Stratford Duralie pits.		

Criteria	JORC Code explanation	Commentary		
		Stratford	Grant and Chainey	Duralie
	detailed design). ▪ *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* ▪ *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* ▪ *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* ▪ *The mining dilution factors used.* ▪ *The mining recovery factors used.* ▪ *Any minimum mining widths used.* ▪ *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* ▪ *The infrastructure requirements of the selected mining methods.*	▪ The mine plans have been based on seven geological models prepared in Gemcom Minex format: WCR_0811, CODAM_0912, SE_0512, StratfordStrat_0315model, GC_0812, DuralieMicromodel0716 and DU_0714. ▪ The mining factors used were: – Minimum parting mining thickness of 0.3 m; and – Global loss of 5%. ▪ RVW coal plies are deemed non-viable when two of the following conditions are met: – The incremental stripping ratio is greater than 10:1; – The coal thickness is less than 0.5 m; and – The underburden thickness is greater than 5 m. ▪ RPM consider these reasonable for the style of deposit and mining methods and equipment proposed. ▪ The dilutant material had a relative density of 2.1 t/cum and an ash of 80%. ▪ Pit Optimisation, pit design and LOM planning have been completed as the basis for converting Coal Resources to Coal Reserves. Geovia Minex Pit Optimiser software was used to estimate economic pit limits, and modified through practical pit design for all pits except RVW which was based on the optimiser result directly. ▪ Inferred Coal Resources are included in the pit optimisation and LOM production schedule, but are not converted to Coal Reserves. ▪ Pit slopes for existing pits were based on surveyed actual slopes and previous geotechnical advice supplied by Yancoal. For proposed pits, slopes between 40° and 45° were used for unweathered waste. ▪ Relative density data in the geological model is based on in situ moisture of 6%. Washed product coal has a moisture of 8%.		
		▪ 200 m offset on SE northern endwall from Stratford East Dam. ▪ Minimal additional infrastructure required. New waste and coal haul roads.	▪ 100 m offset from Wards River and Bucketts Way. ▪ Access though excavation face and dump face ▪ New coal haul road from pit to Stratford ROM stockpile required.	▪ 300 m offset from Bucketts Way. ▪ Access though excavation face and dump face ▪ ROM coal will be crushed at the Duralie crusher and then transported to the coal processing plant.

Criteria	JORC Code explanation	Commentary		
		Stratford	Grant and Chainey	Duralie
		▪ The coal will be transported to the Port of Newcastle using the existing train load-out facility and rail network.		
Metallurgical factors or assumptions	▪ *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* ▪ *Whether the metallurgical process is well-tested technology or novel in nature.* ▪ *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* ▪ *Any assumptions or allowances made for deleterious elements.* ▪ *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole.* ▪ *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	▪ All coal is washed through the Stratford CHPP which is a dense medium type coal preparation plant producing a number of coal products. The metallurgical process to generate marketable coal has been operated successfully on the site for a range of seam types over a period of 17 years. The dense medium coal processing techniques and equipment employed at the Stratford CHPP (SCPP) are widely and successfully used across the coal industry. ROM coal will be crushed at the Stratford ROM crusher and then transported to the coal processing plant. ▪ A new Powerscreen is proposed to be used for specific seams such as Deards and Cloverdale to remove thin partings allowing bulk mining of the seams. Expected yield and mining cost improvements have not been modelled at this stage until actual data can be produced from processing trials. ▪ The site is currently operated with saleable products being produced after processing at the Stratford CHPP. ▪ For all mining areas Measured Coal Resources were downgraded to Probable Reserves due to the limited availability of laboratory washability test results from drillhole data. Significant historical washability data has been recorded for the range of seams processed at the SCPP and was the basis for metallurgical assumptions used in the mine planning process. As additional washability data is made available from the exploration drilling process and the coal quality variation across modelled areas is better understood, there will be increasing confidence associated with the application of the metallurgical factors.		
Environmental	▪ *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	▪ Yancoal developed non-acid forming/potential acid forming (NAF/PAF) geological models for the Duralie and Stratford areas allowing selective waste placement within dumps where acid generating wastes are fully encapsulated by inert materials. Scheduling activities onsite are now focused on locating these waste materials as part of day to day planning operations. ▪ Duralie Operations are approved through till the end of 2021 (Application Number 08_0203). ▪ Additional approvals will be required for the full development of the Stratford South Avon pit and the expansion of the Avon North and Roseville West pits as they are larger than current SEP approvals. Approvals should be achieved within the scheduled development timeframe. ▪ Duralie East pit requires approval. ▪ Rejects will be managed on site as per current approvals. ▪ Water management will be managed on site as per current approvals. ▪ Waste water will be stored in appropriate facilities and disposed of or treated for recycling in accordance with current environmental approvals.		

Criteria	JORC Code explanation	Commentary		
		Stratford	Grant and Chainey	Duralie
Infrastructure	▪ *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	▪ RPM have not undertaken an infrastructure assessment as part of the 2017 Coal Reserves Estimate however it is recognised that minimal additional infrastructure will be required for development of the various open cut mining sites. ▪ An operational CHPP is already available within the Stratford Mining Complex and would process coal from all proposed operations. ▪ Small scale surface facilities would be required for mining activities in the Duralie East area. ▪ Additional mining and coal haulage roads will need to be established for proposed pits that would enable transport of coal to the Stratford CHPP. ▪ Some power lines need to be elevated for the development of Stratford East. Gloucester has completed preliminary discussion with power line owner Transgrid and this process has successfully been applied historically at Duralie. ▪ Stratford Duralie own the majority of the land for the proposed mining and infrastructure areas to be developed in the currently stated Reserves. Some small additional land purchases are required however, Yancoal believe these purchases are achievable and are not a constraint on the proposed mine plans. ▪ Water supply through rainwater harvesting and pit dewatering is planned. The primary water requirement at the site is for dust suppression. ▪ The forecast work force are primarily Yancoal employees and the cost modelling reflects an owner/operating mining operation.		
Costs	▪ *The derivation of, or assumptions made, regarding projected capital costs in the study.* ▪ *The methodology used to estimate operating costs.* ▪ *Allowances made for the content of deleterious elements.* ▪ *The source of exchange rates used in the study.* ▪ *Derivation of transportation charges.* ▪ *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* ▪ *The allowances made for royalties payable, both Government and private.*	▪ All major infrastructure is in place. Capital forecasts have been included which represent the growth and sustaining requirements for the completion of the LOM plan. ▪ All operating costs are based on LOM planning estimates from Yancoal and have been reviewed by RPM. ▪ Current long-term exchange rate assumptions were provided by Yancoal. ▪ Transport charges based on actual contracted prices taking into account existing Take or Pay arrangements. ▪ NSW state government royalties are included in the estimate. ▪ RPM reviewed all costs and they are considered reasonable.		
Revenue factors	▪ *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* ▪ *The derivation of assumptions made of metal or*	▪ Long term product coal pricing assumptions have been provided by Yancoal Marketing and is based on independent third party research and reporting. ▪ The revenue factors are considered reasonable for the purposes of estimating Reserves.		

Criteria	JORC Code explanation	Commentary		
		Stratford	Grant and Chainey	Duralie
	commodity price(s), for the principal metals, minerals and co-products.			
Market assessment	▪ *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* ▪ *A customer and competitor analysis along with the identification of likely market windows for the product.* ▪ *Price and volume forecasts and the basis for these forecasts.* ▪ *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	▪ A Marketing Study has not been reviewed however markets are well established for the mine's coal products. The projects typically produce up to two main products: – Thermal at approx. 22 - 24% ash (ad); and – SHCC at approx. 9.9 – 10.5% ash (ad). ▪ Based upon these products and specifications, RPM anticipates no foreseeable issues in demand for these products.		
Economic	▪ *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* ▪ *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	▪ The inputs to the economic analysis are derived capital and operating cost estimates outlined in the "Costs" section of Table 1. The source of the inputs is real and the confidence satisfactory. The economic modelling is in real terms and a range of discount rates have been used in assessing NPV. ▪ The NPV results for the Project produced from economic modelling generated positive and acceptable NPV's for all discount rates and the Project is considered economic from an NPV stand-point. ▪ Sensitivity analysis has been completed on the Project over a range of variable. The Project is most sensitive to changes in exchange rate, revenue and operating costs.		
Social	▪ *The status of agreements with key stakeholders and matters leading to social licence to operate.*	▪ The SEP was approved on the 29th May 2015 by the NSW Planning Assessment Commission with operating consent until 31st December 2025. ▪ The Coal Reserves quoted in this document differ from the extent and sequencing in the SEP and a revision of Stratford consent conditions will be required. This is not considered as a critical issue by the Competent Person based on historical precedent of approvals.		
Other	▪ *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* ▪ *Any identified material naturally occurring risks.* ▪ *The status of material legal agreements and marketing arrangements.* ▪ *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received*	▪ All mining projects operate in an environment of geological uncertainty. RPM is not aware of any other potential factors, legal, marketing or otherwise, that could affect the operation's viability. ▪ The coal that is currently approved is mined first in the LOM schedule (Duralie West pits and SEP). ▪ Updating of approvals is a continual process and it is reasonably expected that any modifications to existing agreements or additional agreements that may be required can be obtained in a time periods modelled.		

Criteria	JORC Code explanation	Commentary		
		Stratford	Grant and Chainey	Duralie
	within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.			
Classification	▪ *The basis for the classification of the Ore Reserves into varying confidence categories.* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.* ▪ *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	▪ Coal Reserves are primarily supported by Indicated Resources with only minimal Measured Resources estimated in the deposit. These have been classified as Probable Reserves due to the Measure Resources lying outside currently approved operations and an absence of modelled yield data. The Inferred Coal Resources have been excluded from the Reserve estimates.		
Audits or reviews	▪ *The results of any audits or reviews of Ore Reserve estimates.*	▪ Internal peer review of the Reserves Report has been completed.		
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* ▪ *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ The pit shell is based only on Probable Coal Reserves. ▪ The basis of the estimate are actual operating costs and LOM planning. ▪ CHPP and infrastructure are in place and operating. ▪ Analysis of the coal quality has been undertaken by independent laboratories working under international standards of method and accuracy. ▪ The level of accuracy will continue to be dependent on the ongoing update of the geological model and monitoring of the Modifying Factors affecting the coal estimate. ▪ Geotechnical studies have been completed for existing pits. ▪ Modifying factors that could potentially impact the Coal Reserve estimate include: – Forecast pricing and exchange rate; – Geotechnical uncertainty with the deeper Stratford pits; – Limited raw quality data for Avon North; and – Yield assumptions.		

RPMGLOBAL

ORC Code, 2012 Edition – Table 1 report template

The completed Table 1, Sections 1, 2 & 3 are in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person Mr Brendan Stats on behalf of RPM.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* ▪ *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* ▪ *Aspects of the determination of mineralisation that are Material to the Public Report.* ▪ *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	▪ Coal samples were taken from cored drillhole intersections. Core sample size is generally HQTT (61 mm). HQTT coring is a coal industry standard technique to maximise core recovery and ensure sample representivity. ▪ Almost all exploration holes that intersected the Greta seam were geophysically logged and have hard copy down hole geophysics available in drill log folders on site at Austar. The typical geophysical logging suite comprises density, caliper, gamma, neutron, sonic, verticality. Very old (1970's) core holes in the north of EL6598 do not have down hole geophysics. ▪ The Greta seam has been sampled on a ply by ply basis using density geophysical log responses to determine sample intervals. Due to differing eras of drilling plus gradational changes within the Greta seam from west to east, the correlation of individual plies may not be consistent across the leases. ▪ Since LTCC extraction recovers the full Greta seam, Austar has merged all previous borehole ply correlations into one standard system comprising three basal plies each 1 m thick each, and up to eight consecutive 0.5 m thick plies to the seam roof, which gives them the capability to assess standard longwall operations and longwall top coal caving (LTCC) options. The current longwall operations do not use LTCC due to the high total sulphur content of the upper plies of the Greta seam, but LTCC is proposed for the Stage 3 area..
Drilling techniques	▪ *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	▪ The depth to the Greta seam, ranges between 500 and 760 metres in the Stage 3 area. Almost all holes were cored (HQTT core) to recover core samples from the Greta seam plus roof and floor strata. Some non-core holes were drilled for structural investigation of faults that were interpreted from 2D seismic data. Some holes were fully cored (HQTT) from surface to acquire geological and geotechnical information for the full stratigraphic sequence.
Drill sample recovery	▪ *Method of recording and assessing core and chip sample recoveries and results assessed.* ▪ *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	▪ Core recovery for the Greta seam in most holes has been greater than 95%. Core recovery is measured at the drill rig by comparison of drill run length to the core recovered length. This calculation is audited and confirmed by down-hole geophysics (density log) by the geologist. In boreholes where core recovery has been less than 90%, the hole has been

Criteria	JORC Code explanation	Commentary
	▪ *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	redrilled. HQTT is the standard method of core drilling which follows standard industry practices and maximises coal seam recovery with minimal disturbance. ▪ No bias in coal quality due to recovery has been identified and due to the high core recovery, any bias is considered unlikely or immaterial.
Logging	▪ *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* ▪ *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* ▪ *The total length and percentage of the relevant intersections logged.*	▪ Lithological logs are available for almost all drillholes. Some early NER non-core structure holes did not have logs but down hole geophysical logs are available. Logging of Maitland Group overburden strata may be of lesser detail as it is mostly non-core drilled. Core logging of roof/floor strata as well as the Greta seam has been detailed. Geotechnical logs are available from 1999. Core photography from pre 1999 holes are not available however since that time core photography has been standard procedure.
Sub-sampling techniques and sample preparation	▪ *If core, whether cut or sawn and whether quarter, half or all core taken.* ▪ *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* ▪ *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* ▪ *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* ▪ *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* ▪ *Whether sample sizes are appropriate to the grain size of the material being sampled.*	▪ Coal core of the Greta seam is divided into plies using down hole geophysics and then sampled. The entire cored section of each ply is placed in sample bags. No splitting or sawing of coal core takes place. No sample preparation takes places outside the laboratory. Coal quality analytical laboratories used to analyse Greta seam coal comply with Australian Standards for sample preparation. ▪ Sample sizes are considered appropriate for the material being sampled.
Quality of assay data and laboratory tests	▪ *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* ▪ *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* ▪ *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	▪ Laboratories used to analyse Greta seam cores have complied with Australian Standards for coal quality testing and are certified by the National Association of Testing Authorities Australia ("NATA"). ▪ Wireline logging companies that ran down-hole geophysical tools for past and present exploration have, as standard operating procedures a calibration process which takes place on a regular (monthly) basis. ▪ Surface seismic survey data acquired in the past at Austar is of high quality and has proved reliable in identifying faults in advance of mining and defining seam continuity between drillholes. The extensive network of seismic coverage has significantly improved confidence in the overall structural interpretation and continuity of the Greta seam. Seismic survey data was all reprocessed by geophysicist J Saunders, who specialises in seismic interpretation. The favourable nature of overburden strata above the Greta seam allows for capture of very

Criteria	JORC Code explanation	Commentary
		high quality seismic data. More recently, geophysicist G Fallon has also reprocessed seismic data.
Verification of sampling and assaying	▪ *The verification of significant intersections by either independent or alternative company personnel.* ▪ *The use of twinned holes.* ▪ *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* ▪ *Discuss any adjustment to assay data.*	▪ Laboratories used to analyse the Greta seam cores have complied with Australian Standards for coal quality testing and are NATA certified. Repeat sampling on a regular basis to validate results is standard procedure for proximate analysis testing.
Location of data points	▪ *Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* ▪ *Specification of the grid system used.* ▪ *Quality and adequacy of topographic control.*	▪ Drillhole collars over the last 17 years were surveyed by registered surveyors using GPS total station equipment. Previously drill hole surveys were carried out by registered surveyors using theodolite survey instruments. Topography data is from the Department of Lands (supplied 2007). Drill hole collar and topographic data is considered to be suitable for underground evaluation purposes.
Data spacing and distribution	▪ *Data spacing for reporting of Exploration Results.* ▪ *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* ▪ *Whether sample compositing has been applied.*	▪ In the northern portion of CML2, core hole spacing ranges from approximately 250 m - 600 m while in the southern portion of CML2 core hole spacing ranges from 600 m to 1,200 m. In CCL728 core hole spacing is approximately 1,000 m. In EL6598 core hole spacing ranges from 1.0 km - 3.6 km. In addition to drillhole data, an extensive array of seismic survey lines (>100 km) over CML2 and CCL728 provides support for seam continuity. ▪ The amount, type and spatial distribution of data is sufficient to establish the degree of geological and grade continuity appropriate for the Coal Resource classification applied in this estimate. ▪ Coal quality results for individual samples have been composited against the seam or working sections intervals, so that the quality values represent the corresponding seam/working section.
Orientation of data in relation to geological structure	▪ *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* ▪ *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	▪ Orientation of core samples is not relevant to this style of coal deposit. All drillholes were vertical and the coal seam has almost horizontal (4° dip to the southeast. All core samples are from vertical drillholes which are oriented almost orthogonally (85°) to the target Greta seam. No sampling bias has taken place. ▪ Borehole verticality surveys have been incorporated into the modelled boreholes where available.
Sample security	▪ *The measures taken to ensure sample security.*	▪ Coal core sample bags are sent to the coal testing laboratory via courier. In the past they have also been delivered to the laboratory by the field geologist or picked up from site by laboratory personnel. This is considered appropriate for coal core samples.

Criteria	JORC Code explanation	Commentary
Audits or reviews	▪ *The results of any audits or reviews of sampling techniques and data.*	▪ The drillhole information was reviewed as part of the process of developing the geological and coal quality models used for this Resources estimate. No external audits or reviews are known to have been completed.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	▪ *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* ▪ *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	▪ Austar holds title to CCL728, CML2, ML1661, ML1666 and EL6598. The first four titles allow Austar to mine the Greta seam at depth whilst EL6598, which overlies portions of CCL728, CML2 and all of ML1661 and ML1666 provides access to the surface to conduct exploration. – CCL752 was granted 23/05/90 and expires30/12/23 – CCL728 was granted 10/10/89 and expires30/12/23 – CML2 was granted 24/03/93 and expires 06/07/25 – ML1661 was granted 22/11/11 and expires 22/11/32 – ML1666 was granted 25/01/12 and expires 25/01/33 – EL6598 was granted and expires on 13/07/21 ▪ At the time of reporting, there are no identified issues pertaining to the security of tenure.
Exploration done by other parties	▪ *Acknowledgment and appraisal of exploration by other parties.*	▪ Numerous phases of exploration drilling and seismic surveys have taken place since the late 1970's within CCL728 and CML2. Since Yancoal's acquisition of the Southland leases in 2005, exploration drilling has focussed on the central and eastern portions of CML2 in advance of current and proposed mining. The granting of EL6598 has also allowed Austar to explore the Greta seam further to the east. ▪ In the western and southern part of CCL728, boreholes named NED1to NED32 were drilled in the late 1970's and early 1980's to define Coal Resources for Ellalong Colliery, which is now mined out. ▪ During 1986 - 1991 Southland completed the following exploration: – core holes SKD1 to SKD19, in the Stage 3 area; – 44 km of reflection seismic survey - 1986 (Mini- SOSIE); – 30.5 km and 3.6 km of reflection and refraction seismic surveys; – 1991 (mini-SOSIE); and – Ground magnetic survey (30.5 km) along 1the 991 seismic survey lines.

Criteria	JORC Code explanation	Commentary
		▪ During 1994 - 1996, 22 line km of high resolution 2D seismic was carried out over the central portion of CML2. In addition a series of non-core holes named NER1001 toNER1010 were drilled to validate structures identified from the interpretation of the seismic data. ▪ In 1999 a series of shallow non-core holes named SBR1013 to SBR1048 were drilled on tailings/reject areas at Pelton wash plant to assess potential Coal Resources for power station stock feed. ▪ During 2000 - 2003, high resolution 2D seismic (2.9 km) was completed over the SL2-3 longwall panels. All seismic data was gathered and reprocessed by IGEC (seismic consultant J Saunders) using current software to maximise resolution of this data, particularly with respect to fault delineation in the Greta seam. Core holes named SBD1052 to SBD1065 were completed in the central area of CML2.
Geology	▪ *Deposit type, geological setting and style of mineralisation.*	▪ The Lochinvar Anticline is a major north to north-easterly striking regional feature which has a significant impact on the Greta seam dip and strike. ▪ The Austar leases are located on the eastern flank of the south plunging Lochinvar Anticline with gentle seam dip of approximately 4° and strike rotating between east to northeast. ▪ The orientation of fault structures is northerly in the western part of the Austar tenure, rotating progressively to a north-westerly strike in the eastern part of the leases. ▪ Subsidiary fold axes are oriented in a northerly direction in the west and rotate to a north north-westerly direction in the east. ▪ It is common for fault pairs to form graben structures throughout the area of tenure. ▪ Three north north-westerly striking dykes have been identified which are from west to east referred to as; • Ellalong Dyke, which is located in the central part of the Ellalong longwall panels, • The central Dyke which separates the Belbird and the Stage 3 area, and • The Kitchener Dyke which is located in the eastern part of the Stage 3 area. ▪ The Greta seam is located within the Greta Coal Measures in the South Maitland Coalfield, on the western side of the Newcastle Coalfield. ▪ In the area of the current Life of Mine (LOM) plan, the Greta seam thickness ranges from 5.5 m - 6.5 m. for the majority of the Bellbird and Stage 3 areas. The Greta Seam splits into an upper and lower ply in the southeast of the Stage 3 area. ▪ On the eastern side of the Greta seam split line, thickness is approximately 4 m. Raw ash for the full seam is generally less than 11% although east of the split line, ash increases to 18%. Sulphur content is high and ranges from 1.5% to in excess of 3%. ▪ The depth of cover for the current mine plan ranges from 500 m - 760 m.

Criteria	JORC Code explanation	Commentary
		▪ Seam gas content is very low for a seam of this depth.
Drillhole Information	▪ *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* – *easting and northing of the drillhole collar* – *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* – *dip and azimuth of the hole* – *down hole length and interception depth* – *hole length.* ▪ *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	▪ From 2006 to 2011, Austar completed ongoing annual exploration programs in the central and eastern portions of CML2 and in EL6598 where mining is planned in the Stage 3 area... The exploration drilling includes; a) core holes named AQD1072 to AQD1111, b) two regional core holes (AQD1108-1109A) have been drilled in the central part of EL6598 to gain knowledge on the Greta seam in a regional context. c) lAustar completed six partially cored holes named AQD1112 to AQD1117 in the northern portion of CML2 to gain geological information for mine planning,between July 2011 to June 2012, and d) one partially cored hole (AQD1119) on the northern boundary of EL6598, near old underground mine workings at Ellington. e) Boreholes named AQD1120 to AQD1125 have been drilled in recent years in the Stage 3 area for coal quality and structural purposes. f) Boreholes named AQD1126 to AQD1132 were drilled in 2017 however this drillhole data has not been used in the current geological model. This drillhole data will be loaded into the late 2017 geological model used for mine planning purposes in early 2018. ▪ Individual drillhole results are not tabulated and presented in this report however all drillhole data that pertains to the Greta seam has been used in the geological and coal quality models to estimate Greta seam Coal Resources. The Coal Resources table presented in this report includes summary information on the Greta seam such as: • average thickness; • in situ density; • raw ash; • total sulphur; and • average depth. ▪ All surface drillholes were spudded and oriented to be drilled vertically.Down-hole deviation data showing the borehole trajectory to total depth for those holes has been incorporated in the geological computer model.
Data aggregation methods	▪ *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* ▪ *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade*	▪ Past Greta seam drill cores have been sampled on a ply by ply basis using down hole geophysics to determine ply boundaries. Because of the longwall top coal caving method used, Austar has subsequently composited raw coal ply results into three one metre intervals up from the base of the seam. Above the third one metre interval raw coal results have been composited into half metre intervals to the top of the seam. Compositing of samples was weighted by length and density, from the base of the seam.

Criteria	JORC Code explanation	Commentary
	results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. ▪ *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	▪ In recent time, Greta seam cores have been analysed in this sampling pattern (i.e. basal 3 x 1 m samples, followed by 0.5 m sampling interval to top of coal).
Relationship between mineralisation widths and intercept lengths	▪ *These relationships are particularly important in the reporting of Exploration Results.* ▪ *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* ▪ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	▪ Drillholes are vertical and the Greta seam is almost horizontal (4° dip) so drillhole intersections of Greta seam have been assumed to be true thickness.
Diagrams	▪ *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	▪ All relevant figures depicting information considered material to the Coal Resources reported are contained within the JORC report associated with this Table 1.
Balanced reporting	▪ *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	▪ All drillhole data is checked and validated prior to loading into the computer model. Outputs from the geological model (eg seam roof, seam floor, overburden thickness, ash and sulphur) are then checked to ensure trends are real. Laboratory coal quality results have been used as reported.
Other substantive exploration data	▪ *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	▪ In 1994 - 1996, 22 line km of high resolution 2D seismic was carried out over the central portion of CML2. In addition a series of non-core holes (numbered NER1001 to NER1010) were drilled to validate structures identified from the interpretation of the seismic data. ▪ During 2000 - 2003 high resolution 2D seismic (2.9 km) was completed over SL2-3 longwall panels. ▪ All seismic data was gathered and reprocessed by IGEC (seismic consultant J Saunders) using current software to improve the resolution of this data, particularly with respect to fault delineation of the Greta seam. ▪ There has been a long history of exploration and mining in the Austar area, and in particular to the north of the Austar area. Data has been acquired from surface drillhole intersections, previous underground workings (Ellalong, Kalingo, Aberdare Central and Kitchener) and from numerous seismic reflection/refraction surveys. ▪ The geology and disposition of the Greta seam is well understood from the numerous underground operations that have operated in the vicinity of the Austar area. Seam continuity, thickness and quality is well established.

Criteria	JORC Code explanation	Commentary
		▪ Surface seismic survey data acquired has proved to be reliable for identifying faults in advance of mining and defining seam continuity between drillholes. The extensive network of seismic coverage has significantly improved confidence in the overall structural interpretation and continuity of the Greta seam in the Austar area. ▪ A ground magnetometer survey was completed over the Central Dyke to define its location at the surface. Two additional ground magnetometer surveys were completed further to the east in the Stage 3 mine expansion area has interpreted another south-east trending dyke at surface, similar to the Central Dyke. This dyke has been called the Kitchener Dyke and appears to bifurcate into two separate dykes. This geological feature has been projected down to the Greta seam.
Further work	▪ *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* ▪ *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	▪ Future exploration is required to better understand the structure, intrusions, and geotechnical characteristics of the Austar area. ▪

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in Section 1, and where relevant in Section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	▪ *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* ▪ *Data validation procedures used.*	▪ Digital geological data for Austar resides in a Minex borehole database. This includes drillhole survey data, seam picks, raw coal quality data, and verticality data for more recent holes. Data in the database includes drillholes up to borehole AQD1123 Recent holes drilled in 2017 will be loaded into the next geological model.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ RPM personnel and representatives performed a site visit in April 2018. Graeme Rigg visited Austar and went underground. ▪ RPM is familiar with the Austar operation having provided technical services for the mining operation when the mine was called Southland. Thiess was the Contractor at the mine, and RPM provided the technical advice to the owners. ▪ .
Geological interpretation	▪ *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* ▪ *Nature of the data used and of any assumptions made.*	▪ The Greta seam outcrops on the eastern flank of the south plunging Lochinvar Anticline resulting in gentle seam dip to the south or southeast. Zones of normal faulting have been interpreted based on mapping from old workings to the north, and interpretation from seismic

Criteria	JORC Code explanation	Commentary
	▪ *The effect, if any, of alternative interpretations on Mineral Resource estimation.* ▪ *The use of geology in guiding and controlling Mineral Resource estimation.* ▪ *The factors affecting continuity both of grade and geology.*	surveys. In most cases faults have been interpreted where mining has intersected the fault and has stopped. ▪ The Central Dyke was interpreted from a ground magnetic survey and subsequently intersected in the Southland mine workings. The Kitchener intrusive extends south from old workings at Kitchener into the Stage 3 area. Drillhole data and two recent ground magnetic surveys indicate a south southeast trending dyke/or dykes extending through the Stage 3 mine expansion area. This dyke has been called the Kitchener Dyke. ▪ The broad deposit geometry for the Greta seam is well understood. Coal quality such as raw ash and total sulphur are also well understood. The combination of old workings, drillhole data and the extensive array of seismic data have enabled most Resources to be classified as either Measured or Indicated.
Dimensions	▪ *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	▪ Historical mining proves the Greta seam has a strike length of over 22 km (east-west) and extends down dip (north-south) from subcrop to depths in excess of 700 m, for a distance of over 9 km. The Greta seam has been mined within leases to the north of Austar for over 100 years. The variability is well defined and understood from the extensive production and exploration data.
Estimation and modelling techniques	▪ *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* ▪ *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* ▪ *The assumptions made regarding recovery of by-products.* ▪ *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* ▪ *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* ▪ *Any assumptions behind modelling of selective mining units.* ▪ *Any assumptions about correlation between variables.* ▪ *Description of how the geological interpretation was*	▪ The resource estimation was completed using in situ density and ply thickness grids in Minex software (version 6.1), using vertical sided polygon areas. No raw ash or total sulphur laboratory data was excluded. No coal quality limits were applied as Austar wash the ROM coal to produce a low ash, high sulphur product. Coal Resources estimated for 2017 are reconciled against the 2016 Resource estimate. ▪ The latest geological model for Austar was updated in September 2015 (Austar_1015). Exploration data from four new boreholes was loaded at that time. In addition, the fault model was updated based on the current interpretation received from site. The geological model contains the Greta seam and was produced using drillhole intersections, some underground data and structural interpretation from seismic information. The Greta seam is usually a coalesced package for most of the Austar resource area, however the seam splits into the Upper Greta (UG) and Lower Greta (LG) in the eastern part of the Stage 3 area. ▪ The Greta seam was split into an upper and lower section for the entire Austar resource area using the Minex seam splitting interpolation. A working Greta seam section grid developed (WGR) for Resource estimation was created from the upper and lower seam splits according to the logic shown below, (Which states when the separation between the upper and lower ply is less than 0.2m thick the working section is a combined upper and lower ply, and when the separation between the upper and lower ply is greater than 0.2m the working section is the upper ply): – WGR = UG and LG where LG interburden is <0.2 m, or; – WGR = UG only where LG interburden is >0.2 m

Criteria	JORC Code explanation	Commentary
	used to control the resource estimates. ▪ *Discussion of basis for using or not using grade cutting or capping.* ▪ *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	▪ Coal quality grids were produced for this working section at an in situ moisture basis, which is estimated to be 5%. ▪ Drillhole vertically data was loaded where available. Structural and coal quality grids were created using growth techniques (inverse distance squared was tested for quality grids however growth techniques appeared to grid the data better). Seam thickness and quality grids were gridded on a 50 m mesh. ▪ This 2017 Coal Resource estimate compares favourably with the 2016 Resource estimate. Tonnages from Resource polygons that remained unchanged (same area) were checked to compare the accuracy of this model against the previous model.
Moisture	▪ *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	▪ In situ moisture of the Greta seam is considered similar to in situ moisture content of other coal seams within the Permian Wittingham Coal Measures. Average inherent moisture (ad) of sampled data from slim core samples was 1.6%. Total moisture (ar) from six belt samples collected in 2011 averaged 6%. In situ moisture of Greta seam coal was assumed to be slightly lower than belt sample results and for this Resource estimation process was estimated at 5%.
Cut-off parameters	▪ *The basis of the adopted cut-off grade(s) or quality parameters applied.*	▪ No cut off parameters were used for ash, total sulphur or seam thickness. Austar utilise the Pelton Prep Plant to wash ROM coal for product coal at market specifications. Typical product specifications are: ash 6.5% and sulphur is 1.5% ▪ The thickness and quality of the Resource is understood to be consistent and applying typical cut off parameters for thickness or quality would not materially impact on the Resource.
Mining factors or assumptions	▪ *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	▪ Austar is currently an underground coal mine using longwall with top coal caving method. The Resource estimate is based upon underground mining methods including longwall, top coal caving but also potentially bord and pillar of areas not suitable for longwall mining. ▪ The following list details limits and assumptions used to define Resource areas. – limit of mining as at 30 September 2017; – ROM tonnes forecast from October to December 2017 were 556,109 t; and – Resources were divided into three separate areas: ▪ Northwest of the Central Dyke – Kalingo area; ▪ East of the Central Dyke - Stage 3 mine expansion area; and ▪ Southeast of Ellalong Main Headings – Bellbird South area. ▪ Resource exclusion zones comprised: – 50 m distance from old workings; – 5 m either side of the Central (dyke is assumed to be 10 m wide);

Criteria	JORC Code explanation	Commentary
		– 5 m either side of Kitchener Dyke which has been interpreted as two separate dykes trending southeast through Stage 3 mine expansion area. Dykes are each assumed to be 10 m wide; – tonnage and quality variables are reported to an in situ moisture content of 5%; and – Resources have been estimated to depths up to 800 m.
Metallurgical factors or assumptions	▪ *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	▪ No raw ash or total sulphur cut-offs were applied to the computer model as Austar wash ROM coal to produce a low ash, high sulphur coal product. Current market specifications are 6.5% product ash and 1.5% product sulphur (adb). Product coal extracted from the Greta seam has been successfully marketed as a blending metallurgical coal as well as thermal coal for the past 33 years. ▪ Based on the coal quality data, the product is not expected to be materially different to the historic product.
Environmental factors or assumptions	▪ *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	▪ Austar is an operating mine that complies with all environmental conditions that relate to extraction of the Greta seam.
Bulk density	▪ *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* ▪ *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* ▪ *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	▪ Relative density (RD) and apparent relative density (ARD) values have been reported on coal core samples in past and present drilling programs. Differing eras of exploration reported either RD or ARD on each ply sample. ▪ For this Resource estimate, coal quality data was separated into those reporting RD or ARD as per information from original coal quality reports. RD and raw ash data were then converted to an in situ moisture basis of 5% (using the Preston and Sanders change of base equation) and a regression was developed to allow estimation of in situ density (ID) for all data, from raw ash values. This included coal quality data which reported ARD only.
Classification	▪ *The basis for the classification of the Mineral Resources into varying confidence categories.*	▪ Coal Resources were estimated within lease areas, CCL728, CML2, ML1666, ML1661 and that part of EL6598 not covered by the previous two leases. The Greta seam Resource

Criteria	JORC Code explanation	Commentary
	▪ *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.*	estimate is for the full seam, and east of the split line the upper part of the Greta seam (Upper Greta). Resources have not been estimated for the Lower Greta seam that splits from the base of the full Greta seam and deteriorates towards the east. Once Resource polygons were defined, the status of Coal Resources within each polygon was classified either as a: – **Measured Resources** - where geological data points based on detailed and reliable exploration, sampling and testing information support a reasonable level of confidence in Greta seam thickness, continuity, coal quality and structure of the Greta seam. Supporting geological information in the form of reprocessed seismic data was also used to interpret continuity of Greta seam along seismic lines. – **Indicated Resources** - where geological data points contributed to a reasonable level of confidence in seam thickness and continuity and some coal quality. Supporting geological information in the form of reprocessed seismic data was also used to interpret continuity of Greta seam along seismic lines. – **Inferred Resources** - where there was a paucity of coal quality data within the area and drillhole spacing was only
Audits or reviews	▪ *The results of any audits or reviews of Mineral Resource estimates.*	▪ No external peer reviews have been completed. ▪
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ Coal Resources have been classified into Measured, Indicated or Inferred Resources depending on the density of points of observation (drillhole and seismic survey data) which provide varying levels of confidence in the Resource estimate. Extensive past underground mining to the west, north and east of current leases provides additional supporting information further up-dip. A geostatistical study on Greta seam parameters such as raw ash, thickness and density has not been completed and is not considered warranted. ROM ash and sulphur have been close to predicted values from the geological model.

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Section 4 Estimation and Reporting of Ore Reserves

The completed Table 1, Sections 4 is in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person, Mr Graeme Rigg on behalf of RPM.

(Criteria listed in Section 1, and where relevant in Sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	▪ *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* ▪ *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	▪ The Coal Resource estimate used as the basis for this Coal Reserves Statement is described as part of this statement. The Resource estimate has been prepared by Mr. Brendan Stats. The Competent Person, Mr. Stats, has sufficient expertise that is relevant to the style of mineralisation and type of deposit and activity to qualify as a Competent Person as specified under the JORC Code and is a member of the Australian Institute of Mining and Metallurgy . ▪ The Resources Statement was compiled in accordance with The JORC Code 2012 Edition. ▪ The Coal Resources reported are inclusive of the Coal Reserves. ▪ The same geological model has been used for the estimation of Resources and Reserves.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ A site visit to the Austar underground was undertaken by the Reserves Competent Person in April 2018. The outcome of these site visits was observation of site and mining conditions and discussion with site operating personnel regarding the operation and the determination of project parameters used in the Austar underground planning process.
Study status	▪ *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* ▪ *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	▪ Austar is an operating mine. LOM studies undertaken during the project planning and design stages have been complemented by actual operating experience and ongoing exploration and assessment.
Cut-off parameters	▪ *The basis of the cut-off grade(s) or quality parameters applied.*	▪ There are no coal quality cut-off parameters used to eliminate the conversion of Coal Resources to Coal Reserves.
Mining factors or assumptions	▪ *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* ▪ *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* ▪ *The assumptions made regarding geotechnical*	▪ LOM planning has been used as the basis of converting Coal Resources to Coal Reserves. ▪ The selected mining method is that in use in the operating mine, i.e. longwall top coal caving ("LTCC") extraction with continuous miner development. ▪ From a geotechnical perspective, the most significant issues relate to coal bursts, rib control and periodic weighting. Of these, the coal burst issue is easily the most significant and ongoing studies are being carried out in order to increase confidence and levels of safety regarding operating in an environment prone to coal bursts.

Criteria	JORC Code explanation	Commentary
	parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. ▪ *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* ▪ *The mining dilution factors used.* ▪ *The mining recovery factors used.* ▪ *Any minimum mining widths used.* ▪ *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* ▪ *The infrastructure requirements of the selected mining methods.*	▪ The depth of cover for the future workings ranges from 450 m - 700 m. These depths are high by Australian standards. ▪ The mining factors used were: – development roadways 5.0 m wide by 3.2 m high; – longwall cutting height 3.2 m; – longwall caving height ≤ 3.9 m; – longwall panel width 226 m; – no coal is lost from the roof or floor of the mineable coal sections during development; – an average of 25% of the coal from the caving section coal will be lost during longwall extraction; – the development roadways incorporate coal tops and bottoms and therefore no out-of-seam dilution has been included for development operations; – 30 mm of higher ash material will be mined with the floor of the coal seam during longwall operations, and that any longwall caving tonnes will be supplemented with an additional 8% (by mass of the caving tonnes) of roof dilution; – the waste rock quality defaults were a relative density of 2.38 t/m3 for floor dilution and 2.40 t/m3 for roof dilution and ash an of 90%; – relative density data in the geological model is based on assumed in situ moisture of 5.0%, while all qualities are based on air dried moisture gridded values; – Preston Sanders has been used in the estimation of in situ moisture; and – ROM moisture will be 6.0%, and product moisture will be 6.0%. ▪ Inferred coal has been excluded from the LOM Plan. ▪ All necessary infrastructure is in place and operational.
Metallurgical factors or assumptions	▪ *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* ▪ *Whether the metallurgical process is well-tested technology or novel in nature.* ▪ *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* ▪ *Any assumptions or allowances made for deleterious elements.* ▪ *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered*	▪ The metallurgical process for washing the target seams is already in place and being used. The configuration of the CHPP includes Dense Media Cyclone ("DMC") and Spirals. The current CHPP module operates at a nominal capacity of 750 tph. ▪ CHPP yield estimates are based on gridded values for the cut section as well as the various plies in the caved section. A composite yield is calculated and then a practical yield adjustment factor is applied to reflect the differences between laboratory yields and the CHPP yield. ▪ Actual yield in 2017 was 91%, against a budget forecast of 90%. Yields are expected to reduce once LTCC operations recommence in the Stage 3 area. ▪ The process generates a semi hard coking coal product from a cut point that will generally produce a less than 9% ash product. Minor areas will produce a higher ash product, which is

Criteria	JORC Code explanation	Commentary
	representative of the ore body as a whole. ▪ *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	expected to be sold as a thermal product. The metallurgical process is appropriate for Austar Mine. ▪ No bypass products assumed in the LOM plan. ▪ No allowance has been made for deleterious elements.
Environmental	▪ *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	▪ An Environmental Impact Statement has been prepared and the necessary environmental approvals obtained. ▪ Coarse rejects are placed within the Pelton open cut void. Washery fines material is pumped to an adjacent property owned by AGL, under an existing agreement.
Infrastructure	▪ *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	▪ All necessary infrastructure is in place and operational for the current operations at the Asset.
Costs	▪ *The derivation of, or assumptions made, regarding projected capital costs in the study.* ▪ *The methodology used to estimate operating costs.* ▪ *Allowances made for the content of deleterious elements.* ▪ *The source of exchange rates used in the study.* ▪ *Derivation of transportation charges.* ▪ *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* ▪ *The allowances made for royalties payable, both Government and private.*	▪ All major infrastructure is in place. Capital forecasts have been included which represent the growth and sustaining requirements for the completion of the LOM plan. ▪ All operating costs are based on LOM planning estimates from Yancoal and have been reviewed by RPM. ▪ Current long-term exchange rate assumptions were provided by Yancoal. ▪ Transport charges based on actual contracted prices taking into account existing Take or Pay arrangements. ▪ NSW state government royalties are included in the estimate. ▪ RPM reviewed all costs and they are considered reasonable.
Revenue factors	▪ *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* ▪ *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	▪ Long term product coal pricing assumptions have been provided by Yancoal Marketing and is based on independent third party research and reporting. ▪ The revenue factors are considered reasonable for the purposes of estimating Reserves.
Market assessment	▪ *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* ▪ *A customer and competitor analysis along with the*	▪ A Marketing Study has not been reviewed however markets are well established for the mine's coal product. The Project typically produces one main product: – SHCC at approx. 6.7% ash (ad).

Criteria	JORC Code explanation	Commentary
	identification of likely market windows for the product. ▪ *Price and volume forecasts and the basis for these forecasts.* ▪ *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	▪ Based upon these products and specifications, RPM anticipates no foreseeable issues in demand for these products.
Economic	▪ *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* ▪ *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	▪ The inputs to the economic analysis are derived capital and operating cost estimates outlined in the "Costs" section of Table 1. The source of the inputs is real and the confidence satisfactory. The economic modelling is in real terms and a range of discount rates have been used in assessing NPV. ▪ The NPV results for the Project produced from economic modelling generated positive and acceptable NPV's for all discount rates and the Project is considered economic from an NPV stand-point. ▪ Sensitivity analysis has been completed on the Project over a range of variable. The Project is most sensitive to changes in exchange rate, revenue and operating costs.
Social	▪ *The status of agreements with key stakeholders and matters leading to social licence to operate.*	▪ There are no native title claims over the area.
Other	▪ *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* ▪ *Any identified material naturally occurring risks.* ▪ *The status of material legal agreements and marketing arrangements.* ▪ *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	▪ All mining projects operate in an environment of geological uncertainty. RPM is not aware of any other potential factors, legal, marketing or otherwise, that could affect the operation's viability.
Classification	▪ *The basis for the classification of the Ore Reserves into varying confidence categories.* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.* ▪ *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	▪ Classification of Coal Reserves has been derived by considering the Measured and Indicated Resources and the level of mine planning. – Measured Resources have been classified as Proved or Probable Reserves, Indicated Resources have been classified as Probable Reserves. – Approximately 10 Mt of Probable Reserves have been derived from Measured Resources.

Criteria	JORC Code explanation	Commentary
		▪ The Inferred Coal Resources have been excluded from the Reserve estimates. ▪ The result reflects the Competent Person's view of the deposit.
Audits or reviews	▪ *The results of any audits or reviews of Ore Reserve estimates.*	▪ Internal peer review of the Reserves Report has been completed.
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* ▪ *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ The mine footprint is supported by approximately 30% of Measured Coal Resources. ▪ The basis of the estimate are actual operating costs and LOM planning. ▪ CHPP and infrastructure are in place and operating. ▪ Analysis of the coal quality has been undertaken by independent laboratories working under international standards of method and accuracy. Coal products from both MTW and HVO is produced from blended washed coal products. ▪ The level of accuracy will continue to be dependent on the ongoing update of the geological model and monitoring of the Modifying Factors affecting the coal estimate. ▪ Geotechnical studies have been completed for the mine. ▪ The major risk in not achieving the estimated Reserve extraction comes from the coal burst issue, specifically how much the issue intensifies with increasing depth of cover, how well the workforce is able to undertake the necessary testing and still maintain economic productivity levels, and willingness of government regulators to continue to allow the operations to continue if coal burst incidents continue to occur.

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JORC Code Disclosure Requirements

Donaldson

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JORC Code, 2012 Edition – Table 1 report template

The completed Table 1, Sections 1, 2 & 3 are in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person Mr Brendan Stats on behalf of RPM.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* ▪ *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* ▪ *Aspects of the determination of mineralisation that are Material to the Public Report.* ▪ *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	▪ Sampling techniques utilised at Donaldson includes sampling of drill cores for coal quality and gas composition analysis, channel samples for coal quality analysis and geophysical sampling using downhole wireline tools. ▪ Where downhole wireline geophysical data has been obtained it generally includes natural gamma, caliper and dual density. On occasions other tools have been acquired, including resistivity and sonic. ▪ Coal quality sampling is extremely detailed in many drillholes, which has generally allowed ply composites to be derived within the geological model. This process provides coal quality results that are representative of the horizons estimated for Resources. Samples are rejected by the modelling software when the sample is not representative of the ply because there is significant difference in thickness. ▪ Wireline logging tools are calibrated by the geophysical logging contractors in accordance with their company standards. ▪ Laboratories currently being used to provide coal quality analysis are NATA accredited and work to Australian and International Standards.
Drilling techniques	▪ *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	▪ 17 different phases of exploration have occurred at the Donaldson Asset since the early 1950s. Hence, a variety of drilling techniques have been utilised. All drillholes are vertical and are fully cored, partially cored or non-cored open holes. The majority of the holes are either non-core or partially cored HQ3 diameter holes.
Drill sample recovery	▪ *Method of recording and assessing core and chip sample recoveries and results assessed.* ▪ *Measures taken to maximise sample recovery and ensure representative nature of the samples.* ▪ *Whether a relationship exists between sample recovery*	▪ Contractual arrangements requiring greater than 95% recovery on a seam basis have been in place for drillholes that have recently been drilled. The recovery is recorded in the geological database for a large portion of holes and it is generally at an acceptable level (>80%). Where the recovery is recorded and it is less than 80% then the sample is rejected from the geological modelling process. Where sample recovery has not been recorded it

Criteria	JORC Code explanation	Commentary
	and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	has been accepted as adequate. No relationship between sample recovery and a quality bias has been identified.
Logging	▪ *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* ▪ *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* ▪ *The total length and percentage of the relevant intersections logged.*	▪ Lithological and geotechnical logging has been undertaken on core and chip samples for the majority of drillholes. For a small collection of older drillholes these data have been lost and these holes are not used in the geological model. In most cases the logging is of a detailed enough nature to provide an accurate reflection of the geology. In most cases lithological logging encompasses the full length of the drillhole.
Sub-sampling techniques and sample preparation	▪ *If core, whether cut or sawn and whether quarter, half or all core taken.* ▪ *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* ▪ *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* ▪ *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* ▪ *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* ▪ *Whether sample sizes are appropriate to the grain size of the material being sampled.*	▪ Samples taken at Donaldson are generally only sub-sampled by the laboratory as a part of their coal quality analysis procedures. Sub-sampling by the lab involves either riffle or rotary splitting in order to receive a representative sub-sample to undertake each step of the analysis procedure. ▪ Historically coal quality samples taken from drillholes have not undergone any pre-treatment, rather they have been crushed to pass 11.2 mm and then analysis preformed. It is understood that coal quality samples received through channel sampling are subject to a pre-treatment process that involves drop shatter, sizing, wet tumbling and hand knapping. ▪ The more modern coal quality analysis has involved analysing ply samples on an individual basis and then re-combining into working/seam sections on an RD x length basis.
Quality of assay data and laboratory tests	▪ *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* ▪ *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* ▪ *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	▪ A portion of historical coal quality results exists; however, they were undertaken at reputable laboratories including R.W. Miller Laboratories, CSIRO Coal Section or ACIRL. These results have been checked and are considered valid. ▪ More recently laboratories including ACTEST and ALS have been utilised to undertake coal quality analysis. These laboratories are NATA accredited and report results to Australian and International Standards.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	▪ *The verification of significant intersections by either independent or alternative company personnel.* ▪ *The use of twinned holes.* ▪ *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* ▪ *Discuss any adjustment to assay data.*	▪ Generally a significant number of coal quality data points exists for each seam allowing anomalous values to be spotted easily. ▪ Values for each variable were checked prior to loading into the geological database and any anomalous values were verified. ▪
Location of data points	▪ *Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* ▪ *Specification of the grid system used.* ▪ *Quality and adequacy of topographic control.*	▪ Drillholes recently completed have been surveyed by a registered surveyor using an RTK GPS system with a base station control. These collars have been captured and stored in the Map Grid of Australia (MGA) 1994 Zone 56 system. ▪ Locations of historical holes are recorded in either the old Integrated Survey Grid (ISG) or in Chains from referenced cadastral locations. ▪ Historical drillhole surveys have been converted to the MGA 94 Zone 56 system; however, the accuracy of the conversion is not known by the Competent Person. ▪ A topographic surface was created in the geological model built in July 2015 using LiDAR data acquired by Donaldson Coal in 2014/2015. The quality and adequacy of the topographic surface is considered good.
Data spacing and distribution	▪ *Data spacing for reporting of Exploration Results.* ▪ *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* ▪ *Whether sample compositing has been applied.*	▪ Drillhole spacing varies across the Donaldson deposit with closely spaced (<200 m) holes distributed across the mined open cut area and down into the current Abel Underground Mine area. South of the Abel Underground Mine area, the spacing between drillholes increases to approximately 1,200 m. A significant database of mapped geological features exists. These features have been mapped in the workings of the now closed Stockrington No.2 and Tasman Mines as well as Abel Underground Mine.
Orientation of data in relation to geological structure	▪ *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* ▪ *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	▪ All drillholes at the Donaldson Project have been drilled vertical and are generally perpendicular to the coal seams. More recent drillholes have had downhole verticality recorded and show little deviation of the drillholes through the strata. ▪ Faults and dykes tend to trend in two strike directions at Donaldson, southeast to northwest and a perpendicular set striking southwest to northeast. Drilling at Donaldson is somewhat sporadic and doesn't conform to a regular grid pattern. However, there is good drillhole coverage of the deposit, which allows for the delineation of major geological structures.
Sample security	▪ *The measures taken to ensure sample security.*	▪ Any sample security measures applied to historical samples is unknown by the Competent Person. Holes recently drilled (those holes completed in 2014) were double bagged with sample tickets included between the bags. A copy of the sample ticket was retained on site at Donaldson Coal.
Audits or reviews	▪ *The results of any audits or reviews of sampling techniques and data.*	▪ The Competent Person does not know of any audits or reviews of the sampling techniques.

Criteria	JORC Code explanation	Commentary
		▪ In 2015 MBGS undertook a large review of the seam and ply correlation as well as a comparison of the coal quality data against the original lab results. This extensive exercise resulted in a completely new geological model, which removed numerous small and several large errors.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	▪ *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* ▪ *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	▪ Donaldson Coal and its subsidiary Newcastle Coal hold title to four exploration licences (EL) and four mining leases (ML). Donaldson Coal also have one mining lease application (MLA) lodged. The tenure held by Donaldson Coal is as follows: – EL5537; – EL5497; – EL5498; – EL6964; – MLA416; – ML1461; – ML1555; – ML1618; – ML1653; and – ML1703.
Exploration done by other parties	▪ *Acknowledgment and appraisal of exploration by other parties.*	▪ In total 17 phases of exploration have been undertaken on the Donaldson deposit. A number of the early exploration phases overlap each other in their timing but were undertaken by different parties in small areas that are now incorporated in Donaldson Coal. ▪ Companies that have undertaken exploration of the Donaldson deposit include Bureau of Mineral Resources, Joint Coal Board, R.W. Miller, Electricity Commission of NSW, J&A Brown, Seaham Collieries, Gollin Wallsend Coal Company, Donaldson Projects Pty Ltd, Callaghans Collieries, Bloomfield Collieries, Excel Coal and Yancoal.
Geology	▪ *Deposit type, geological setting and style of mineralisation.*	▪ Strata from the Late Permian Newcastle Coal Measures and Tomago Coal Measures are present within the Donaldson Coal deposit. These coal bearing formations are overlain by Triassic strata that are devoid of any significant coal occurrences. In total, seven coal seams have been identified in the Newcastle Coal Measures and ten have been identified within the underlying Tomago Coal Measures. Of the 17 coal seams, 13 have been included in the geological model and six have been included in this Resource estimate.

Criteria	JORC Code explanation	Commentary
		▪ Numerous faults and intrusions have been identified at Donaldson using mapping from workings, drillhole intersections and geophysical data. Faults that have been identified are generally minor with only a single significant (approx. 8 m) reverse fault noted. Intrusions at Donaldson tend to be in the form of dykes that intrude the coal seams to varying degrees. Intrusion of coal seams tends to occur in the south of the deposit. ▪ Seam splitting and coalescing is common at Donaldson and is considered extreme in many cases. Coal seams of the Tomago Coal Measures tend to be coalesced through the area covered by the Abel Mine and split rapidly to the west and east of this area. As the seams split, the individual plies thin to a point where their correlation is difficult. Coal seams within the Newcastle Coal Measures are affected by a moderate complexity of splitting and coalescing. One significant feature exists in the West Borehole seam, which has been previously named the 'Want Zone'. This is a zone where the interburden between the plies thickens and the coal plies thin. This feature appears to be caused by an overbank splay affecting the depositional environment.
Drillhole Information	▪ *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* – *easting and northing of the drillhole collar* – *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* – *dip and azimuth of the hole* – *down hole length and interception depth* – *hole length.* ▪ *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	▪ A total of 833 drillholes were supplied and used to estimate the Resources reported here. Of these, 40 drillholes had either incomplete or missing collar data which meant they could not be used in the model. The remaining drillholes were loaded into a Vulcan Isis database along with lithology, seam/ply picks and coal quality information. Drillholes used in the evaluation and estimation of the Coal Resources reported in the document are shown on the accompanying figures. Provision of further information would not change the materiality of the Coal Resource reported.
Data aggregation methods	▪ *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* ▪ *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* ▪ *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	▪ Where numerous samples fall within a ply horizon they are composited in Vulcan using relative density and sample length in order to generate coal quality values on a ply basis.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	▪ *These relationships are particularly important in the reporting of Exploration Results.* ▪ *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* ▪ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	▪ All drillholes at Donaldson Coal are drilled vertically. Some minor deviation of the drillholes has occurred and the seams dip at approximately 5° to the southeast; however, bias is not expected to be introduced by these minor variations.
Diagrams	▪ *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	▪ All relevant figures depicting information considered material to the Coal Resources reported are contained within the JORC report associated with this Table 1.
Balanced reporting	▪ *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	▪ Where values appeared anomalous and their accuracy could not be validated they were not included in the data used to generate the geological model. This only occurred on a small set of data. All other values have been included in the construction of the database, development of the model and estimation of the Coal Resources. Weighted average coal quality values have been reported in the Resource tables to summarise a complex set of data and these values are considered representative of the Donaldson deposit.
Other substantive exploration data	▪ *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	▪ The Stockrington No.2 Colliery extensively mined the West Borehole seam within the Donaldson Coal tenure. Mapping of geological features, such as faults and dykes, provides a widespread dataset that covers large portions of the Donaldson deposit.
Further work	▪ *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* ▪ *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	▪ No further exploration is planned at this time.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	▪ *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* ▪ *Data validation procedures used.*	▪ In 2015 MBGS undertook an extensive re-correlation exercise, which resulted in an entirely new geological model being developed. This exercise included: – checking the correction of every hole with geophysics; – picking ply and seam boundaries for hole with geophysics or graphic logs; and – validating coal quality against original lab reports. ▪ This exercise removed many errors from the Donaldson Coal dataset. ▪ Validation of the data was undertaken after loading into the Vulcan Isis database using Vulcan's validation tools. Grids were also visually inspected for anomalies using isopach contouring. Statistics were also run on all grids to identify any significant anomalous values. ▪ RPM reviewed the geological model database using logic, statistical and regression analysis. RPM reviewed the geological model to assess if the modelling method was appropriate and that the resultant model honoured the drillhole data. ▪ RPM considers the geological data suitable for the estimate of Coal Resources.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ The Donaldson site is currently on care and maintenance. ▪ The Resources Competent Person was unable to visit the site but interviewed the previous Competent Person who has visited the site on numerous occasions and who was responsible for developing the geological model. From a Resources perspective, the geological understanding is based on the drillhole data and the geological model which was reviewed.
Geological interpretation	▪ *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* ▪ *Nature of the data used and of any assumptions made.* ▪ *The effect, if any, of alternative interpretations on Mineral Resource estimation.* ▪ *The use of geology in guiding and controlling Mineral Resource estimation.* ▪ *The factors affecting continuity both of grade and geology.*	▪ A reasonably extensive dataset exists for Donaldson in the form of both drillholes and operational mapping. These data provide a reasonable level of confidence for most of the Donaldson deposit. Seam splitting is a prominent feature of the Donaldson geology and it has a significant impact on the continuity and quality of potential mining sections. This has been taken into consideration during the classification and estimation of the Coal Resources for Donaldson Coal.
Dimensions	▪ *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	▪ The Donaldson coal deposit is approximately 12 km wide by 15 km long. Within those dimensions, target coal seams can change character considerably and may not be a Resource over the entire area due to splitting and seam deterioration. Coal seams subcrop in the northern portion of Donaldson leases and extend to depths in excess of 300 m towards the south.
Estimation and modelling techniques	▪ *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining,*	▪ Early in 2015 MBGS undertook a complete review of the Donaldson deposit correlation. This process resulted in the development of an entirely new database. Using this database, which houses lithology and coal quality data, MBGS developed an updated geological model. The

Criteria	JORC Code explanation	Commentary
	interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. ▪ *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* ▪ *The assumptions made regarding recovery of by-products.* ▪ *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* ▪ *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* ▪ *Any assumptions behind modelling of selective mining units.* ▪ *Any assumptions about correlation between variables.* ▪ *Description of how the geological interpretation was used to control the resource estimates.* ▪ *Discussion of basis for using or not using grade cutting or capping.* ▪ *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	geological model was generated in July 2015 using standard grid modelling practices in Maptek's Vulcan software (version 9). Design data consisting of points and lines were applied to control the up-dip and down-dip geometry of the coal seams away from the drillhole extents. These controls are outside of the Donaldson Coal tenure and are used to prevent the software from flattening seams back to horizontal where no actual data exists. ▪ Structure map files were generated using FixDHD for each of the 107 plies included in the geological model. Grid surfaces for structure roof, structure floor, thickness and interburden were created at a 25 m mesh size. ▪ Raw coal quality grids for seven variables were generated from a FixDHD database. Using a FixDHD database allowed the samples for parent plies to be used by splitting the parent ply into its children. Raw coal quality grids at a mesh size of 25 m were generated for ash, moisture, fixed carbon, volatile matter, total sulphur, specific energy and in situ density. All coal quality variables, with the exception of in situ density, were modelled at a standardised air dried moisture of 2.5%. In situ density was modelled at an in situ moisture of 4%. In situ density was derived by applying regression equations to raw ash values. Coal Technologist, Bob Leach developed two regression equations for the Donaldson data, one for samples with raw ash values less than 50% (air dried basis) and another for samples with raw ash values greater than 50% (air dried basis). ▪ RPM reviewed the geological model to confirm estimations output by the software are valid. ▪ Resources were estimated within vertical sided polygons, which provided a 'cookie cutter' limit to each area classified. In situ density grids were used to convert volume into tonnes within the Vulcan software.
Moisture	▪ *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	▪ Coal quality has been standardised to a 2.5% moisture basis in prior to loading into the Vulcan database and all quality variables were modelled at this basis with the exception of in situ density. In situ density was calculated at 4% in situ moisture basis. These moisture values are typical for these coals in this region.
Cut-off parameters	▪ *The basis of the adopted cut-off grade(s) or quality parameters applied.*	▪ Minimum seam thickness was 1.2 m and maximum parting thickness was 0.3 m. Raw ash cut-off was 50% for most seams except the Lower Donaldson seam. In this instance a 55% ash cut-off was used.
Mining factors or assumptions	▪ *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the*	▪ Resources were estimated within the confines of the seam's subcrop and within the tenements holdings. No surface constraints were applied to the Resource estimate, and no minimum interburden thicknesses were considered for vertically overlapping underground Resources, on the premise that geotechnical and financial (Reserves) considerations would define the most economic option.

Criteria	JORC Code explanation	Commentary
	assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	▪ Cinder zones around dykes are thin (<0.5 m) and have not been excluded from Resources. Fault throws within existing mine workings do not have a material impact on Resources. Faults with throws greater than seam height exist in the northeast (8 m thrust fault) and in the northwest, where seam limits are bound by a north-south normal fault. ▪ Two seams, the Sandgate and Ashtonfield were included in the previous Resource estimate. These seams were excluded from this Resources estimate due to the conclusion by this Competent Person that they did not meet the 'Reasonable Prospects' test as they are unlikely to be developed, principally due to the thickness of each seam.
Metallurgical factors or assumptions	▪ *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	▪ High ash cut-off of 50% (is) raw ash was applied to the Coal Resource. Abel Mine previously produced thermal and semi-soft coking coals. Coals that are quoted in the Resource estimate have been mined and processed in previous mine operations in the area.
Environmental factors or assumptions	▪ *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	▪ Donaldson Coal maintains title over two mining leases and five exploration licences, which have environmental conditions that Donaldson Coal uphold.
Bulk density	▪ *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* ▪ *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* ▪ *Discuss assumptions for bulk density estimates used in*	▪ In situ density was calculated for all samples using two regression equations developed by coal quality specialist Bob Leach. Bob Leach provided one regression equation for samples under 50% ash (adb) and another for samples over 50% ash (adb). In situ density was calculated at an in situ moisture of 4%.

Criteria	JORC Code explanation	Commentary
	the evaluation process of the different materials.	
Classification	▪ *The basis for the classification of the Mineral Resources into varying confidence categories.* ▪ *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.*	▪ Status of Coal Resources were classified either as: – **Measured Resources** - where geological data points based on detailed and reliable drillhole data, sampling and testing information support a reasonable level of confidence in seam thickness, continuity and coal quality of the seam. Adjacent past workings (if present) provide additional supporting information confirming seam presence and continuity. Distance between drillholes can be up to 700 m depending on the consistency of seam character. – **Indicated Resources** - where geological data points contribute to a reasonable level of confidence in seam thickness and continuity and coal quality. Distance between drillholes can be up to 1,300 m depending on the consistency of seam character. – **Inferred Resources** - where there is a paucity of coal quality data and drillhole spacing is only sufficient to delineate seam thickness to a low level of confidence. Distance between drillholes is generally greater than 1,500 m.
Audits or reviews	▪ *The results of any audits or reviews of Mineral Resource estimates.*	▪ No external audits or reviews have been undertaken with regards to the Coal Resource estimate.
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ Coal Resources for Donaldson Coal have been classified into confidence categories (Measured, Indicated & Inferred) based on the Competent Person's assessment of the data and understanding of the geology. These confidence categories, and the appropriate rounding that has been applied, reflect the accuracy and confidence of the Resource estimate. ▪ Coal Resources have been reported within polygons that contain multiple drillhole intersections. The estimate is therefore considered a global estimate.

Section 4 Estimation and Reporting of Ore Reserves

The completed Table 1, Sections 4 is in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person, Mr Graeme Rigg on behalf of RPM.

(Criteria listed in Section 1, and where relevant in Sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	▪ *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* ▪ *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	▪ The Coal Resource estimate used as the basis for this Coal Reserves Statement is described as part of this statement. The Resource estimate has been prepared by Mr. Brendan Stats. The Competent Person, Mr. Stats, has sufficient expertise that is relevant to the style of mineralisation and type of deposit and activity to qualify as a Competent Person as specified under the JORC Code and is a member of the Australian Institute of Mining and Metallurgy . ▪ The Resources Statement was compiled in accordance with The JORC Code 2012 Edition. ▪ The Coal Resources reported are inclusive of the Coal Reserves.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ Multiple site visits to the Abel underground have been undertaken by the Reserves Competent Person. The outcome of these site visits was observation of site and mining conditions and discussion with site operating personnel regarding the operation and the determination of project parameters used in the Donaldson underground planning process.
Study status	▪ *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* ▪ *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	▪ Abel Mine is currently on care and maintenance, following cessation of the bord and pillar operations over a number of years of low coal prices. LOM studies have been complemented by ongoing exploration and assessment.
Cut-off parameters	▪ *The basis of the cut-off grade(s) or quality parameters applied.*	▪ There are no coal quality cut-off parameters used to eliminate the conversion of Coal Resources to Coal Reserves. LOM planning has been used to determine whether Coal Resources will convert to Coal Reserves.
Mining factors or assumptions	▪ *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* ▪ *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* ▪ *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* ▪ *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* ▪ *The mining dilution factors used.*	▪ LOM planning has been used as the basis of converting Coal Resources to Coal Reserves. ▪ The selected mining method is conventional longwall extraction with continuous miner development. ▪ Geotechnical studies have been carried out to determine roadway and longwall behaviour. ▪ Groundwater studies have been carried out to estimate groundwater impacts and inflows. ▪ Gas studies have been carried out to determine seam gas content and composition, and likely gas management requirements. ▪ The mining factors used were: – Development roadways 5.4 m wide by 2.7 m high – Longwall operating height 2.4 m - 3.2 m – Longwall panel width 250 m - 300 m

Criteria	JORC Code explanation	Commentary
	▪ *The mining recovery factors used.* ▪ *Any minimum mining widths used.* ▪ *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* ▪ *The infrastructure requirements of the selected mining methods.*	– It is assumed that no coal is lost from the roof or floor of the mineable coal sections during development or longwall extraction; – Seam splitting and seam thickness variation across the target area results in stone forming part of the working section (mid-seam or at the seam roof) during development and longwall operations, thereby diluting the in situ coal quality. – The quality defaults assigned to the waste rock were assumed to be relative density of 2.2 t/m^3, ash of 80%, and specific energy of 0 kcal/kg; – Relative density data in the geological model is based on assumed in-situ moisture of 2.5%, while all qualities are based on air-dried moisture gridded values. – Preston & Sanders has been used in the estimation of in situ moisture. – RPM has assumed that ROM moisture will be 6%, and product moisture will be 11%. ▪ Inferred Coal Resources do exist within the LOM Plan footprint but have been excluded from Reserve estimates. ▪ The majority of necessary infrastructure is in place.
Metallurgical factors or assumptions	▪ *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* ▪ *Whether the metallurgical process is well-tested technology or novel in nature.* ▪ *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* ▪ *Any assumptions or allowances made for deleterious elements.* ▪ *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole.* ▪ *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	▪ The metallurgical process for washing the target seams is already in place, having been used for washing the coal from the Abel bord and pillar operations. The configuration of the CHPP includes Dense Media Cyclone ("DMC"), Spirals/Reflux separator, and Flotation processes. The current CHPP capacity is approximately 5.1 Mtpa, but this could be increased to approximately 6.8 Mtpa by implementing a 24/7 operation. ▪ The process generates a medium ash thermal product. The metallurgical process is appropriate for the Donaldson/Abel mine. ▪ Yancoal commissioned a coal quality expert to review production data and determine an estimate of current yield at Donaldson/Abel. ▪ No bypass products assumed in the LOM plan. ▪ No allowance has been made for deleterious elements. ▪ Last dot point is not applicable for coal.
Environmental	▪ *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	▪ An Environmental Impact Statement has been prepared and environmental approvals obtained for longwall mining. It is anticipated that some modifications to the approval will be required following additional exploration licence areas being added to the existing areas, further assessment and further modification of the proposed mine layout. ▪ Coarse rejects and washery fines are placed within the Bloomfield open cut void.

Criteria	JORC Code explanation	Commentary
Infrastructure	▪ *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	▪ The majority of necessary infrastructure is in place for the current operations at the Asset.
Costs	▪ *The derivation of, or assumptions made, regarding projected capital costs in the study.* ▪ *The methodology used to estimate operating costs.* ▪ *Allowances made for the content of deleterious elements.* ▪ *The source of exchange rates used in the study.* ▪ *Derivation of transportation charges.* ▪ *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* ▪ *The allowances made for royalties payable, both Government and private.*	▪ Abel mine is currently on care and maintenance. Subsequent capital expenditure will be limited primarily to items associated with the change from bord and pillar operations to longwall operations. ▪ All operating costs are based on LOM planning estimates from Yancoal and have been reviewed by RPM. ▪ Current long-term exchange rate assumptions were provided by Yancoal. ▪ Transport charges based on actual contracted prices taking into account existing Take or Pay arrangements. ▪ NSW state government royalties are included in the estimate. ▪ RPM reviewed all costs and adjusted them where necessary.
Revenue factors	▪ *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* ▪ *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	▪ Long term product coal pricing assumptions have been provided by Yancoal Marketing and is based on independent third party research and reporting. ▪ The revenue factors are considered reasonable for the purposes of estimating Reserves.
Market assessment	▪ *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* ▪ *A customer and competitor analysis along with the identification of likely market windows for the product.* ▪ *Price and volume forecasts and the basis for these forecasts.* ▪ *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	▪ A Marketing Study has not been reviewed however markets are well established for the mine's coal products. The projects typically produce up to four main products: – Thermal at approx. 14.5 - 33% ash (ad); and – SSCC at approx. 9.5% ash (ad). ▪ Product Coal specifications were based on assessment by A&B Mylec. ▪ Based upon the product and specifications, RPM anticipates no foreseeable issues in demand for the product.
Economic	▪ *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* ▪ *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	▪ The inputs to the economic analysis are derived capital and operating cost estimates outlined in the "Costs" section of Table 1. The source of the inputs is real and the confidence satisfactory. The economic modelling is in real terms and a range of discount rates have been used in assessing NPV.

Criteria	JORC Code explanation	Commentary
		▪ The NPV results for the Project produced from economic modelling generated positive and acceptable NPV's for all discount rates and the Project is considered economic from an NPV stand-point. ▪ Sensitivity analysis has been completed on the Project over a range of variable. The Project is most sensitive to changes in exchange rate, revenue and operating costs. ▪ GCL currently pays significant rail and port Take or Pay penalties for Abel Mine. Once the mine becomes operational again (assuming favourable economic conditions) it will be necessary for the rail and port contracts to mesh better with the actual mine output, otherwise Take or Pay penalties could impact significantly on project value.
Social	▪ *The status of agreements with key stakeholders and matters leading to social licence to operate.*	▪ Further exploration is planned for areas outside the existing tenements. The additional exploration and subsequent assessment may require modification of existing approvals, or the establishment of additional agreements.
Other	▪ *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* ▪ *Any identified material naturally occurring risks.* ▪ *The status of material legal agreements and marketing arrangements.* ▪ *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	▪ All mining projects operate in an environment of geological uncertainty. RPM is not aware of any other potential factors, legal, marketing or otherwise, that could affect the operation's viability. ▪ As mining proceeds it is reasonably expected any modifications to existing agreements or additional agreements that may be required can be obtained as required.
Classification	▪ *The basis for the classification of the Ore Reserves into varying confidence categories.* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.* ▪ *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	▪ Classification of Coal Reserves has been derived by considering the Measured and Indicated Resources and the level of mine planning. – Both Measured and Indicated Resources have been classified as Probable Reserves. – Approximately 1 Mt of Probable Reserves have been derived from Measured Resources. ▪ The Inferred Coal Resources have been excluded from the Reserve estimates. ▪ The result reflects the Competent Persons view of the deposit.
Audits or reviews	▪ *The results of any audits or reviews of Ore Reserve estimates.*	▪ Internal peer review of the Reserves Report has been completed.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* ▪ *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ The mine footprint is supported by approximately 2% of Measured Coal Resources, with the bulk of the rest of the footprint supported by Indicated Coal Resources. ▪ The basis of the estimate are estimated operating costs and comparison with typical industry mining costs. ▪ CHPP and surface infrastructure is in place. ▪ Analysis of the coal quality has been undertaken by independent laboratories working under international standards of method and accuracy. ▪ The level of accuracy will continue to be dependent on the ongoing update of the geological model and monitoring of the Modifying Factors affecting the coal estimate. ▪ Geotechnical studies have been completed for the mine. ▪ Additional exploration is proposed in areas outside of the current tenements, as well as within the proposed mine footprint. ▪ The major risk in not achieving the estimated Reserve extraction comes from the low project NPV and the exposure of the project's economic viability to future variations in coal prices.

RPMGLOBAL

JORC Code Disclosure Requirements

Middlemount

RPMGLOBAL

JORC Code, 2012 Edition – Table 1 report template

The completed Table 1, Sections 1, 2 & 3 are in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person Mr Michael Johnson on behalf of RPM.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* ▪ *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* ▪ *Aspects of the determination of mineralisation that are Material to the Public Report.* ▪ *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	▪ The Middlemount Mine has been in operation since November 2011. ▪ The Middlemount Mine area contains some 1,073 boreholes which forms the knowledge basis of the coal deposit; 732 of which were used in the 2018 geological model. ▪ Open hole drilling was used for structure control. ▪ Open holes are sampled at 1 m intervals. ▪ Core drilling was used for the collection of coal quality information. ▪ Core drilling is typically by both HQ (nominal 60 mm diameter) and 100 mm diameter tungsten carbide drill bits and triple tube barrels which are standard industry practice. ▪ Core hole locations are selected based on the ability to fully represent the Coal Resource at the particular location in the deposit taking the structural complexity into consideration. ▪ Cored holes are typically sampled at 10 cm and a maximum of 1 m intervals so that the quality of the seam can be characterised for raw coal ash. ▪ All non-coal bands greater than 5 cm thick are sampled and tested separately. ▪ Samples were selected based on the coal brightness in an attempt to maximise coking potential (typically associated with brighter coals) and provided with a unique sample number before being placed into double plastic bags and sealed. ▪ Raw coal ash and CSN are used to determine the coal mining sections for washed coal products. ▪ The entire seam was sampled in each occasion. ▪ Roof and floor strata were also sampled and tested. Dilution samples are 20 cm to 30 cm in length.
Drilling techniques	▪ *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	▪ Industry standard drilling techniques are used, with conventional rotary table drill rigs using air and water circulation. ▪ All drilling has been completed using vertical drill orientation. No core orientation has been performed.

Criteria	JORC Code explanation	Commentary
		▪ Blade/Hammer/PCD bits were used to drill open (chip) holes. ▪ Partially cored 4-inch (100 mm) core holes were drilled to obtain coal quality information. It is estimated that 40% of core holes are 4-inch; the remainder are HQ (nominally 60 mm diameter). ▪ Where geological complexity increased, 4-inch core barrels were used to maximise core recovery. Minimum core recovery for core holes used in the model was 90%. It is observed that the brightest, lowest ash, friable/brittle coal is more susceptible to core loss, especially in faulted areas. Core loss usually occurs between core runs, and thus the maximum 4C core barrel length of 4.5 m was used to minimise the number of core runs. ▪ Contractually, a redrill is required if less than 95% core recovery is obtained. Recovery less than 95% is occasionally accepted if the drilling environment is difficult, or the loss is deemed acceptable via comparing against geophysics density, and the position of the loss in the seam.
Drill sample recovery	▪ *Method of recording and assessing core and chip sample recoveries and results assessed.* ▪ *Measures taken to maximise sample recovery and ensure representative nature of the samples.* ▪ *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	▪ Coring instructions followed by field geologists at Middlemount are based on the industry-standard CoalLog Manual for Geology & Geotechnical Data Collection. ▪ Core recovery is recorded by the rig geologist at the time logging the bore hole, based on measurements taken of the cored interval and the core recovered and visual inspection of the core. Actual recovered core lengths are measured with a tape measure and any core loss is recorded in geological logs, coal quality sample intervals and in the run by run drilling record field sheets. ▪ Core loss is confirmed by the rig geologist after comparing the recovered core to the geophysical logs to determine which parts if any of the seam are missing due to core loss. ▪ Core loss is recorded and excluded from samples in accordance with the CoalLog Manual for Geology & Geotechnical Data Collection. ▪ Historic boreholes do not comply with CoalLog Manual for Geology & Geotechnical Data Collection. ▪ The database contains 3,312 coal quality samples, of which 2,266 are of coal. 95% of these samples have valid proximate analysis. ▪ If core recovery for a coal ply is less than 95%, then that section of the hole is redrilled to ensure a representative sample is taken, provided that the cored hole is not located in an area of high structural complexity, in which case lower core recovery is accepted, but may not be used in the Resource model. ▪ Open hole chip recovery is assessed qualitatively by the rig geologist.
Logging	▪ *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies*	▪ Standardised Peabody logging systems and protocols are utilised for all drilling, logging and sampling.

Criteria	JORC Code explanation	Commentary
	and metallurgical studies. ▪ *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* ▪ *The total length and percentage of the relevant intersections logged.*	▪ Core is geologically logged and open hole chip samples are taken every 1 m and logged for lithology changes. ▪ All holes have been lithologically logged, with cored coal sections brightness logged. The logging of the chip and core samples is detailed and includes a record of the recovery of the total length and the cored length, rock type, stratigraphic unit and numerous adjectives to describe the sample in terms of colour, grainsize, bedding etc. all of which is sufficient to describe the various lithologies and coal samples to support the Coal Resource estimation from a geological and coal quality consideration. ▪ Geotechnical drilling is completed by Middlemount, particularly around faulted areas, and where the Girrah seams are up thrown and appear at the top of the open cut highwall. ▪ Geotechnical boreholes have been drilled vertically. ▪ Bore core is photographed on both the core table (0.5 m increment). ▪ An estimated 75% of the Resource uses holes with digital geophysical logs. Some older holes only have paper copy geophysics. The holes without geophysics appear to have been corrected to geophysics, and reliability has been verified from newer drilling, and mining. Holes confirmed to be unreliable have been flagged in the Isis database to avoid accidental use during modelling. In some areas these holes have been redrilled. ▪ The standard geophysical tools used were: density, gamma and caliper. Selected historic holes have verticality, sonic, resistivity, temperature and spontaneous potential sondes run in the holes. ▪ Drill hole vertically data was used (when available) to orientate and locate the boreholes and the coal seams for inclusion in the structural model. An estimated 10% of the Resource was modelled using verticality data.
Sub-sampling techniques and sample preparation	▪ *If core, whether cut or sawn and whether quarter, half or all core taken.* ▪ *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* ▪ *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* ▪ *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* ▪ *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* ▪ *Whether sample sizes are appropriate to the grain size of the material being sampled.*	▪ Core sampling is completed at the drill site and is based on a set of standard criteria (determined by lithology and structure) that follows the Middlemount sampling procedure. ▪ All samples were photographed, double bagged, and provided with a unique sample identifier prior to sending to the laboratory. ▪ Whole samples were used for quality analysis. ▪ All samples within the seam extents were analysed. ▪ Carbonaceous material, and all stone bands were sampled to ensure that full coverage of each seam was obtained. ▪ Sample depths have been reported as the geophysically corrected depths. ▪ Samples were air dried and weighed prior to analysis. Raw analysis samples were crushed to -12.5 mm and split into portions using a rotary splitter prior to coal quality analysis.

Criteria	JORC Code explanation	Commentary
		▪ Washability analysis was conducted across the Resource area. The analysis was conducted in accordance with the Middlemount washability procedure.
Quality of assay data and laboratory tests	▪ *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* ▪ *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* ▪ *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	▪ Only core samples are used to obtain coal quality information. ▪ Only third party NATA certified labs were used for sample analysis. Labs conduct round robin validation checks to ensure a high standard of reporting is maintained. ▪ All samples were analysed for raw coal quality. ▪ Sample instructions were issued by Middlemount Coal personnel. ▪ Middlemount Coal currently uses the ALS Global Coal Quality laboratory at Richlands, QLD, following appropriate Australian Standards for coal testing.
Verification of sampling and assaying	▪ *The verification of significant intersections by either independent or alternative company personnel.* ▪ *The use of twinned holes.* ▪ *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* ▪ *Discuss any adjustment to assay data.*	▪ At the laboratory, all samples are registered into both Coal8 & LabSys – ALS's own sample tracking software systems (approved by NATA). This registration is confirmed by Asset Manager against the original client instructions, and each sample and its subsequent children are affixed with a designated sticker containing all the sample details and a scannable barcode. ▪ Samples are analysed according to client procedures. As samples are analysed the barcode is used to log each result to that sample. ▪ Results are quarantined and repeated if they do not meet the requirements of the appropriate Australian or ISO Standards. Controls are run with each batch of samples to ensure the testing apparatus is operating properly. Asset Managers and Laboratory Managers/Supervisors approve these results. ▪ Laboratory Asset Managers collate and validate the data, looking for abnormalities in the results. The primary means of validation include looking for known trends in the data, by creating cross plots of the results on a seam by seam basis. Typical industry practices include the comparison of the following (for example): – Ash vs. Relative Density, – Volatile Matter vs. Ash, – Specific Energy vs. Volatile Matter, and – Ash vs. Total Sulphur ▪ Sample results are also validated in-house by Middlemount Coal employees. ▪ Twinned core holes have only been drilled where initial sample recovery was not acceptable for analysis. ▪ All coal quality data is stored in Peabody's internal data managements system.

Criteria	JORC Code explanation	Commentary
		▪ The coal quality laboratories provide the results of coal quality testing to Middlemount in a template which is directly uploaded into Peabody's internal data management system. CSV files are exported from this system for modelling, which eliminates transcription and key in errors arising from data transfer. ▪ Validation is conducted before and after the data is loaded into Peabody's internal data management system. ▪ Relative density is adjusted for Preston Sanders, using the assumed bed (in situ) moisture of 5%, which is consistent for the rank of the coal present at Middlemount.
Location of data points	▪ *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* ▪ *Specification of the grid system used.* ▪ *Quality and adequacy of topographic control.*	▪ The initial borehole coordinates are obtained using handheld GPS by the site geologist using Aus Geoid heights and GDA94 Zone 55 datum and projection system. ▪ Final borehole collar survey is completed by the Middlemount Coal personnel trained in surveying, using the Middlemount Mine base station calibrated to GDA94_55. ▪ Geological models are developed from topographic data from Middlemount Coal supplied Digital Terrain Model (DTM) data for the Middlemount area, as at the end of June 2018. ▪ The topographic surface at Middlemount is essentially flat lying. ▪ In the case that older boreholes were not surveyed in line with CoalLog Manual for Geology & Geotechnical Data Collection, the holes have been reviewed and where elevations were questions, adjusted to DTM levels. Else, these locations have been redrilled.
Data spacing and distribution	▪ *Data spacing for reporting of Exploration Results.* ▪ *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* ▪ *Whether sample compositing has been applied.*	▪ There is a low to moderate level of geological structural complexity at Middlemount, therefore, relatively wide-spaced hole distribution has been employed to correlate the Resource to an acceptable level of confidence (i.e. approximately 200 m). ▪ Where the seam is cropping, line of oxidation (LOX) drilling has been completed, with 100m-long parallel lines drilled with approximately 50 m between lines and 25 m between holes. The LOX line drilling extends for approximately 4 km of strike length within the mining area. ▪ The spacing of exploration drill holes is reduced as certainty of inclusion of Resources into the LOM increases. ▪ Borehole spacing is not the overarching criteria for determining the spacing of exploration. Geological certainty is the prime requirement at the completion of exploration. In other words the greater the geological complexity, the closer the final borehole spacing.
Orientation of data in relation to geological structure	▪ *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* ▪ *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	▪ Drill holes were oriented and drilled vertically. ▪ In areas of steep bedding dip, drill holes often have a high percentage of deviation. ▪ LOX holes have been drilled perpendicular to the strike of the coal seam being investigated. ▪ Verticality data was acquired during geophysical logging for holes drilled in 2017 only (10% of modelled holes).

Criteria	JORC Code explanation	Commentary
		▪ Core orientation has not been measured.
Sample security	▪ *The measures taken to ensure sample security.*	▪ Core samples are bagged by the geologist and dispatched to the laboratory by dedicated courier service. ▪ Sample instructions are provided to the laboratory. ▪ In light of the bulk commodity nature of coal, no higher level security measures are deemed necessary since it is very unlikely to be subject to material impact from sample tampering theft or loss.
Audits or reviews	▪ *The results of any audits or reviews of sampling techniques and data.*	▪ The coal quality laboratory is audited by external auditors as a requirement under the NATA accreditation. ▪ All updates to the geological data or model have been documented following internal checklists and reporting documentation. ▪ Peer review of the 2018 JB Mining model has been completed by Carol Rolley, confirming consistency between JORC Table 1 and the model report. ▪ Resource estimation checks have been completed by Spencer Summers of Peabody Energy. ▪ Resource estimation checks have also been completed internally by RPM Geologists.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	▪ *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* ▪ *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	▪ All Resources lie within Mining Leases held by Middlemount Coal Pty Ltd, which is a joint venture between Peabody Energy Australia Pty Ltd (50.003%) and Yancoal Australia Ltd (49.997%). There are no overriding royalties, native title interests, historical sites or wilderness or national park and environmental settings over these Mining Leases. ▪ Middlemount Coal has title to ML70379, ML70417, MDL282 and infrastructure mining leases ML700014 and MLA700027. ▪ The Resources have been reported for ML70379, ML70417 and MDL282 only. ▪ The tenure licence for ML70379 will expire on 30 September 2031. The primary activity undertaken on this lease is mining. ▪ The tenure licence for ML70417 will expire on 30 September 2031. The primary activity undertaken on this lease is mining.

Criteria	JORC Code explanation	Commentary
		▪ The tenure licence for MDL282 will expire on 30 April 2020. The primary activity undertaken on this lease is exploration. ▪ The tenure licence for ML700014 will expire on 30 September 2031. The primary use for lease is infrastructure location.
Exploration done by other parties	▪ *Acknowledgment and appraisal of exploration by other parties.*	▪ 40/732 model holes (0.05%) were drilled in the 1970-80's by Anglo American. ▪ 93/732 model holes (12.7%) were drilled in the 1980's by Capricorn Coal (CapCoal) Pty Ltd. ▪ 39/732 model holes (0.05%) were drilled in 2006-07 by Custom Mining. ▪ 550/732 model holes (75.1%) were drilled from by 2008-2017 were drilled by Middlemount Coal, including three water bores. ▪ 10/732 model holes (0.01%) were drilled by other companies during the exploration history of the tenure. ▪ All known historical drilling has been incorporated into the Middlemount Isis database. The term 'historical drilling' used by Middlemount Coal, refers to all boreholes completed prior to 2008. ▪ No drilling is conducted on Middlemount Coal's mining leases by other parties.
Geology	▪ *Deposit type, geological setting and style of mineralisation.*	▪ The Middlemount deposit is located in the central region of the Bowen Basin and targets the Permian Rangal Coal Measures of the Blackwater Group. ▪ The major regional structure is the north-northwest oriented Jellinbah fault, a thrust fault with over 300 m throw. The Jellinbah faults bisects Middlemount's ML70379. ▪ To the west of the Jellinbah fault, small-scale (<10 m) faults have been detected in mining and exploration. ▪ The cropping coal of the Middlemount deposit is located to the west of the Jellinbah fault, which also bounds the eastern extent of the Resource area. ▪ The coal seams strike north-northwest also, and dip at an average of 5-8° to the east. ▪ The deposit dimensions are approximately 7 km in length north-northwest, by 2 km in width west-east. ▪ The seam structure is complicated by seam splitting and localised thickening of seams around faulted zones.
Drill hole Information	▪ *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* – *easting and northing of the drill hole collar* – *elevation or RL (Reduced Level – elevation above sea level*	▪ All borehole data is stored within the Middlemount Isis database. ▪ The Isis database associated with the 2018 Vulcan model contains 1,076 boreholes, of which 481 are cored holes of various diameters.

Criteria	JORC Code explanation	Commentary
	in metres) of the drill hole collar – *dip and azimuth of the hole* – *down hole length and interception depth* – *hole length.* ▪ *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	▪ A total of 344 boreholes are not used in the geological model, as they are either located outside the current model area; they occur to the east of the Jellinbah fault; they did not intersect coal measure strata; the hole was redrilled; or the data was considered unreliable. ▪ The majority of boreholes in the Resource area at Middlemount are modern data that was acquired post-2008.
Data aggregation methods	▪ *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* ▪ *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* ▪ *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	▪ Samples collected by the field geologist may be combined prior to raw coal analysis, based on the seam naming from review of the geophysical logs. ▪ Samples may be combined after raw coal analysis to create composites (for washability and product coal analyses) that represent the mineable seam working sections. ▪ Individual sample parameters have been weighted by thickness and density (mass weighting), except for relative density (RD), which is composited based on thickness only. ▪ There are no metal equivalents used to report the Coal Resources. This is not a standard reporting practice for Coal Resources.
Relationship between mineralisation widths and intercept lengths	▪ *These relationships are particularly important in the reporting of Exploration Results.* ▪ *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* ▪ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	▪ All boreholes at Middlemount are planned as vertical. However due to the bed dips the holes tend to deviate 'up-dip' so that with sufficient depth the hole is perpendicular to the seam. ▪ Downhole deviation data has been collected on holes drilled in 2017 to provide a higher degree of certainty to the location of the coal seams in the boreholes.
Diagrams	▪ *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	▪ All relevant figures depicting information considered material to the Coal Resources reported are contained within the JORC report associated with this Table 1.
Balanced reporting	▪ *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	▪ All valid exploration data for the Middlemount project has been collated and reported accordingly. ▪ Some exploration holes have not been included in the geological model, as they are either located outside the current model area; they occur to the east of the Jellinbah fault; they did not intersect coal measure strata; the hole was redrilled; or the data was considered unreliable, or misrepresentative (of coal quality results). However, sufficient coverage of

Criteria	JORC Code explanation	Commentary
		boreholes has allowed JORC Resources to be reported for the Middlemount deposit, owing to the collection of valid borehole data.
Other substantive exploration data	▪ *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	▪ Three 2D seismic lines totalling 7.5 km in coverage were completed in 2008 to assist in identifying the location of the Jellinbah fault. ▪ An additional six 2D seismic lines totalling 2.93 km in coverage were completed in 2017. ▪ In-pit survey data of coal roof and floor of the Middlemount Lower and Pisces Upper seams have been incorporated into the geological model for Middlemount ▪ Toe & crest locations for faults have been incorporated into the geological model for Middlemount.
Further work	▪ *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* ▪ *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	▪ Sufficient work has been completed to establish seam continuity in the planned LOM area. ▪ Pre-production drilling is completed to maintain a two year gap in advance of mine production. ▪ Additional drilling will be required to test the weathering affects for proposed open cut Resource to the north of the current open cut mine. This may assist increase Resources for future reporting. ▪ Additional exploration require to more accurately define the position and geometry of the Jellinbah fault. This will also assist with defining the pinch-out of the Middlemount seam which is currently occurring against the fault. ▪ Additional core drilling to reduce the spacing between core holes will assist increase confidence in the Resource ▪ Further fault delineation drilling or 2D seismic surveys for structural interpretation.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	▪ *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* ▪ *Data validation procedures used.*	▪ Geological data for Middlemount is stored in Peabody's internal data managements system "Task Manager". ▪ Task Manager stores the following data types: – Collar survey; – Lithology; – Geophysics; and

Criteria	JORC Code explanation	Commentary
		– Coal quality data. ▪ Core and chip sample photographs are stored separately on a server. ▪ Exploration data is data entered into Task Manager which contains validation and other business rules to ensure only acceptable codes are entered. ▪ Coal quality data is loaded directly into Task Manager from laboratory excel spreadsheets based on the template containing the requests for analysis. ▪ Coal quality data is validated accordant to rules which include: – proximate data must add to 100%; – acceptable ranges; and – the sum of density fractions must sum to the raw mass. ▪ The original data recorded by the geologist and supplied by the laboratory is retained as a raw file and backed up. Subsequent upgrades to geological data in Vulcan/Isis are made in the copies of the original data. ▪ The lithology data is corrected to geophysics. ▪ The data is reviewed by a Senior Geologist. ▪ The data uploaded into the Isis database prior to geological modelling. ▪ The boreholes are checked by the Resource Geologist during the modelling process.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ A site visit was undertaken by the Competent Person in April 2018. The outcome of the site visit was to better understand of the location, geological data, environment and site procedures. ▪ The Competent Person is familiar with the style of the Middlemount Resource. ▪ RPM has spent time in discussion with Mr. Stuart Whyte who is the Yancoal Competent Person; and Mr. Greg Jones who is the Competent Person for Peabody for additional understanding of the Resource.
Geological interpretation	▪ *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* ▪ *Nature of the data used and of any assumptions made.* ▪ *The effect, if any, of alternative interpretations on Mineral Resource estimation.* ▪ *The use of geology in guiding and controlling Mineral Resource estimation.* ▪ *The factors affecting continuity both of grade and geology.*	▪ Detailed coal ply logging is completed by geological logging of open and fully cored holes supported by geophysical log data. ▪ Coal seam and ply correlation are relatively simple where drill spacing is adequate and are sufficient to establish the structural thickening of seams, and structural dislocation due to faulting. ▪ The coal seams of the Rangal Coal Measures at Middlemount, namely in descending stratigraphic order: – Middlemount seam; – Tralee seam; and

Criteria	JORC Code explanation	Commentary
		– Pisces seam. ▪ All coal seams have unique geophysical signatures that enables seam correlations to be made consistently and confidently. ▪ The Pisces seam is underlain by the Yarrabee Tuff which is a basin wide marker interval and can be used to provide stratigraphic assurance to the seam picks. ▪ Other markers used to assist with seam identification at Middlemount include: – typical seam thickness and geophysical signatures of the seams; – interburden thickness characteristics; and – gamma response of the seam intervals.
Dimensions	▪ *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	▪ The Middlemount deposit is approximately 7 km in strike length (north-northwest), and 2 km wide (east-west). ▪ Coal Resources commences at the subcrop line in the west of the deposit, and extends towards the Jellinbah fault, which bounds the east of the deposit. Resource estimations are limited to 50 m west of the Jellinbah fault. ▪ Resource estimates are exclusive of mined coal at Middlemount. ▪ Only coal less than 37% (ad) raw ash has been considered for Resource estimations, based on the limits used by Middlemount CHPP operators. ▪ Open cut Coal Resources commence below the base of weathering, which averages 40-45 m across the deposit. ▪ The minimum mining thickness for fresh coal is 0.30 m. ▪ Potential open cut Coal Resources have been estimated to a depth of 280 m, and all coal down to the floor of the Pisces Upper seam to within a 50 m buffer from the underground mining area. ▪ To the east of the open cut, highwall mining is planned in the Pisces Upper seam until the 50 m buffer from the Jellinbah fault. This zone is 50-150 m wide, and is controlled by the location of the Jellinbah fault. This section of coal has not been included in the Resource estimate. ▪ South of the current Middlemount Coal open cut mine, a proposed underground area is limited to the Middlemount seam (coalesced plies of MLT and MLB) and the Pisces Upper seam (coalesced plies of PUT, PUM and PUB). ▪ There are no thickness or depth restrictions on the underground Resource estimates (a minimum thickness of 0.5 m was applied to the individual plies for the purpose of generating coal resource model to report resources); tenure is the only limiting factor from which a 50 m offset has been applied to the mining lease boundary on the southern extents of the

Criteria	JORC Code explanation	Commentary
		Underground Area, and a 50 m barrier pillar between the Open Cut area and Underground Area. ▪ It is estimated that the coal thickness increases to over 5 m in the underground area. ▪ No fault-repeated coal has been included in the Resource estimation.
Estimation and modelling techniques	▪ *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* ▪ *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* ▪ *The assumptions made regarding recovery of by-products.* ▪ *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* ▪ *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* ▪ *Any assumptions behind modelling of selective mining units.* ▪ *Any assumptions about correlation between variables.* ▪ *Description of how the geological interpretation was used to control the resource estimates.* ▪ *Discussion of basis for using or not using grade cutting or capping.* ▪ *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	▪ Modelling was undertaken using Maptek Ptd Ltd geological modelling software, Vulcan, version 10.1.4. ▪ One all-encompassing model (mar18) was created for the Middlemount Coal Resource. ▪ Structure models were created at 20x20 m mesh size, and coal quality modelling created with a 100x100 m mesh size. The mesh sizes were selected to achieve the most representative models. ▪ Faults are modelled with dip (25-30°). The location where the fault plane intersects the roof and floor of each seam has been estimated. In the case of the Jellinbah Fault, a 50 m buffer to the west of this point has been applied as the fault line. ▪ Stratigraphic mapfiles were used to interpolate horizons in every hole to control the development of the structure and thickness grids. ▪ Seams were split into their plies and modelled as contiguous elements. ▪ Where holes were not drilled deep enough to intersect seams lower in the sequence (e.g. in LOX holes), the interpolation of the seams into these holes was ignored and only true intersections were recognised so that the structural integrity of the model was kept intact. ▪ Spot heights from interpretation of 2D seismic lines supplied by Middlemount Coal were used for the floor of the Middlemount Lower seam and Pisces Upper seam to control the structural model. ▪ Selected data points were used from in-pit floor survey of the Middlemount Lower seam and Pisces Upper seam to control the structural model also. ▪ Toe and crest survey for faults encountered in mining were applied to the structural model. ▪ A base of weathering grid was developed from drillhole intersections, and all final structure grids used for Resource estimations were clipped to the base of weathering to ensure oxidised coal was excluded from the calculations. ▪ Structural and coal quality grids were developed using inverse distance modelling interpolation, to the power of two with no trending. This has been selected to honour the data while providing a degree of smoothing over the Resource.
Moisture	▪ *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	▪ There are no total moisture determinations for Middlemount in situ coal. Air dried density has been adjusted to an in situ basis using the Preston Sanders equation using an assumed in situ moisture of 5%, which is commensurate with the coal rank. The selection of a total moisture estimate of 4% to 6% will not make a material difference to the Resource tonnage

Criteria	JORC Code explanation	Commentary
		estimate. Therefore the Competent Person considers that further discussion about changes of the total moisture assumption of 5% is not relevant.
Cut-off parameters	▪ *The basis of the adopted cut-off grade(s) or quality parameters applied.*	▪ The minimum seam thickness for Resource estimation is 0.30 m; a limit that has been applied due to practical mining limitations, as well as consultation with mine planning engineers. However, no seam thickness limit is applied where seams adjoin (coalesce) with other seams. ▪ 37% raw ash is used as an upper limit for raw coal quality, based on discussions with CHPP personnel. ▪ No weathered coal is included in the Resource estimation. ▪ No fault-repeated coal is included in the Resource estimation. ▪ All coal within a 50 m buffer of the Jellinbah fault has been excluded from the Resource estimates. ▪ Highwall Mining Areas have been excluded from the Resource Estimate. ▪ A 50 m Offset from the lease boundary on the southern extent of the Underground Area has been applied. ▪ All coal to the east of the Jellinbah fault has been excluded from Resource estimates.
Mining factors or assumptions	▪ *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	▪ Open cut mining methods using a combination of conventional excavator and truck operation and blast cast and dozer mining for approximately 80% of the Resource. ▪ Underground extraction methods have been considered for the remaining 20% of the Resource. ▪ Highwall mining methods are excluded from the Resource.
Metallurgical factors or assumptions	▪ *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	▪ Middlemount Coal has a six year history of washplant performance data available. ▪ The Middlemount CHPP consists of industry standard separation equipment such as: – De-sliming screen; – Dense media cyclones; – Spirals; and – Froth flotation. ▪ The Middlemount CHPP is a 700 tph single stage plant with two product coal handling systems.

Criteria	JORC Code explanation	Commentary
		▪ Washability testing is performed on 100 mm diameter core to estimate the coals performance in the CHPP. ▪ Coal samples are crushed to 12.5 mm, and float sink testing is performed on the following separation densities: – F1.30; – F1.40; – F1.50; – F1.60; – F1.70; – F1.80; and – F2.00. ▪ Clean coal composites are prepared and tested for coking and PCI parameters, following accepted industry practice for metallurgical coal. ▪ Middlemount Coal currently produces both coking and PCI coal products, which requires beneficiation in the CHPP. ▪ Products are determined based on their coal quality. The MLT seams and the +16 mm fraction of the TL2 and PU seams are washed to a PCI product. The MLB seam and the -16 mm fraction from TL2 and PU seams is washed to a semi hard coking coal.
Environmental factors or assumptions	▪ *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	▪ Current operations are conducted under an approved environmental authority (EA). ▪ All Resources are within mining leases. No issues are expected that would impact the Resource estimate. ▪ Re-alignment of Roper Creek is required to complete the full extraction of Coal Resources at the southern end of the pit.
Bulk density	▪ *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* ▪ *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences*	▪ The Middlemount Mine has been in operation since 2011. The density of the coal and its distribution within the seams has been established. ▪ Most borehole samples have true relative density analysis. ▪ The in situ density is estimated using laboratory air dried relative density and adjusted to in situ density using the Preston Sanders method using the assumed in situ moisture of 5%.

Criteria	JORC Code explanation	Commentary
	between rock and alteration zones within the deposit. ▪ *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	
Classification	▪ *The basis for the classification of the Mineral Resources into varying confidence categories.* ▪ *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.*	▪ The classification of the Coal Resources into varying confidence categories is based on a standardised process of utilising points of observation (PoO) according to their reliability. The PoOs are used to categorise quantity and quality continuity (or both) or support continuity. ▪ Resource classification is based on the Competent Person's confidence of the seam continuity and coal quality variability within drillholes. ▪ Seam continuity is the key parameter in structurally complex deposits, which drives the drillhole spacing as well as the Resource classification made by the Competent Person. ▪ The overarching requirement for the Competent Person is that seam continuity can be demonstrated. ▪ A Quantity PoO has the following attributes: – open or cored hole; – seam interval geophysically logged, or where geophysical data is missing for a seam(s), it is up to the Competent Person's discretion to determine if the seam level and thickness is consistent with nearest neighbour boreholes; and – reliable collar survey. ▪ A Quality PoO has the following attributes: – cored hole; – linear core recovery greater than 90%; – reliable collar survey; – cored hole in which 100% of the seam interval has been cored; – seam interval geophysically logged; – if no geophysics log data is available it is up to the Competent Person's discretion to determine if the seam level and thickness is consistent with nearest neighbour boreholes; and – raw coal ash (can be used as a proxy for relative density and yield). ▪ Support Data for PoOs can include: – In-pit mapping data for faults and dykes; – Seam floor or roof survey data; and – Elevations from interpreted 2D seismic surveys. ▪ The radii of influence for PoOs were determined by consideration of the following for each coal ply:

Criteria	JORC Code explanation	Commentary
		– seam continuity; – variability of seam thickness; – variability of interburden thickness; – structural variability; – variability of coal quality (particularly raw ash); and – review of the variability of the geology between boreholes and the reliability of borehole data. ▪ The nominal PoO spacing and radii of influence are: – **Measured**: 500 m apart with 250 m radii – **Indicated**: 1,000 m apart with 500 m radii – **Indicated**: 2,000 m apart with 1,000 m radii ▪ The Competent Person is satisfied that the stated Coal Resource classification reflects the geological controls interpreted and the estimation constraints of the deposits.
Audits or reviews	▪ *The results of any audits or reviews of Mineral Resource estimates.*	▪ Data review, modelling and Resource estimation procedures have been critically reviewed. ▪ The Coal Resource estimate has been compared with previous Resource estimations for Middlemount, and are found to be acceptable given the updates and changes that have occurred between the 2018 model and its predecessor.
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ The geological modelling for Middlemount has been conducting by JB Mining since 2007. ▪ Geostatistical analysis was completed on modelled seam thickness and raw ash across the Middlemount deposit. This analysis assisted with justification of confidence categories for Resource estimation. ▪ Middlemount budgeted coal recovery and quality specifications are achieved annually, therefore, it is inferred that the geological model honours exploration data and is reflective of the mined product. ▪ To maintain consistency when converting Resources to Reserves, the same modelling methodology has been used since 2007.

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Section 4 Estimation and Reporting of Ore Reserves

The completed Table 1, Sections 4 is in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person's, Mr Doug Sillar on behalf of RPM.

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	▪ *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* ▪ *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	▪ The Coal Resource estimate used as the basis for this Coal Reserves Statement is described as part of this statement. The Resource estimate has been prepared by Mr. Michael Johnson. The Competent Person, Mr. Johnson, has sufficient expertise that is relevant to the style of mineralisation and type of deposit and activity to qualify as a Competent Person as specified under the JORC Code and is a member of the Australian Institute of Mining and Metallurgy and a member of the Australian Institute for Geoscientists. ▪ The Resources Statement was compiled in accordance with The JORC Code 2012 Edition. ▪ The Coal Resources reported are inclusive of the Coal Reserves. ▪ The same geological model has been used for the estimation of Resources and Reserves.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ A site visit to the Middlemount Mine was undertaken by representatives of RPM in April 2018. The Reserves Competent Person was unable to attend but interviewed the representative following the visit. The outcome of this visit was observation of the Asset area to better understand location, environmental, social, groundwater and existing infrastructure consideration.
Study status	▪ *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* ▪ *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	▪ Middlemount Coal Pty Ltd is a joint venture between Peabody Energy and Yancoal. ▪ Middlemount is an operating mine consisting of a single operating pit. ▪ Middlemount completed a Life of Mine (LOM) Plan in 2017. Only open cut Resources have been considered for Reserves. ▪ The level of detail in the LOM plan is sufficient to meet requirements of JORC. The costs and modifying factors are based on site performance and reconciliations.
Cut-off parameters	▪ *The basis of the cut-off grade(s) or quality parameters applied.*	▪ A minimum mining thickness of 0.3 m is applied to all seams at Middlemount. ▪ A raw ash cut-off of 37% is applied to Resources. No further ash cut-off is applied to Reserves. ▪ Tralee seam is wasted if the seam is thin <0.8 m and high ash >15% ash.
Mining factors or assumptions	▪ *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).*	▪ RPM estimated a break even strip ratio and compared against the Company pit shell to confirm pit limits. ▪ The mining method at Middlemount open cut is conventional truck and shovel mining. The operating method is well proven and suitable for the deposit.

Criteria	JORC Code explanation	Commentary
	▪ *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* ▪ *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* ▪ *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* ▪ *The mining dilution factors used.* ▪ *The mining recovery factors used.* ▪ *Any minimum mining widths used.* ▪ *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* ▪ *The infrastructure requirements of the selected mining methods.*	▪ Pit slope designs are based on the following criteria: – 35° lowwall; – 50° highwall and endwall in weathered zone, 10 m berms every 12 m vertically to give overall slope of approximately 35°; – 25 m berm at top of fresh Permian; and – 70° slopes is fresh material, 25 m berm every 50 m vertically. ▪ The following mining factors are based on reconciliations of production at the Middlemount mine: – minimum coal mining thickness of 0.3 m; – coal loss of 0.10 m at the working section roof and 0.05 m at the working section floor; – edge loss of 0.20 m applied to the Pisces Upper seam; – Tralee loss criteria: ▪ wasted if product ash >20%; ▪ wasted if thin (<0.8m) and high ash (>15% ash); and ▪ Additional loss of 15% applied when recovered; – roof and floor dilution of 0.05 m and 0.10 m respectively; – additional fault loss of 1% and fault dilution of 1%; – in situ moisture assumed to be 5%. ROM moisture is assumed to be 6%. Washed moisture is assumed to be 10.5%; and – dilution assumed to have an RD of 2.1 and ash of 80%. ▪ Inferred Resources are not included in the estimate of Coal Reserves. Minor quantities of Inferred Resources are included in the LOM Plan however RPM anticipate that exclusion of this coal would not impact on the outcomes of the study. ▪ All necessary infrastructure is in place and operational. Existing haul roads will need to be extended as the mine advances.
Metallurgical factors or assumptions	▪ *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* ▪ *Whether the metallurgical process is well-tested technology or novel in nature.* ▪ *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* ▪ *Any assumptions or allowances made for deleterious elements.*	▪ All ROM coal is washed at Middlemount to produce two product types. ▪ The Middlemount CHPP is a 700 tph single stage plant with two product coal handling systems. The CHPP uses industry standard technology and is operating at high availability. ▪ Product yields are based on wash plant simulations and supported by operating knowledge since 2010. ▪ Products are determined based on their coal quality. The MLT seams and the +16 mm fraction of the TL2 and PU seams are washed to a PCI product. The MLB seam and the -16 mm fraction from TL2 and PU seams is washed to a semi hard coking coal. ▪ The operational plant data supersedes bulk scale test work.

Criteria	JORC Code explanation	Commentary
	▪ *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole.* ▪ *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	▪ No allowance has been made for deleterious elements.
Environmental	▪ *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	▪ All necessary approvals are in place for the current mining areas at Middlemount. ▪ Coarse rejects is placed into open cut waste rock dumps inpit. ▪ Re-alignment of Roper Creek is required to complete the full extraction of Coal Reserves at the southern end of the pit.
Infrastructure	▪ *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	▪ All the necessary infrastructure is in place and operational for the current operation and is suitable for the current and future production projections. ▪ Existing haul roads will need to be extended as the mine advances.
Costs	▪ *The derivation of, or assumptions made, regarding projected capital costs in the study.* ▪ *The methodology used to estimate operating costs.* ▪ *Allowances made for the content of deleterious elements.* ▪ *The source of exchange rates used in the study.* ▪ *Derivation of transportation charges.* ▪ *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* ▪ *The allowances made for royalties payable, both Government and private.*	▪ All major infrastructure is in place. Capital forecasts have been included which represent the growth and sustaining requirements for the completion of the LOM plan. ▪ All operating costs are based on LOM planning estimates provided by Yancoal and have been reviewed by RPM. ▪ Current long-term exchange rate assumptions were provided by Yancoal. ▪ Transport charges based on actual contracted prices taking into account existing Take or Pay arrangements. ▪ QLD state government royalties are included in the estimate. ▪ RPM reviewed all costs and they are considered reasonable.
Revenue factors	▪ *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* ▪ *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	▪ Long term product coal pricing assumptions have been provided by Yancoal Marketing and is based on independent third party research and reporting. ▪ The revenue factors are considered reasonable for the purposes of estimating Reserves.
Market assessment	▪ *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* ▪ *A customer and competitor analysis along with the*	▪ A Marketing Study has not been reviewed however markets are well established for the mine's coal products. The projects typically produce up to four main products: – Low Volatile PCI Coal at 10.5% ash.

Criteria	JORC Code explanation	Commentary
	identification of likely market windows for the product. ▪ *Price and volume forecasts and the basis for these forecasts.* ▪ *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	– Semi Hard Coking Coal at 10.0% ash and CSN of 6. ▪ Based upon these products and specifications, RPM anticipates no foreseeable issues in demand for these products.
Economic	▪ *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* ▪ *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	▪ The inputs to the economic analysis are derived capital and operating cost estimates outlined in the "Costs" section of Table 1. The source of the inputs is real and the confidence satisfactory. The economic modelling is in real terms and a range of discount rates have been used in assessing NPV. ▪ The NPV results for the Project produced from economic modelling generated positive and acceptable NPV's for all discount rates and the Project is considered economic from an NPV stand-point. ▪ Sensitivity analysis has been completed on the Project over a range of variable. The Project is most sensitive to changes in exchange rate, revenue and operating costs.
Social	▪ *The status of agreements with key stakeholders and matters leading to social licence to operate.*	▪ The relationship with adjacent landowners is sound and the project has the necessary key stakeholder agreements in place.
Other	▪ *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* ▪ *Any identified material naturally occurring risks.* ▪ *The status of material legal agreements and marketing arrangements.* ▪ *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	▪ The topographical area of Middlemount is flat lying and subject to flooding in cyclonic conditions. Appropriate flood mitigation is in place or planned to cover a 1 in 1000 year event. Levees and drains are existing to protect active pit areas. ▪ The eastern pit limit will be mining up to and adjacent to the Jellinbah Fault which presents a risk to a portion of Reserves. ▪ All mining projects operate in an environment of geological uncertainty. RPM is not aware of any other potential factors, legal, marketing or otherwise, that could affect the operation's viability.
Classification	▪ *The basis for the classification of the Ore Reserves into varying confidence categories.* ▪ *Whether the result appropriately reflects the Competent Person's view of the deposit.* ▪ *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	▪ Classification of Coal Reserves has been derived by considering the Measured and Indicated Resources and the level of mine planning. – Measured Coal Resources are classified as Proved Coal Reserves and Indicated Resources classified as Probable Coal Reserves, as the pit is currently operating and the level of mine planning is considered adequate to support this level of certainty in the Reserves estimate.

Criteria	JORC Code explanation	Commentary
		▪ The Inferred Coal Resources have been excluded from the Reserve estimates. ▪ The result reflects the Competent Person's view of the deposit.
Audits or reviews	▪ *The results of any audits or reviews of Ore Reserve estimates.*	▪ Internal peer review of the Reserves Report has been completed.
Discussion of relative accuracy/ confidence	▪ *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* ▪ *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ▪ *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* ▪ *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	▪ The pit shells are supported by a high proportion of Measured Coal Resources. ▪ The basis of the estimate are actual operating costs and LOM planning. ▪ CHPP and infrastructure are in place and operating. ▪ Analysis of the coal quality has been undertaken by independent laboratories working under international standards of method and accuracy. ▪ The level of accuracy will continue to be dependent on the ongoing update of the geological model and monitoring of the Modifying Factors affecting the coal estimate. ▪ The Reserves have been adjusted through application of the modifying factors to reflect the ongoing site performance. The deposit is drilled in detail and additional short term drilling is done ahead of mining as required. ▪ There is some minor risk of flooding though site infrastructure is in place or is being constructed to protect against this. ▪ Ongoing geotechnical review will be required as the mine advances towards the Yarrabee fault on the eastern margin of the pit. ▪ A decrease in future coal prices represents the largest risk to the realisation of Reserves at Middlemount.

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JORC Code Disclosure Requirements

Monash

RPMGLOBAL

JORC Code, 2012 Edition – Table 1 report template

The completed Table 1, Sections 1, 2 & 3 are in response to the current ADV-BR-11019_Hunting Eagle_CPR Report completed in part by Competent Person Mr Brendan Stats on behalf of RPM.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* ▪ *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* ▪ *Aspects of the determination of mineralisation that are Material to the Public Report.* ▪ *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	▪ Exploration in and around EL6123 commenced in 2004 with completion of EM series core holes (EM01, EM02, EM05, EM06). EL7579 was granted to Monash Coal Pty Ltd in July 2010 and two campaigns of exploration were carried out in 2011 and 2012 (MN series core holes). ▪ All EM and MN series holes within both EL's have been geophysically logged for long and short spaced density, natural gamma and caliper. In addition, most recent MN series holes have full wave sonic logs, and acoustic televiewer data for holes MN001, MN01A and MN002. Geophysical data exists in hard copy and electronic formats in the MBGS Sydney office and within the secure onsite database. ▪ During non core drilling, drill samples were placed at 1m intervals and lithologically logged and HQ drill core was logged and sampled at the drill rig. As coal plies had not been identified prior to sampling, sampling was detailed and extensive in distinguishing coal from stone units. Coal seams intersected in both MN and EM series holes were sampled and sent to the laboratory for preparation and testing. Raw coal analysis was conducted on all ply samples from MN series holes. Ply intervals were then composited to form a thicker potential mining section and then underwent washability and clean coal analysis.
Drilling techniques	▪ *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	▪ All MN and EM series holes were HQ sized (100mm hole diameter, 63mm core) and core was recovered using the triple tube method. EM and MN series holes drilled on top of the Triassic escarpment were non core drilled to base of Triassic with 100mm bit. In this circumstance, coring drilling would commence between 300m and 420m depending on Triassic sediment package thickness.
Drill sample recovery	▪ *Method of recording and assessing core and chip sample recoveries and results assessed.* ▪ *Measures taken to maximise sample recovery and ensure representative nature of the samples.* ▪ *Whether a relationship exists between sample recovery*	▪ HQ drill core was logged either at the drill rig or in a core shed post drilling. Where core was interpreted to be lost, a core loss unit was assigned. Core losses were then verified when correcting lithology against downhole geophysical logs. ▪ Core recovery data from field logging was not available and so laboratory volumetric recoveries for sampled intervals have been reviewed. Laboratory calculated volumetric

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Criteria	JORC Code explanation	Commentary
	and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	recoveries are generally greater than 95% and range between 70% and 120%. The high degree of variability in laboratory recovery is thought to be related to applying laboratory density to small sample intervals where the degree of error can be high. Where a seam did not have sufficient recovery for representative sampling it was redrilled. For modelling purposes the quality data from the redrilled seam was used.
Logging	▪ *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* ▪ *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* ▪ *The total length and percentage of the relevant intersections logged.*	▪ For all EM and MN series holes, non core intervals were logged on a meter by meter basis and all drill core was logged to centimetre accuracy. Evidence of geotechnical logging has not been provided, however field geotechnical testing (point load testing) was conducted and geotechnical samples from MN002 and MN003 underwent laboratory analysis at STS.
Sub-sampling techniques and sample preparation	▪ *If core, whether cut or sawn and whether quarter, half or all core taken.* ▪ *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* ▪ *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* ▪ *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* ▪ *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* ▪ *Whether sample sizes are appropriate to the grain size of the material being sampled.*	▪ Coal and stone samples for laboratory analysis were sampled at the drill rig following lithological logging of drill core. As coal plies had not been developed, sampling was highly detailed in distinguishing coal from stone units. For each sample, the full length of core was placed into bags with sample details. No splitting or sawing of any samples takes place and there is no sample preparation outside of the laboratory. Coal quality testing was undertaken at laboratories complying with Australian Standards for sample preparation. ▪ Upon arrival at the lab, samples were crushed and subdivided into two subsamples. One subsample is analysed for proximate analysis, relative density and sulphur. The second subsample was combined with other subsamples and float sink tested for ash and sulphur at each density fraction. ▪ No non-core material was sampled
Quality of assay data and laboratory tests	▪ *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* ▪ *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* ▪ *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	▪ At a minimum, raw coal analysis results have been attained from each drill location within EL6123 and EL7579. ▪ Geophysical logging was conducted on all drill holes by Ellemby Consulting except for MN006 which was logged by Weatherford Pty Ltd. It is industry standard that all down hole geophysical logging tools are calibrated on a monthly basis before usage. ▪ Coal and stone sampling was conducted at the drill rig before geophysical logging of holes. Upon completion of a drill hole, lithology logs were corrected to downhole geophysics. Coal quality data was not always corrected to geophysics, however there was a very close correlation between sample thicknesses and logged lithology thicknesses which allowed confident correlation of quality samples. Bureau Veritas Pty Ltd Newcastle laboratory was

Criteria	JORC Code explanation	Commentary
		used for all sample preparation and testing and is certified by the National Association of Testing Authorities (NATA).
Verification of sampling and assaying	▪ *The verification of significant intersections by either independent or alternative company personnel.* ▪ *The use of twinned holes.* ▪ *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* ▪ *Discuss any adjustment to assay data.*	▪ All quality data is checked for any anomalous results and are investigated upon identification. Laboratories as part of standards always keep a reserve sample if re-analysis is required. Raw coal and washability data is provided by the laboratory in digital format, which is compiled into a coal quality database (Excel). The database is loaded into the geological model (Vulcan) and anomalies are investigated and validated against final laboratory reports, geological logs and geophysical logs prior to modelling. Any anomalies are investigated prior to further use. ▪ Raw specific energy data was only available for composite samples. This data was compiled and used to generate a regression with ash in Microsoft Excel. This equation, CV = -91505 x Ash + 7948.4 has an R^2 = 0.9909 and was used to estimate energy for all samples with less than 65% ash value.
Location of data points	▪ *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* ▪ *Specification of the grid system used.* ▪ *Quality and adequacy of topographic control.*	▪ All drill hole collars have been surveyed by registered surveyors using GPS equipment. A digital terrain model (DTM) exists over EL6123 and EL7579 accurate to 1m which is used for topographic control between data points and to validated collar RLs. The grid system used is MGA94, Zone 56.
Data spacing and distribution	▪ *Data spacing for reporting of Exploration Results.* ▪ *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* ▪ *Whether sample compositing has been applied.*	▪ Drilling within EL6123 and EL7579 would have been constrained by local topography as drill holes do not appear to follow a grid or pattern. All data points across EL6123 and EL7579 are in excess of 500m from each other. In the EL7579 all MN series holes are within 1km and in the southwest of EL6123, MN drill holes are spaced between 1km and 2km. In the east of EL6123, holes EM01 and EM02 are approximately 1.5km apart, but are in excess of 2km from the nearest MN drill hole. ▪ Within EL6123 and EL7579 coal seams and plies can confidently be correlated between data points although there is some variation in coal quality results.
Orientation of data in relation to geological structure	▪ *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* ▪ *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	▪ No oriented drilling was conducted in EL6123 and EL7579. Coal seams are near horizontal (dip approximately 50 southwest) and coal sampling was performed on almost orthogonal (>850) seam intersections. Seam thicknesses are assumed to be true thicknesses and there is no sample bias.
Sample security	▪ *The measures taken to ensure sample security.*	▪ All samples were placed in plastic bags at the drill rig with sample details written on tags included in the sample. Sample numbers were recorded on lithology field logs at time of sampling and copies of sample details were sent to the laboratory once drill data was entered.

Criteria	JORC Code explanation	Commentary
Audits or reviews	▪ *The results of any audits or reviews of sampling techniques and data.*	▪ All drillhole data is corrected to geophysical logs and final coal quality data is verified by the laboratory before importing into computer model. Section outputs and contour plots from the computer model are used to identify any anomalous data. If any anomalies exist, original field logs, geophysical logs and final lab reports are used to verify the existence of, or correct the data. RPM has reviewed the drill hole data using logic and statistical checks.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	▪ *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* ▪ *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	▪ Yancoal Australia Pty Ltd, through its subsidiary Monash Coal Pty Ltd holds title to EL6123 and EL7579. ▪ EL6123 was granted on 8th September 2003 and was last renewed on 23 October 2017. EL6123 expires on the 3rd September 2019. ▪ EL 7579 was granted on the 22nd July 2010 and a renewal was granted on 23rd October 2017. Expiry for EL7579 is 22 July 2019. ▪ EL6123 lies wholly within Pokolbin State Forest, which will have environmental conditions attached to any exploration. There are currently no known sites with native title or historical significance.
Exploration done by other parties	▪ *Acknowledgment and appraisal of exploration by other parties.*	▪ Ellemby Consulting supervised exploration for all holes within EL6123 and EL7579. EM series holes were drilled in 2004 and MN series holes were drilled throughout 2011 and 2012.
Geology	▪ *Deposit type, geological setting and style of mineralisation.*	▪ EL6123 and EL7579 are located in the South Maitland Coalfield of the Lower Hunter Valley close to the eastern margin of the Sydney Basin. Surrounding the Monash Project, Early Triassic Narrabeen Group sediments unconformably overly Late Permian Newcastle Coal Measures, which overly Late Permian Wittingham Coal Measures. Regional topography is dominated by steep Narrabeen Group escarpments with sediment pile thickness ranging from 30m to 400m in areas of low and high relief. ▪ Target seams for drilling within the Newcastle Coal Measures were: – Fassifern Seam (youngest) – Borehole Seam ▪ Target seams for drilling within the Wittingham Coal Measures were: – Whybrow Seam – Redbank Creek Seam

Criteria	JORC Code explanation	Commentary
		– Wambo Seam – Whynot Seam – Blakefield Seam – Glen Munro Seam – Woodlands Hill Seam – Arrowfield Seam – Bowfield Seam (oldest) ▪ Seams intersected below Bowfield Seam include Warkworth, Mount Arthur, Piercefield, Vaux, Broonies and Bayswater. Only two holes (MN07A, MN004) intersected these lowermost seams and only MN004 had down hole geophysics. Other coal seams were identified within the Newcastle and Wittingham Coal Measures, however they were considered too thin or of too poor quality to be considered a target. Measured gas content from all seams is typically <10m3/t. Regional strike is eastwest and strata dip is approximately 50 to the southwest. This regional dip is influenced by the northsouth trending Loder anticline and Belford Dome located to the north of the ELs. No other structures or igneous activity have been identified within or around Monash Project.
Drill hole Information	▪ *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* – *easting and northing of the drill hole collar* – *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* – *dip and azimuth of the hole* – *down hole length and interception depth* – *hole length.* ▪ *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	▪ Within EL6123 and EL7579 all holes were drilled to target seams from the Newcastle and Wittingham Coal Measures. All coal quality holes and holes dedicated to gas testing were partially cored with open hole intervals from surface to top of Fassifern Seam, and on occasion, through poorly developed Newcastle Coal Measures to top of Borehole Seam. Cored intervals were drilled with HQTT and hole diameters were 100mm. Most holes terminated once Bowfield Seam had been intersected, however, MN004 and MN07A intersected Bayswater Seam (five seams below Bowfield) and terminated in the Archerfield Sandstone at the base of Jerrys Plains Subgroup. Redrills of MN series drill holes were due to unacceptable core loss, if the original hole was dedicated to gas testing or if holes were abandoned due to downhole conditions. In the east of EL6123, EM01 and EM02 holes were terminated shortly after a deteriorated Fassifern Seam was intersected at 330 and 365m respectively. ▪ Individual drill hole results are not tabulated and presented in this report, however all drill hole data that pertains to coal seams has been loaded and modelled in the Vulcan geological model used to estimate resources. The coal resource table presented in this report does present summary information (average thickness, raw ash, density) relating to each seam. ▪ For the purposes of modelling, drill holes have been assumed as vertical. However, deviation data is not available for holes drilled within EL6123 and EL7579.
Data aggregation methods	▪ *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	▪ Drill cores were sampled at the rig prior to geophysical logging and without the determination of ply boundaries. Samples were therefore highly detailed in distinguishing stone from coal. Upon loading the coal quality database into the computer model, lab samples were composited into plies nominated by MBGS during re-correlation prior to modelling. Plies

Criteria	JORC Code explanation	Commentary
	▪ *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* ▪ *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	would then be composited to provide average thickness and average coal quality information for a coal seam or desired potential mining section. Samples composited to make plies or seam/working sections were weighted by length and density. No limits or cut offs have been applied to any coal quality data.
Relationship between mineralisation widths and intercept lengths	▪ *These relationships are particularly important in the reporting of Exploration Results.* ▪ *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* ▪ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	▪ Deviation data is not available for any drill holes within EL6123 and EL7579. However, all drill holes in the exploration area are vertical and regional dip is south-southwest at 50(near horizontal). Drill hole intersections with coal seams is very close to orthogonal and seam thicknesses are assumed to be true thickness.
Diagrams	▪ *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	▪ Site overview and Leases are presented in the report to which this Table 1 is attached.
Balanced reporting	▪ *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	▪ All available drill hole data, geophysical data and coal quality data has been loaded into the Vulcan computer model to estimate resources. No representative reporting has taken place and model outputs honour all data.
Other substantive exploration data	▪ *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	▪ Geotechnical point load and immersion testing was conducted in the field for most MN series holes. Geotechnical samples taken from drill core in holes MN002 and MN003 were sent to Strata Testing Services (NATA approved) for strength testing. ▪ Seam gas (Q1) testing was performed in the field for holes MN006 and MN007 and gas samples were sent to the laboratory for further desorption testing.
Further work	▪ *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* ▪ *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	▪ No further exploration drilling has been planned.

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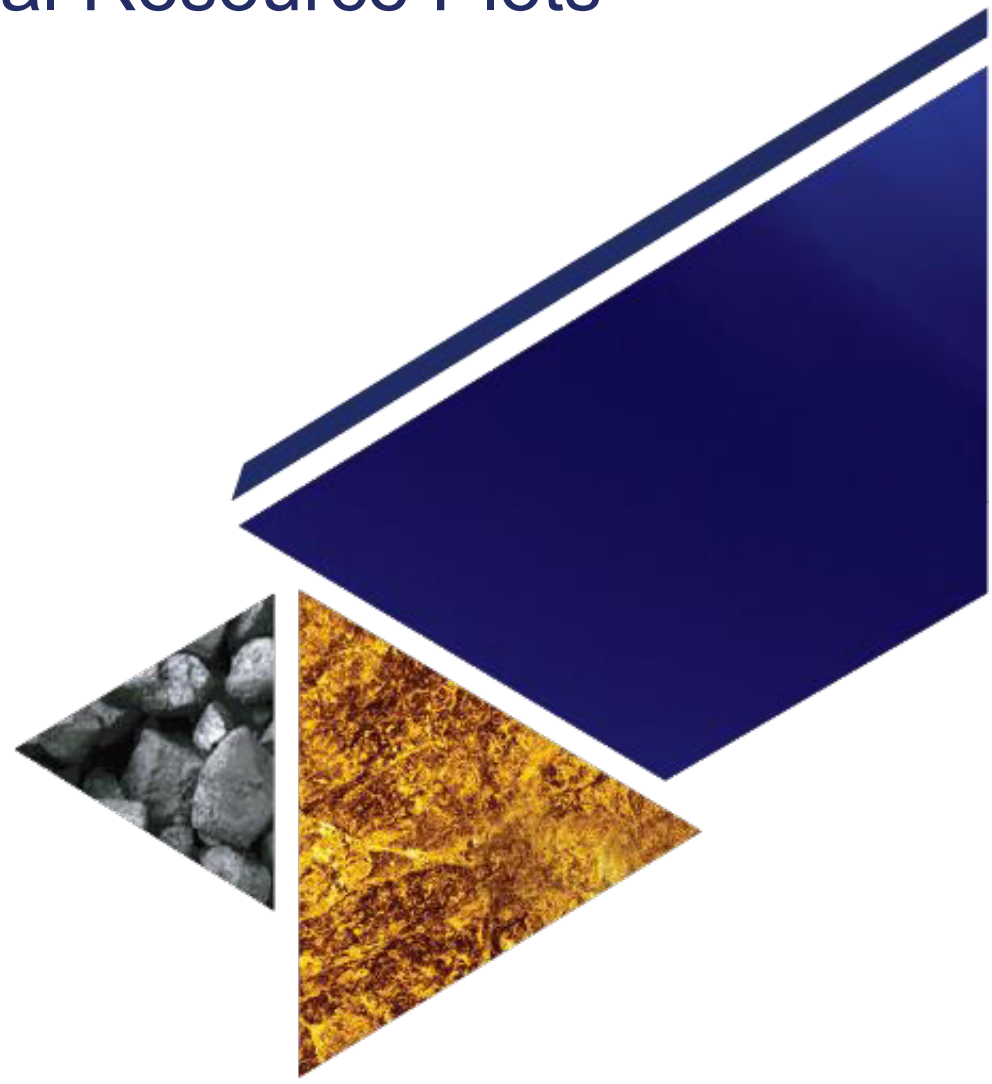
Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	▪ *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* ▪ *Data validation procedures used.*	▪ All lithologies and thicknesses entered directly into the drill hole data base were corrected against downhole geophysics. Seam graphics displaying lithology against geophysical profile were produced following corrections where keying errors made with lithologies or thicknesses could be identified and fixed. ▪ Final laboratory data as standard was checked by Bureau Veritas before release. Final lab reports are compiled (in Excel) to produce the coal quality database for import into the computer model. ▪ MBGS performed a re-correlation of all seams in EL6123 and EL7579 where seam thicknesses and quality statistics were reviewed against 1:200 and 1:20 geophysics. A degree of tolerance was adopted when reviewing Ellemby target coal seam depth picks, however spurious seam picks were reviewed against coal quality data and lithological logs and were either verified or corrected. ▪ Upon loading drill hole and coal quality data into the computer model, contour plots and section outputs for target seams were produced and visually checked for anomalous data. ▪ RPM reviewed the geological data and geological model produced by MBGS.
Site visits	▪ *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* ▪ *If no site visits have been undertaken indicate why this is the case.*	▪ No site visit has been completed by the Competent Person. As the Project is an underground exploration site, there is little value in attending site as the Competent Person is familiar with regional geology and local conditions in the Monash area.
Geological interpretation	▪ *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* ▪ *Nature of the data used and of any assumptions made.* ▪ *The effect, if any, of alternative interpretations on Mineral Resource estimation.* ▪ *The use of geology in guiding and controlling Mineral Resource estimation.* ▪ *The factors affecting continuity both of grade and geology.*	▪ There is a moderate level of confidence in the current geological interpretation of the Monash Project. Coal seams have been correlated between drill holes and coal plies have been determined within all seams. Seam correlations were conducted using 1:200 scale geophysical logs. Existing coal seam picks were verified and coal plies and stone partings were defined using 1:20 scale geophysical logs. Down hole deviation data was not available, however all holes were drilled vertical and it is assumed seam thicknesses represent true thickness. ▪ Drill hole spacing within EL7579 is in excess of 500m and up to 2km in the western half of EL6123. Variability in seam thickness, coal quality data and uncertainty in coal ply and stone parting correlations resulted in moderate to low confidence in the geology and resources within this deposit. ▪ There is a high degree of uncertainty in the east of EL6123. Only two holes (EM01 and EM02) have been drilled in this part of the lease, both of which terminated within 15m below Fassifern Seam (uppermost target).

Criteria	JORC Code explanation	Commentary
Dimensions	▪ *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	▪ EL7579 is almost surrounded by EL6123 and together form a block approximately 9km wide (east west) and 3km long (north south). Exploration drilling shows considerable variability in seam thickness and quality due to the splitting nature of seams. Resources have been estimated to a maximum depth of 700m.
Estimation and modelling techniques	▪ *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* ▪ *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* ▪ *The assumptions made regarding recovery of by-products.* ▪ *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* ▪ *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* ▪ *Any assumptions behind modelling of selective mining units.* ▪ *Any assumptions about correlation between variables.* ▪ *Description of how the geological interpretation was used to control the resource estimates.* ▪ *Discussion of basis for using or not using grade cutting or capping.* ▪ *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	▪ The estimation was completed using a block model generated from in situ density and ply thickness grids in Vulcan, using vertical sided polygons and limited to 700m below surface. All seams have been modelled, however resources have been estimated for seven seams only. Target seam continuity, thickness and quality is variable throughout the lease and resources have been estimated on the most likely workable section. ▪ Seam thickness and quality grids were gridded on a 50m mesh basis. ▪ Coal resources were estimated using in situ density adjusted to 6% moisture. ▪ Coal quality data loaded into the Vulcan computer model has not been limited or capped. Drill hole data is validated in Vulcan prior to modelling and anomalous values are reviewed against field logs, core photos and geophysical logs. The model is validated by visual checks of geological sections through the deposit and contour plots of seam thickness, depth and coal quality data. Spurious results are investigated and if necessary, corrected.
Moisture	▪ *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	▪ Coal resources were estimated using an in situ moisture estimated at 6%. Coal quality parameters were adjusted to 6% in situ moisture using the Preston and Sanders change of base formula.

Appendix E.
Coal Resource Plots



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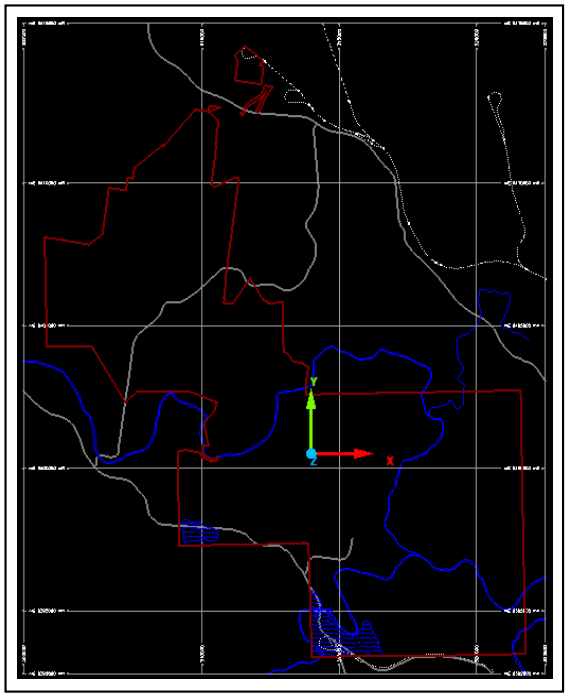
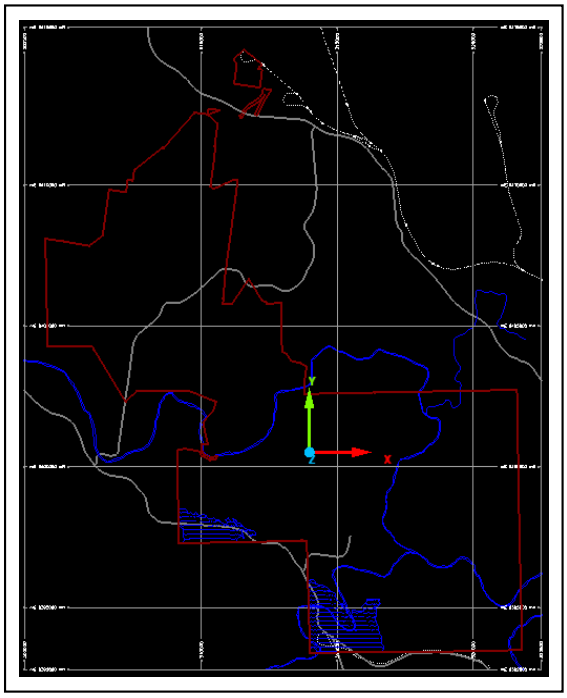
Resource Polygons

HVO

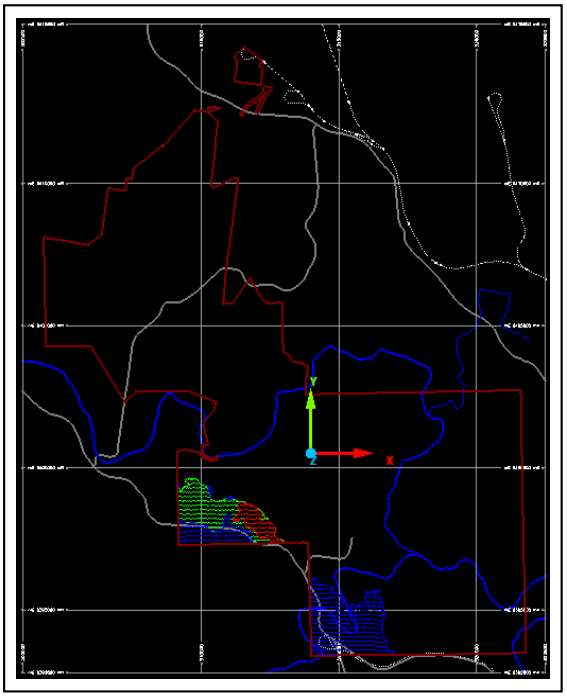
Blakefield Seam



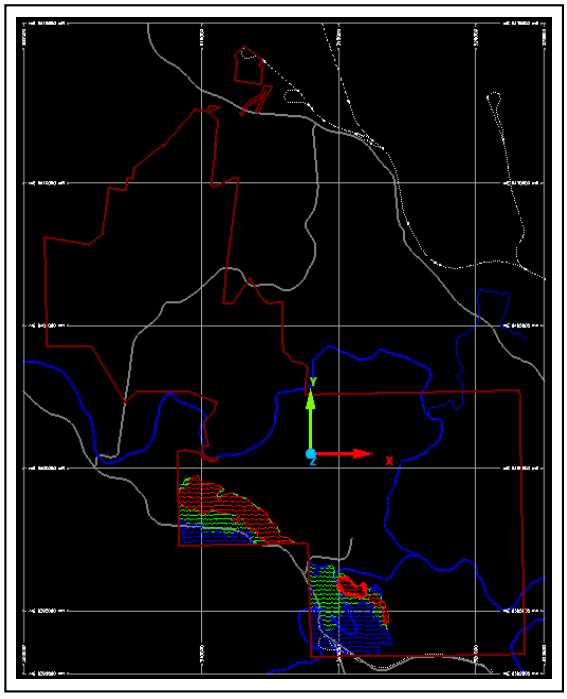
Glen Munro Seam



Woodlands Hill Seam



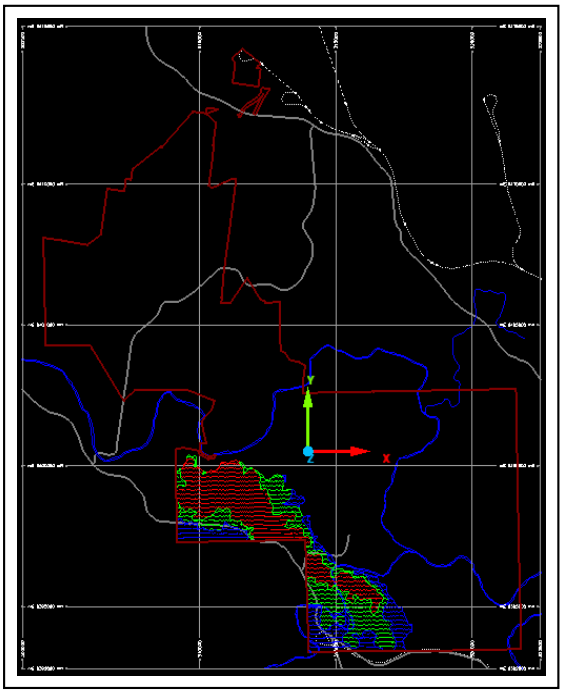
Arrowfield Seam



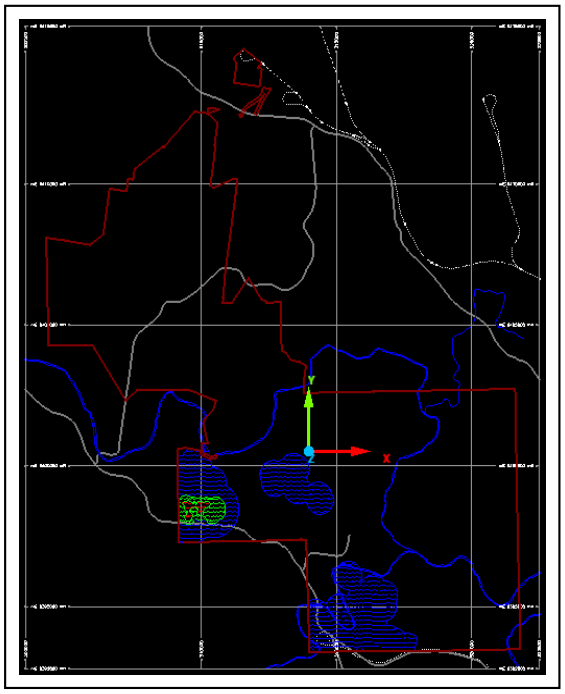
RPMGLOBAL

LEGEND	CLIENT	PROJECT
MEASURED RESOURCE INDICATED RESOURCE INFERRED RESOURCE N	YANCOAL 兖煤澳大利亚有限公司	NAME: COMPETENT PERSON REPORT DRAWING: HVO RESOURCE BOUNDARIES Appendix: E PROJECT No.: ADV-BR-11018 Date: November 2018

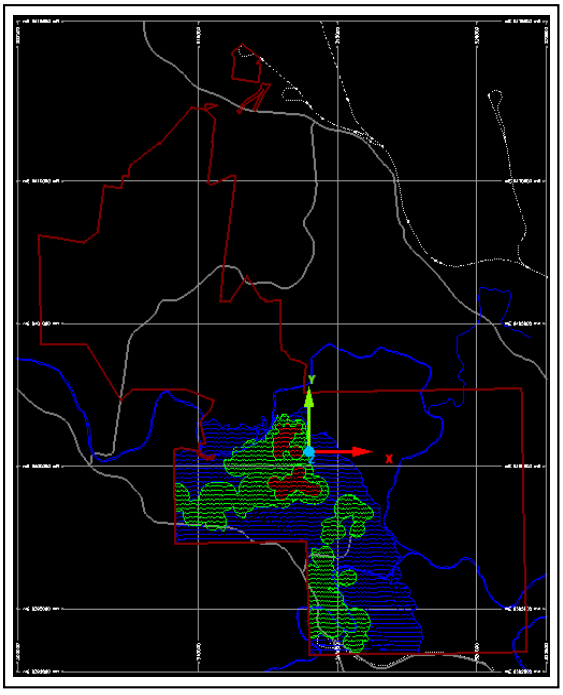
Arrowfield Seam



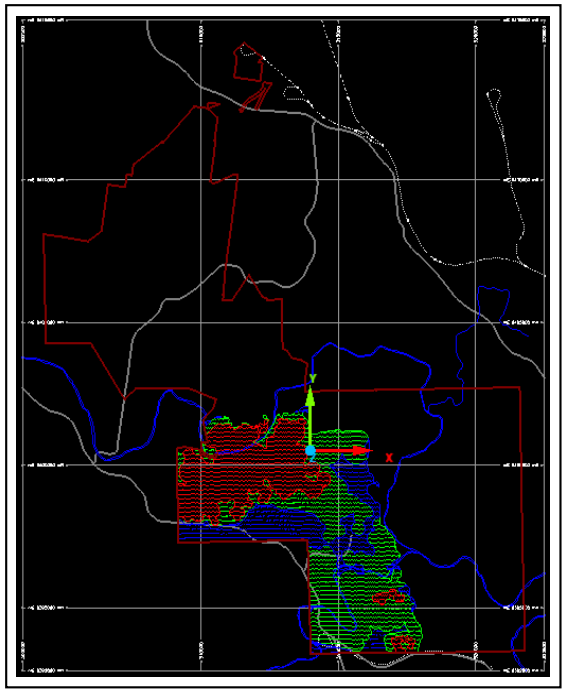
Warkworth 1 Seam



Warkworth 7 & 8 Seams



Warkworth 2,3,4,5,6,9,10 Seams



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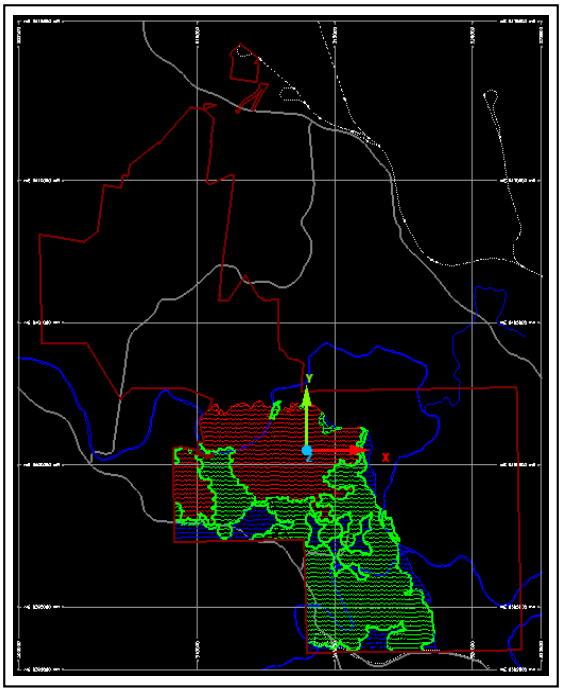
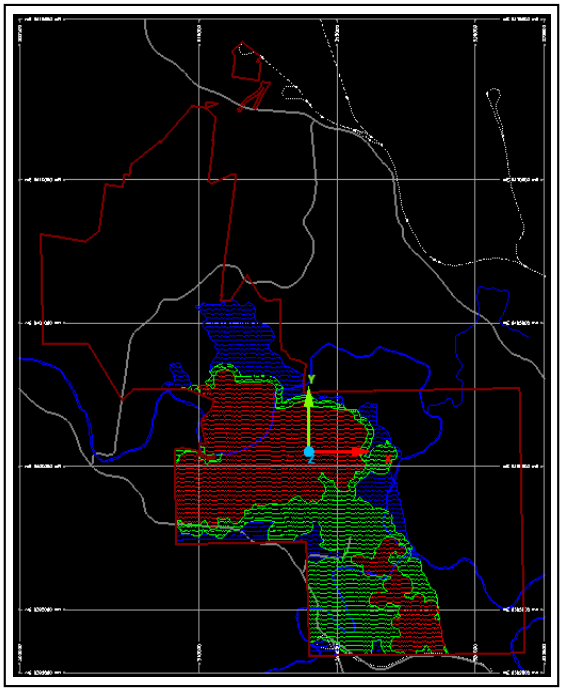
LEGEND	CLIENT	PROJECT
MEASURED RESOURCE INDICATED RESOURCE INFERRED RESOURCE N	YANCOAL 克煤澳大利亚有限公司	NAME: COMPETENT PERSON REPORT DRAWING: HVO RESOURCE BOUNDARIES Appendix: E PROJECT No.: ADV-BR-11018 Date: November 2018

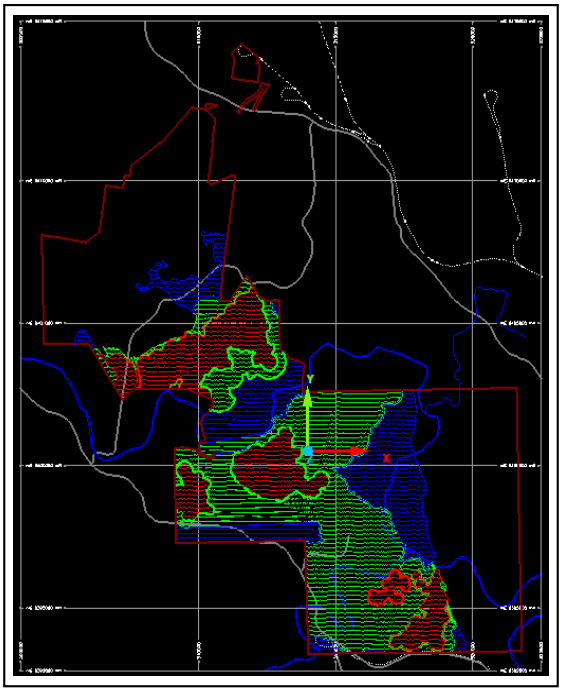
Mt Arthur Seam



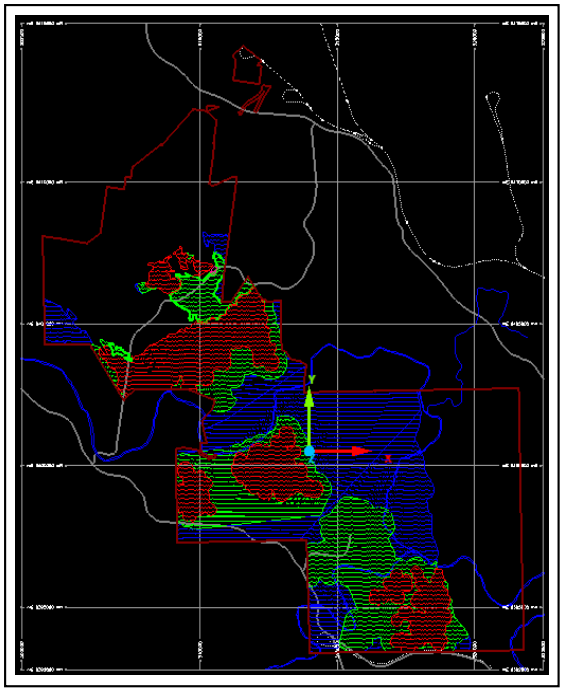
Vaux Seam



Broonie Seam



Bayswater Seam



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LEGEND

MEASURED RESOURCE

INDICATED RESOURCE

INFERRED RESOURCE

N

CLIENT

YANCOAL 克煤澳大利亚有限公司

PROJECT

NAME

COMPETENT PERSON REPORT

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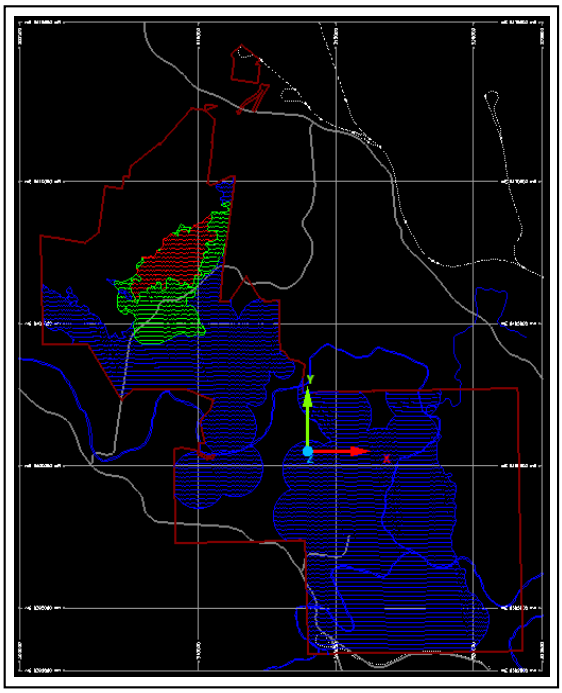
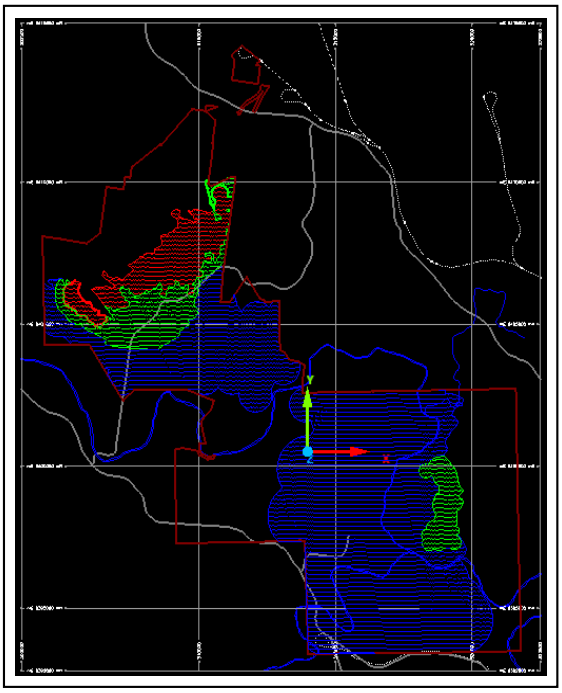
HVO RESOURCE BOUNDARIES

Appendix	PROJECT No.	Date
E	ADV-BR-11018	November 2018

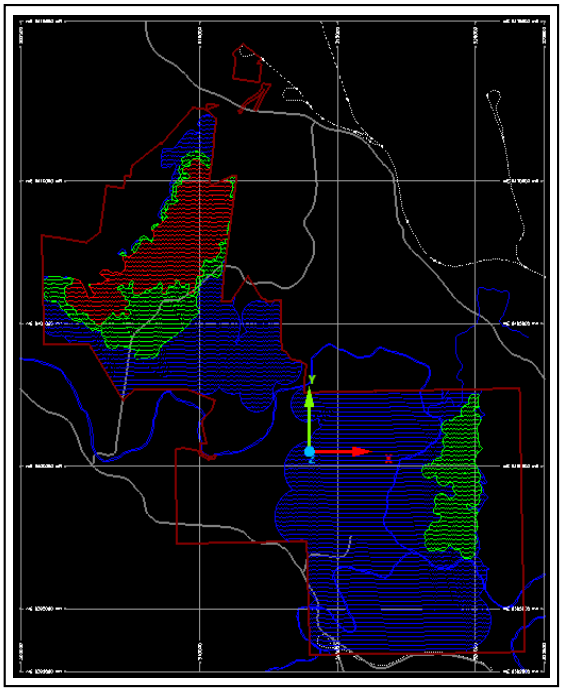
Lemington Seam



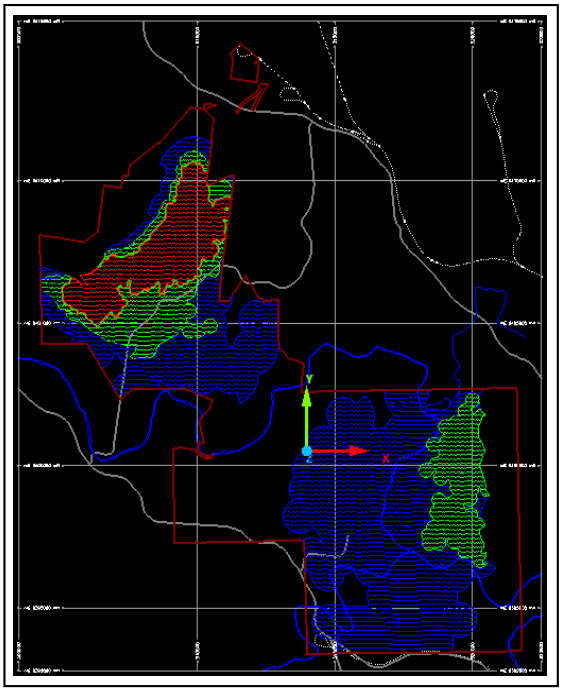
Pikes Gully Seam



Arties Seam



Liddell Seam



RPMGLOBAL

LEGEND

MEASURED RESOURCE

INDICATED RESOURCE

INFERRED RESOURCE

N

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YANCOAL 兖煤澳大利亚有限公司

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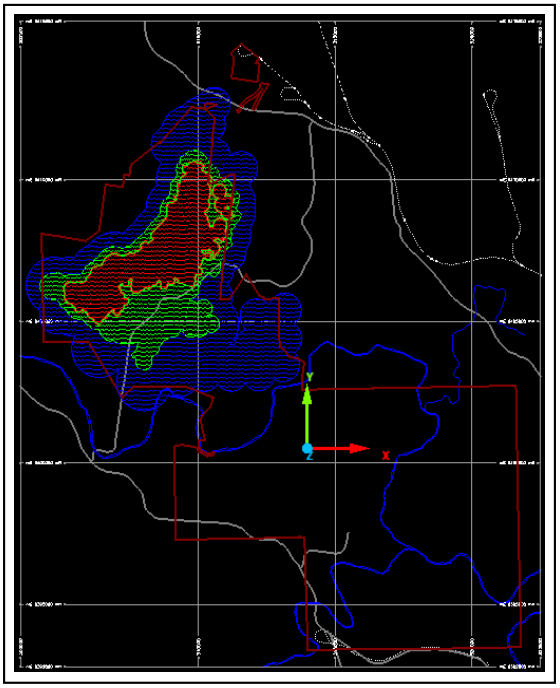
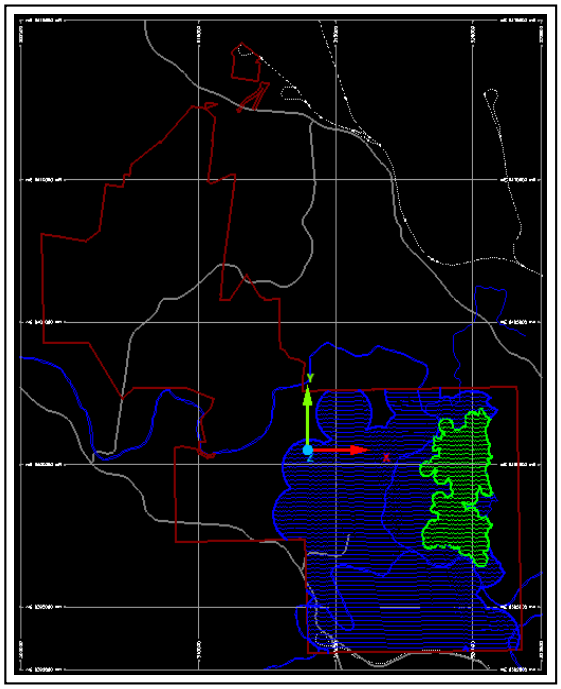
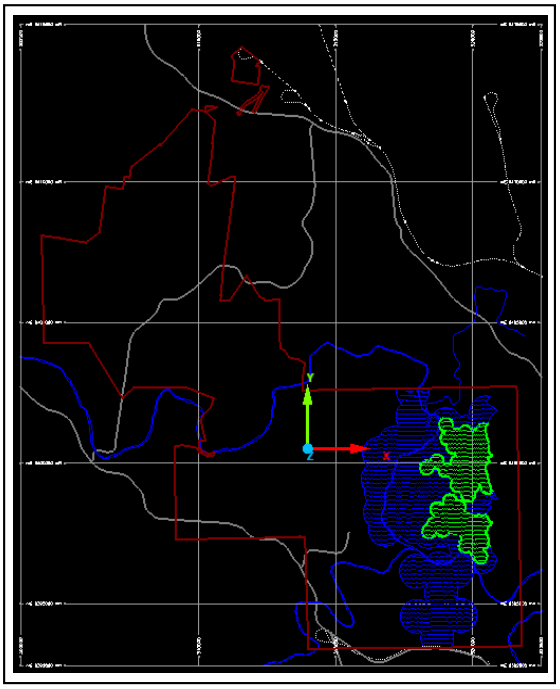
Barrett Seam



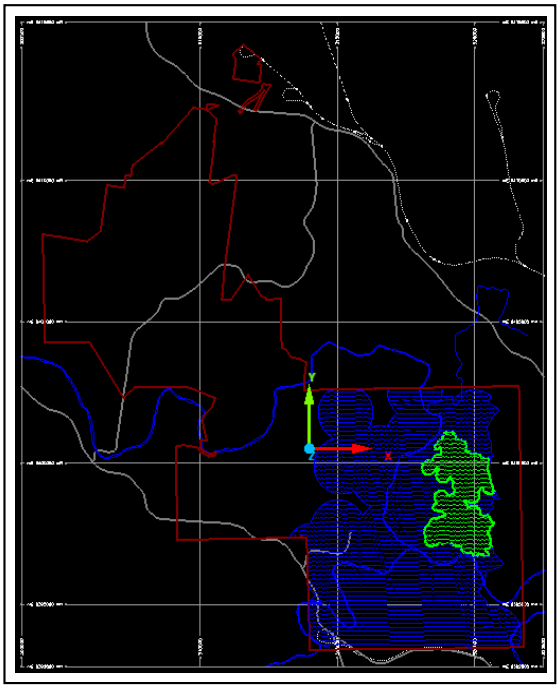
Barrett 1A Seam



Barrett 1B Seam



Barrett 2A Seam



RPMGLOBAL

LEGEND

MEASURED RESOURCE
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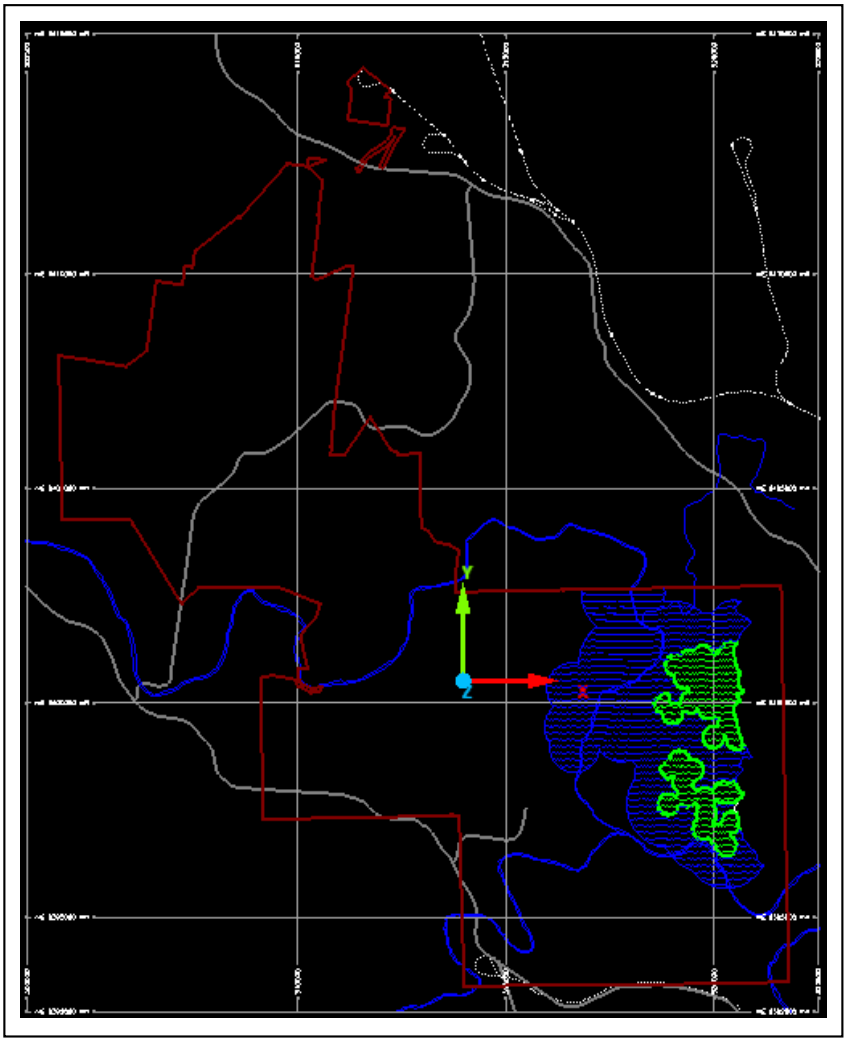
Barrett 2B Seam



RPMGLOBAL

LEGEND

MEASURED RESOURCE
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INFERRED RESOURCE

N

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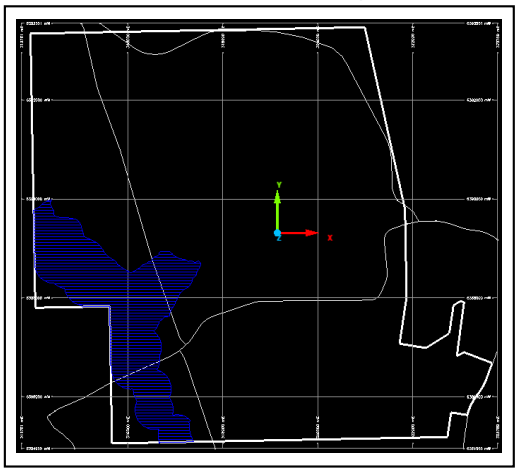
RPMGLOBAL

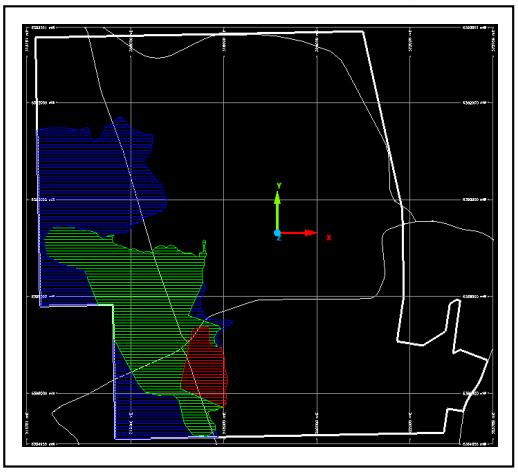
Resource Polygons

MTW

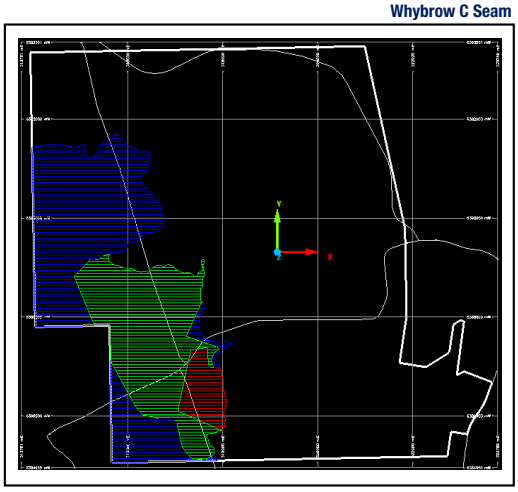
Whybrow A and B Seams



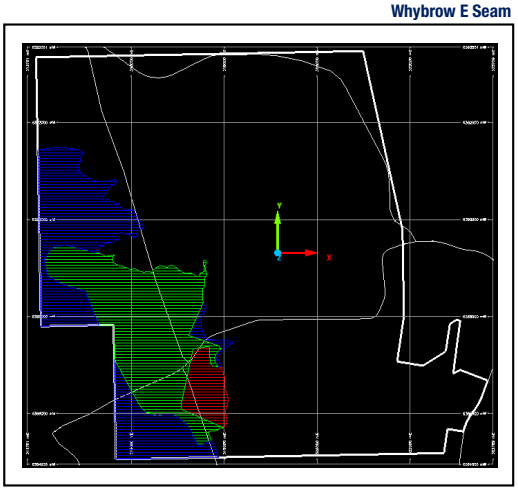
Whybrow D Seam



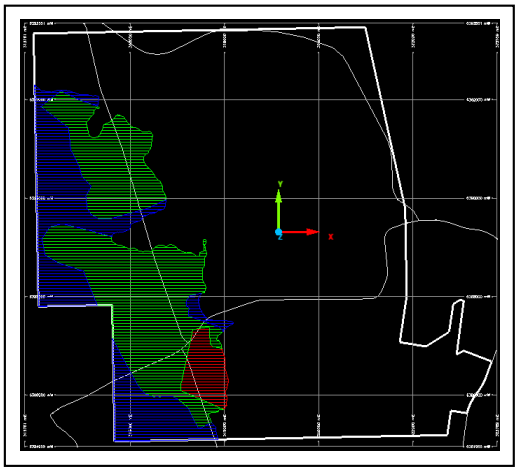
Whybrow C Seam



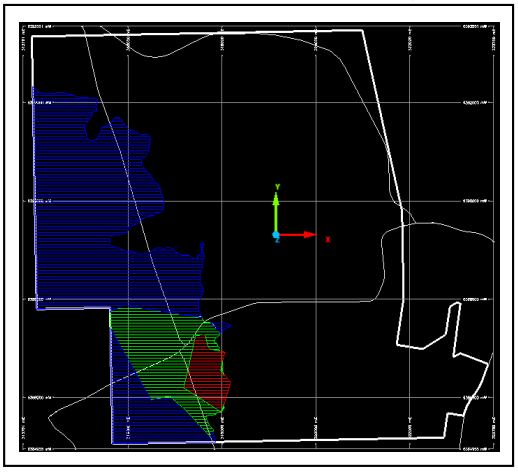
Whybrow E Seam



Whybrow F Seam



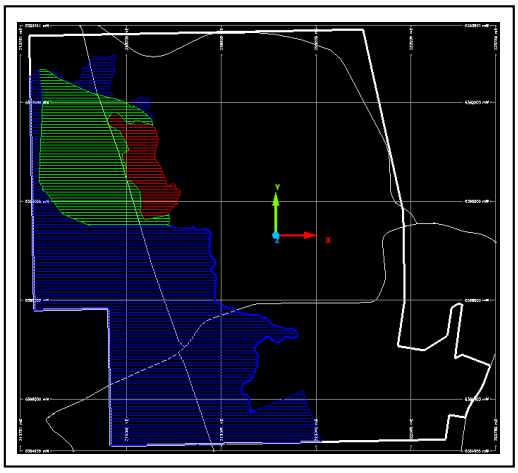
Whybrow G Seam



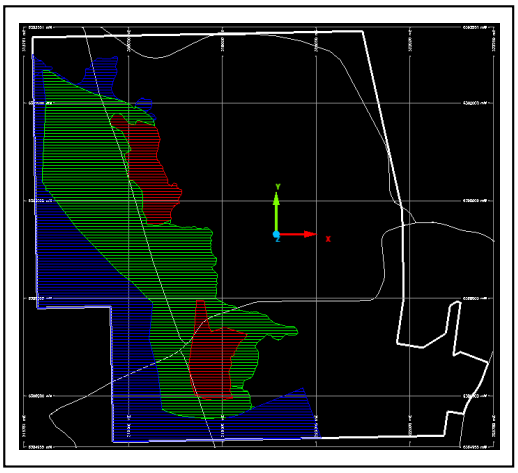
RPMGLOBAL

LEGEND	CLIENT	PROJECT
MEASURED RESOURCE INDICATED RESOURCE INFERRED RESOURCE N	YANCOAL 克煤澳大利亚有限公司	NAME: COMPETENT PERSON REPORT DRAWING: MTW RESOURCE BOUNDARIES Appendix: E PROJECT No.: ADV-BR-11018 Date: November 2018

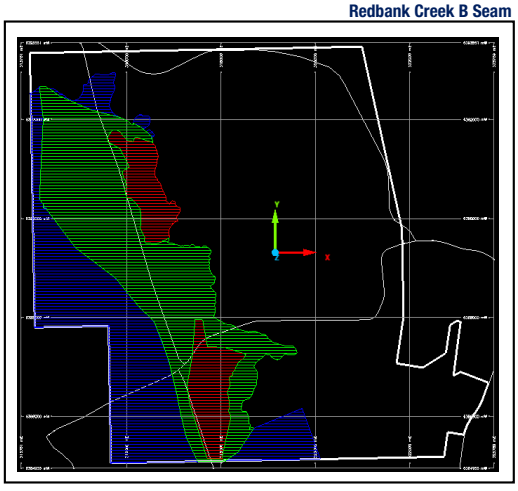
Redbank Creek A Seam



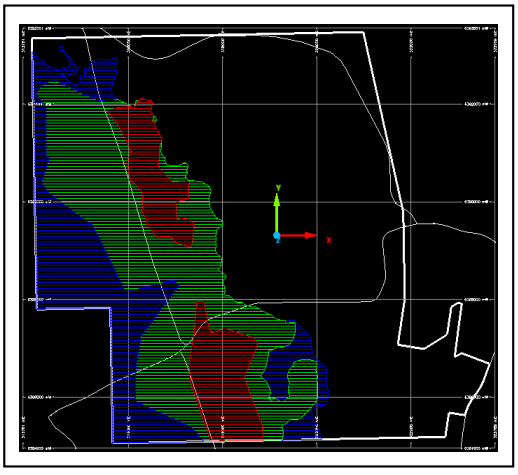
Redbank Creek C Seam



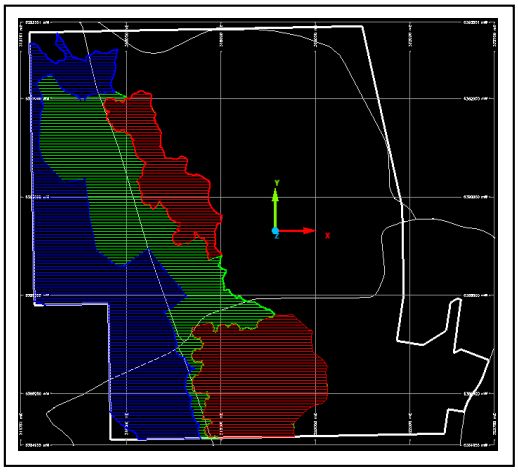
Redbank Creek B Seam



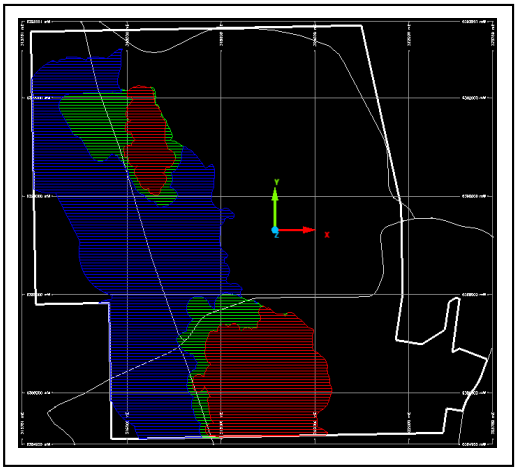
Redbank Creek DEF Seams



Wambo ABC Seams



Wambo D Seam



RPMGLOBAL

LEGEND

MEASURED RESOURCE
INDICATED RESOURCE
INFERRED RESOURCE

N

CLIENT

YANCOAL 克煤澳大利亚有限公司

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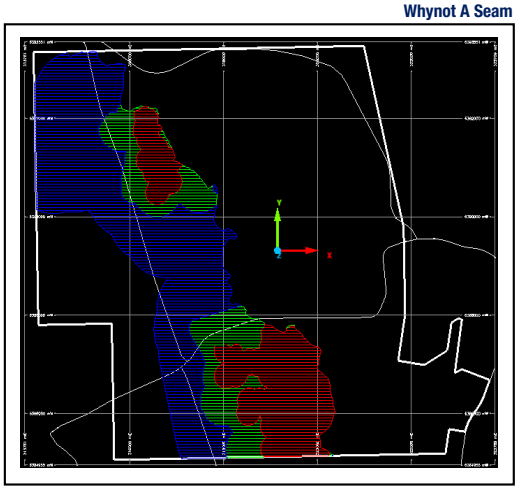
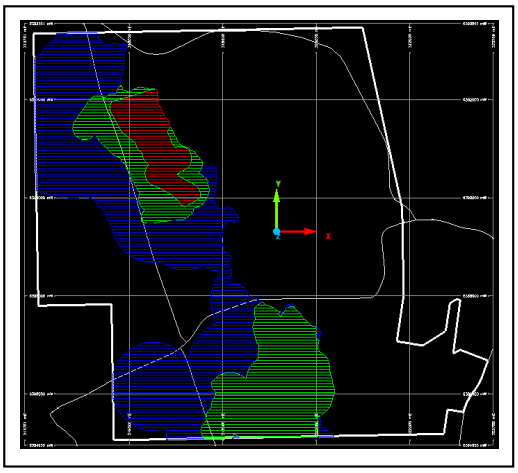
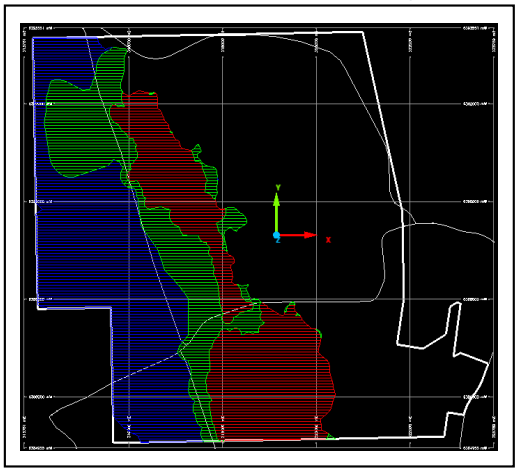
Whynot A Seam



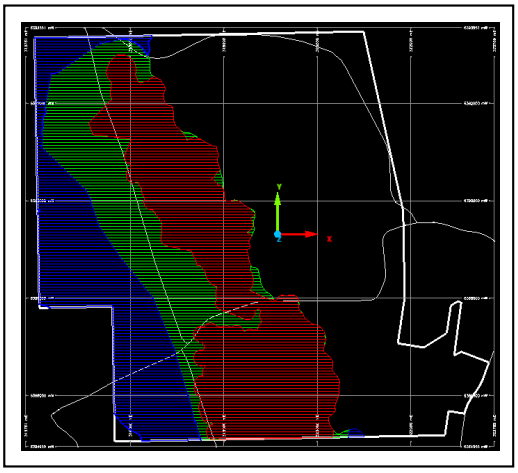
Whynot C Seam



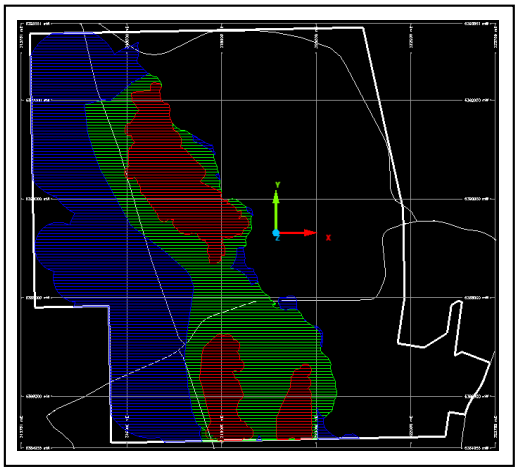
Whynot BD Seams



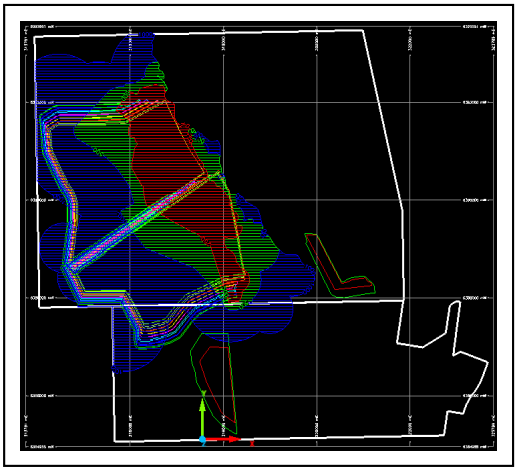
Blakefield ABCEFGH Seams



Blakefield D Seam



Blakefield J Seam



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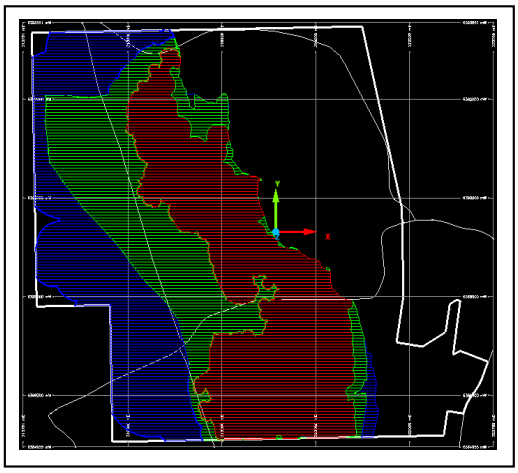
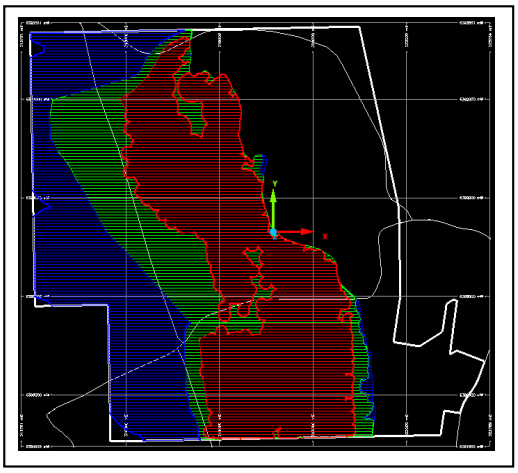
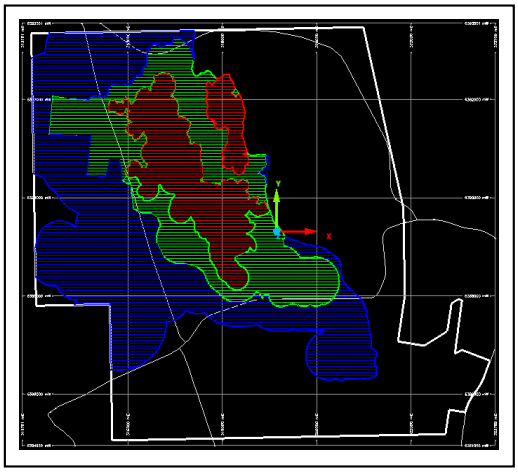
Glen Munro Seam



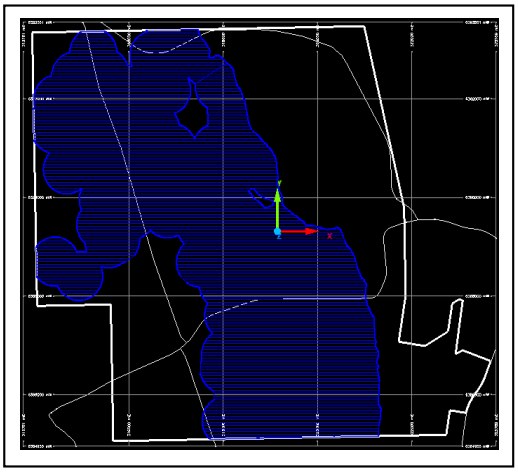
Woodlands Hill Seam



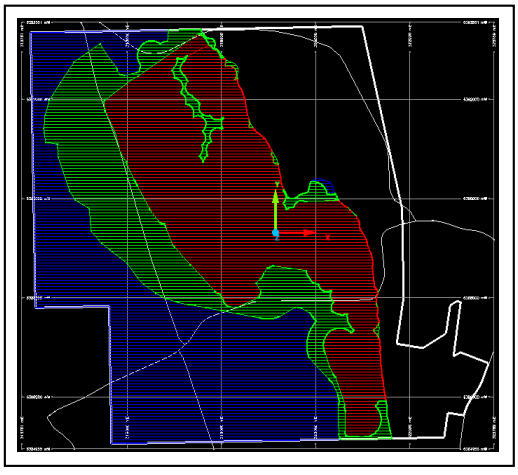
Arrowfield A Seam



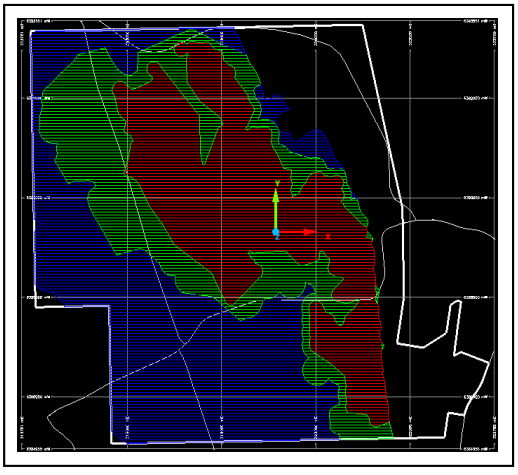
Arrowfield B Seam



Bowfield Seam



Warkworth Seam



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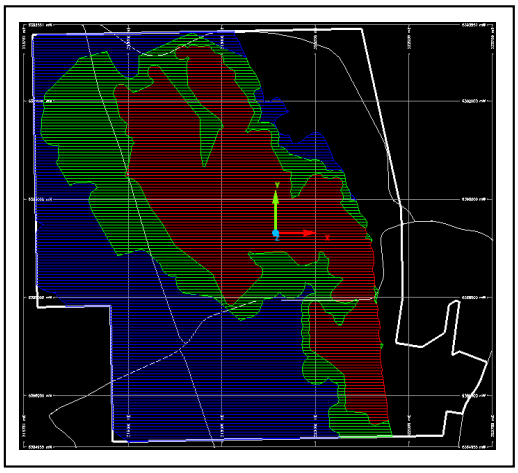
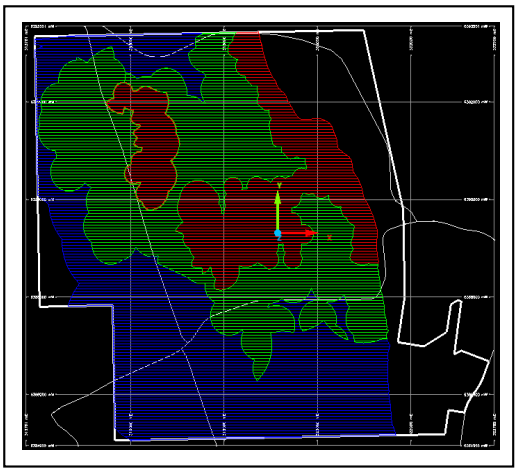
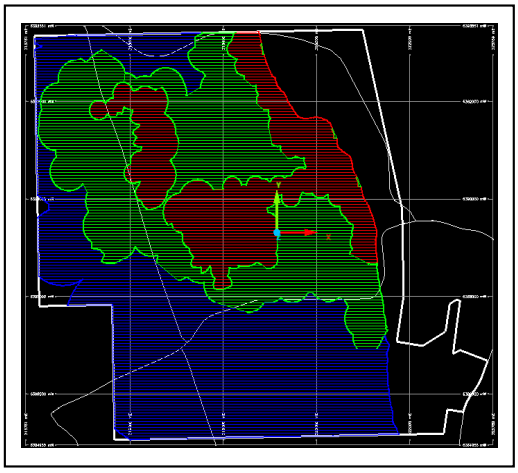
Warkworth Seam



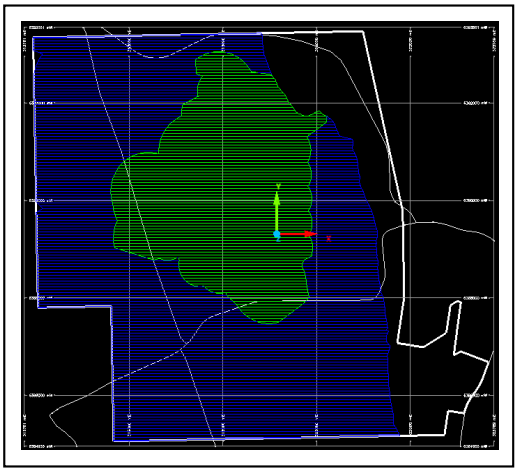
Piercefield AB Seams



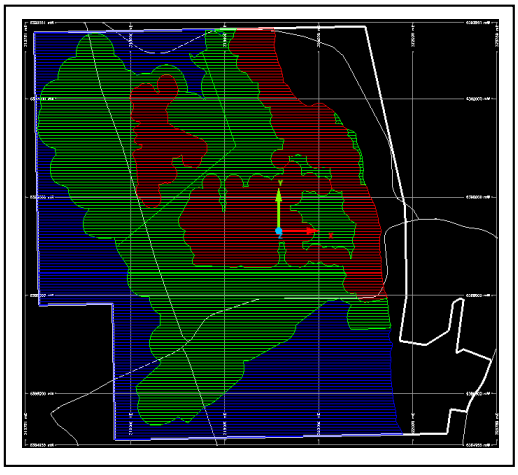
Piercefield CDE Seams



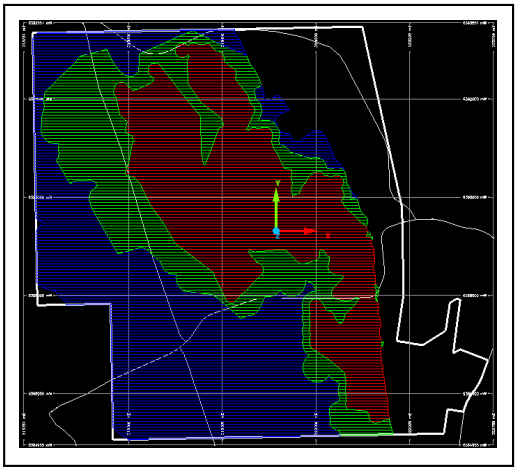
Vaux AB Seams



Vaux CDEFGH Seams



Vaux J Seam



RPMGLOBAL

LEGEND

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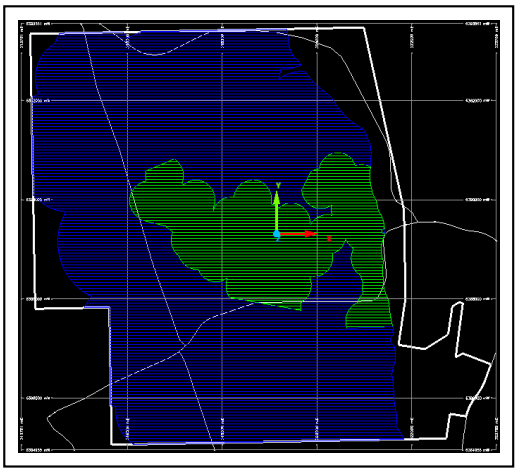
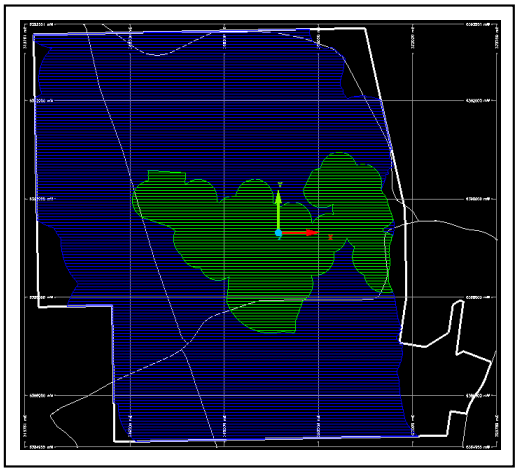
Broonie ABCDEF Seams

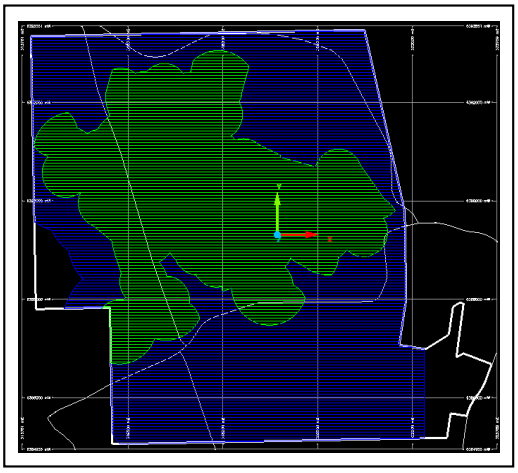
Broonie GH Seams



Broonie JQ Seam



Bayswater Seam



RPMGLOBAL

LEGEND

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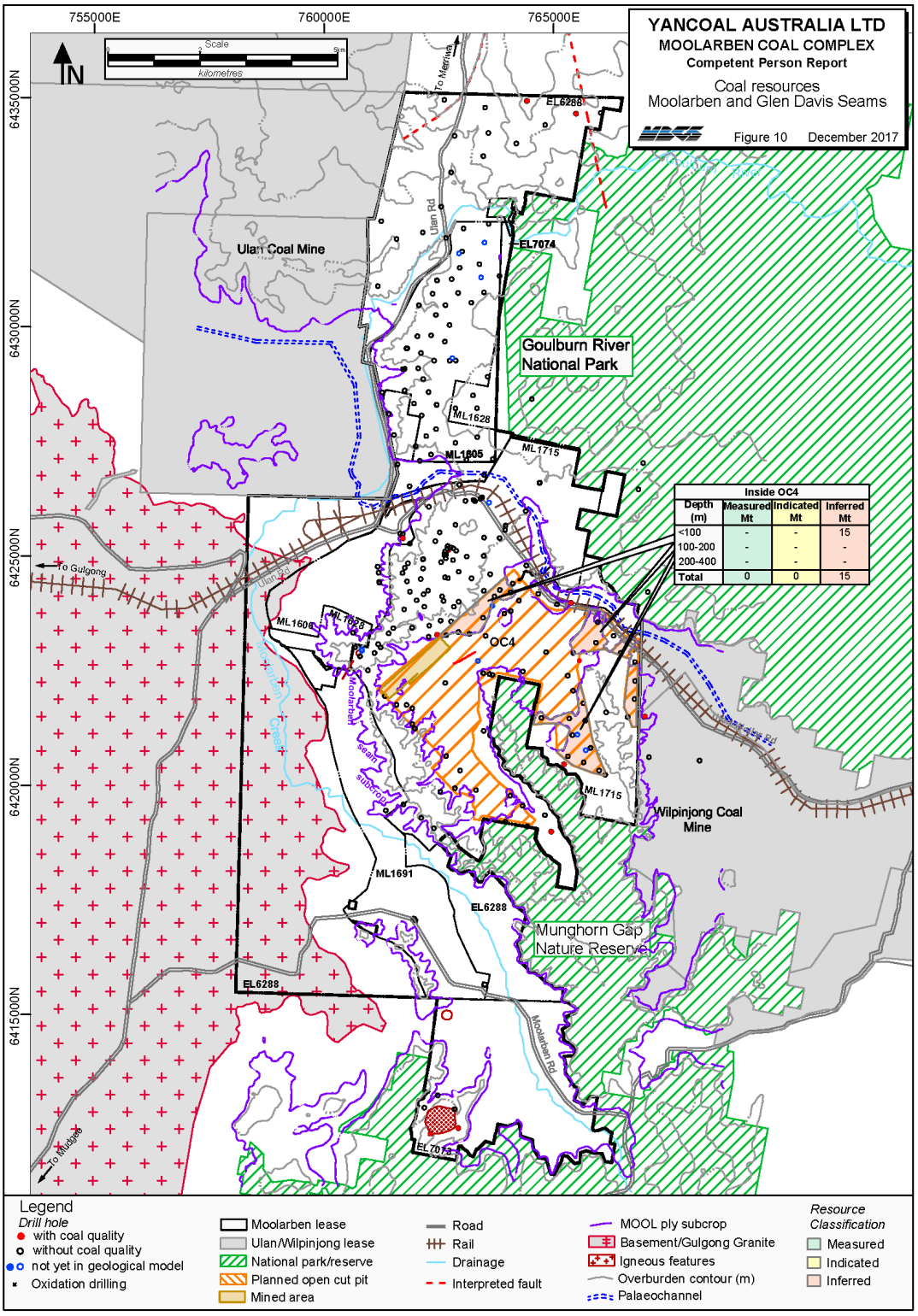
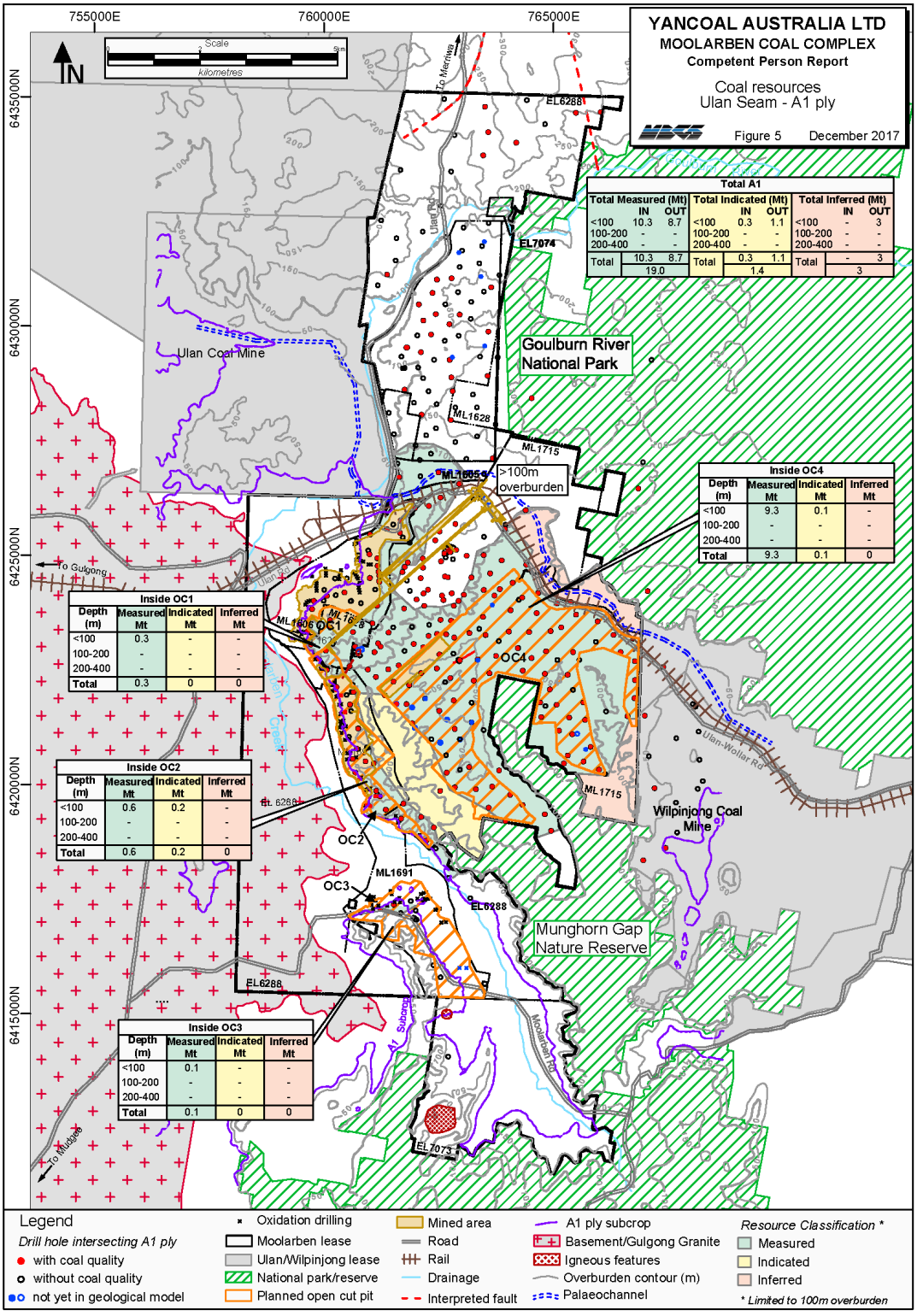
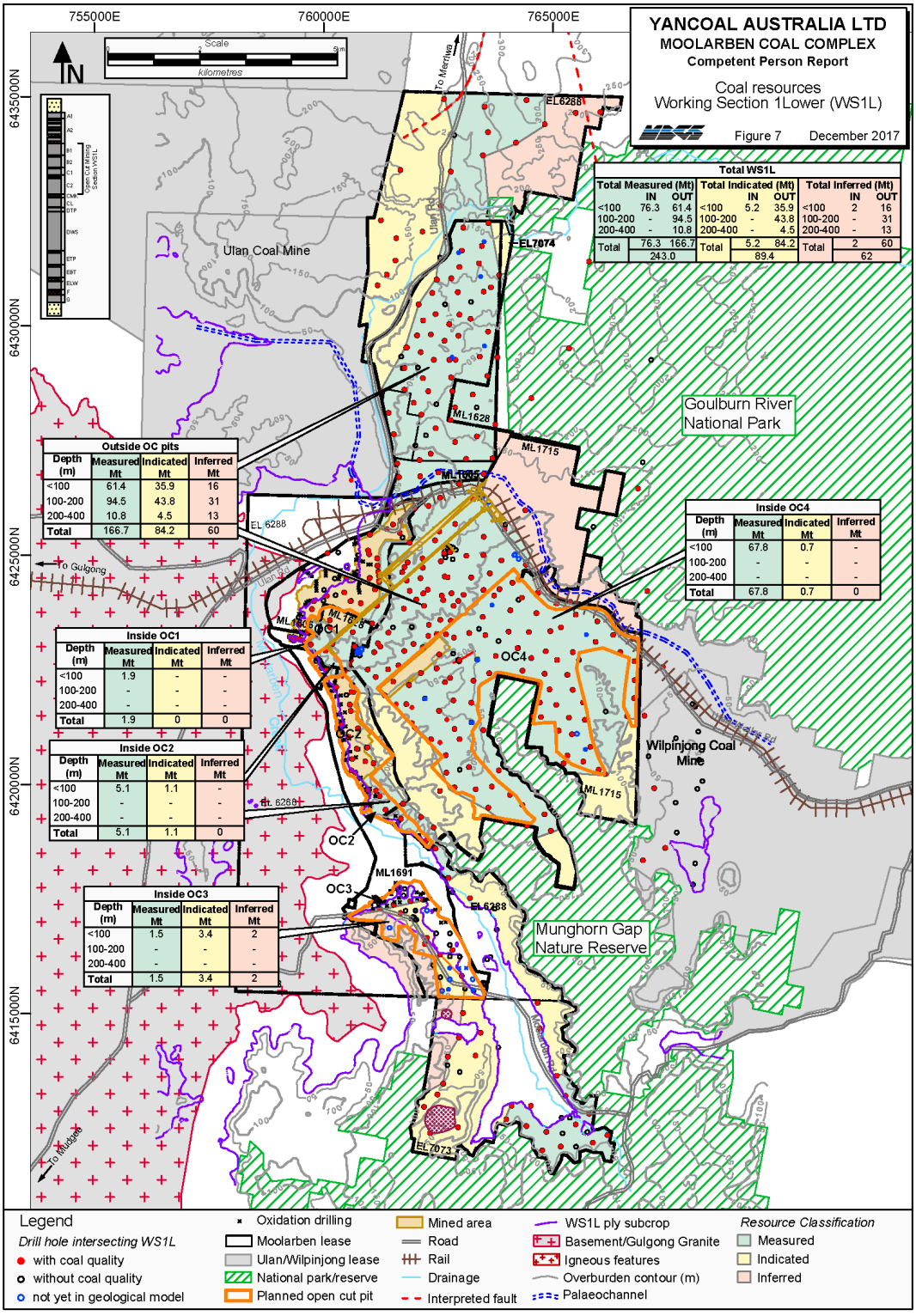
Resource Polygons

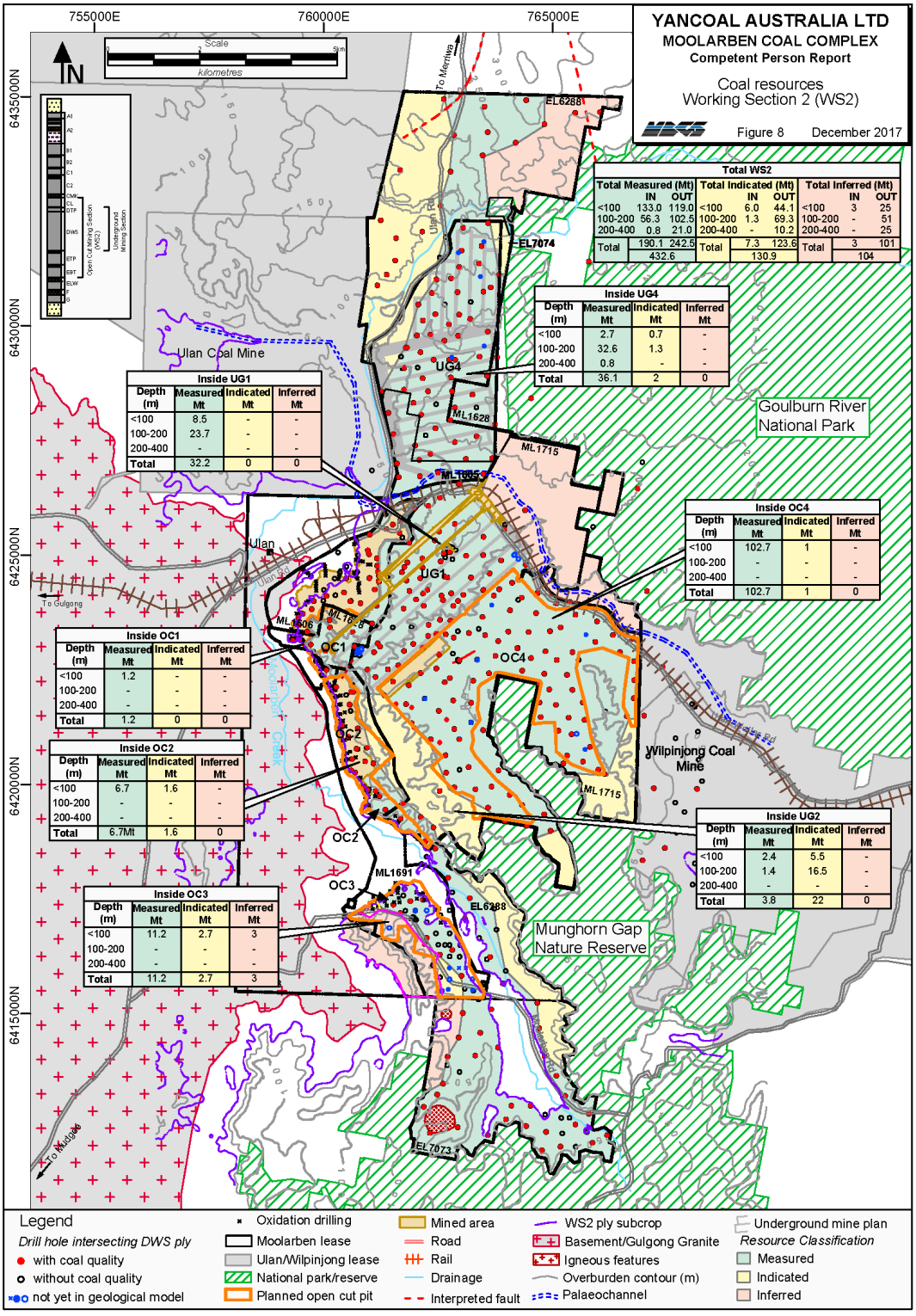
Moolarben

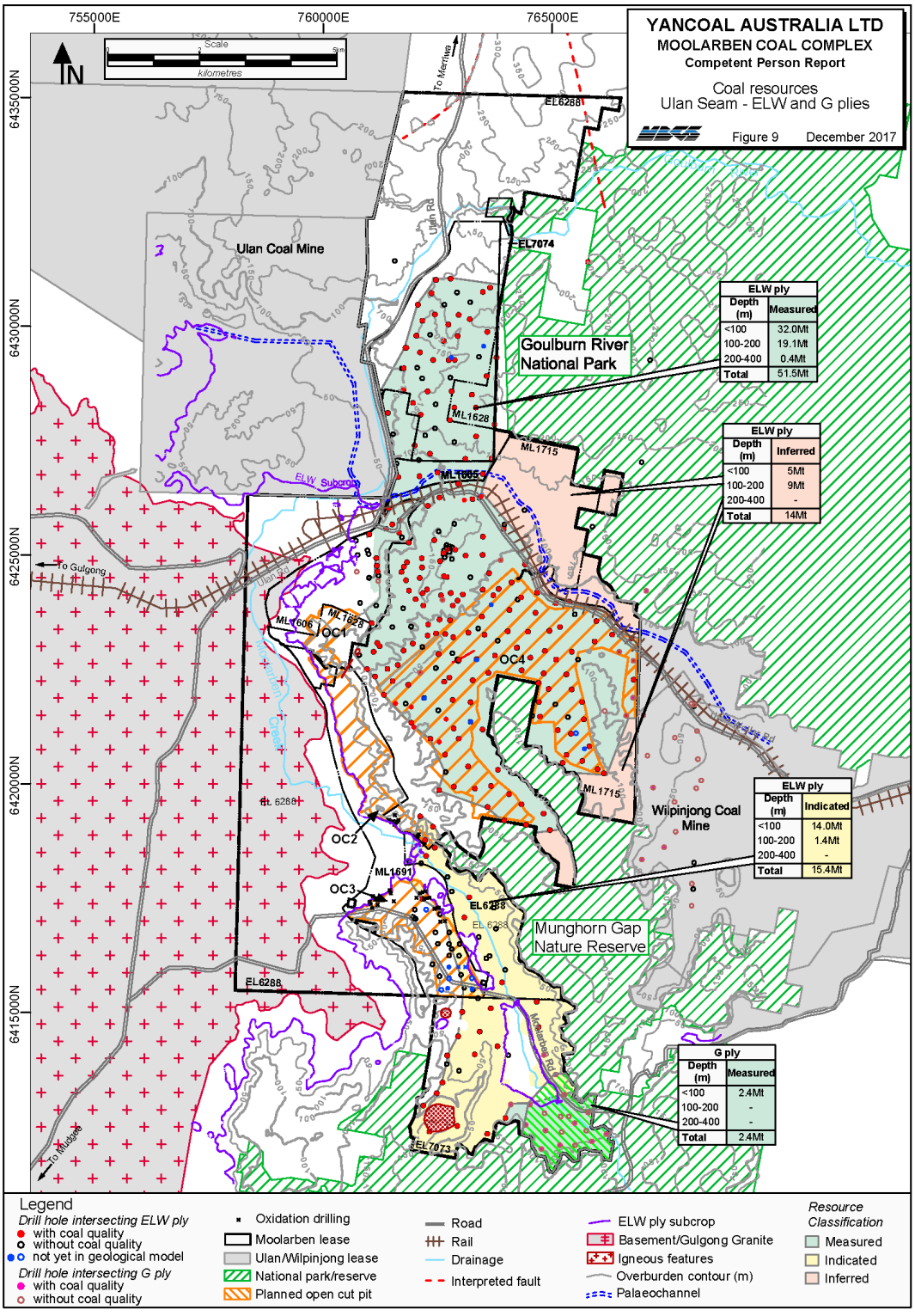

YANCOAL AUSTRALIA LTD
MOOLARBEN COAL COMPLEX
Competent Person Report
Coal resources
Moolarben and Glen Davis Seams
Figure 10 December 2017
755000E
760000E
765000E
6435000N
6430000N
6425000N
6420000N
6415000N
Scale
kilometres
N
Ulan Coal Mine
Goulburn River National Park
Wilpinjong Coal Mine
Munghorn Gap Nature Reserve
EL6288
EL7074
EL7013
ML1628
ML1805
ML1715
ML1608
ML1691
OC4
Ulan Rd
Moolarben Rd
To Merriwa
To Gulgong
To Mudgee
Inside OC4
Depth (m) | Measured Mt | Indicated Mt | Inferred Mt
<100 | - | - | 15
100-200 | - | - | -
200-400 | - | - | -
Total | 0 | 0 | 15
Legend
Drill hole
with coal quality
without coal quality
not yet in geological model
Oxidation drilling
Moolarben lease
Ulan/Wilpinjong lease
National park/reserve
Planned open cut pit
Mined area
Road
Rail
Drainage
Interpreted fault
MOOL ply subcrop
Basement/Gulgong Granite
Igneous features
Overburden contour (m)
Palaeochannel
Resource Classification
Measured
Indicated
Inferred


YANCOAL AUSTRALIA LTD
MOOLARBEN COAL COMPLEX
Competent Person Report
Coal resources
Ulan Seam - A1 ply
Figure 5 December 2017
755000E
760000E
765000E
6435000N
6430000N
6425000N
6420000N
6415000N
Scale
kilometres
To Merriwa
To Gulgong
To Mudgee
EL6288
EL7074
EL7073
Ulan Coal Mine
Goulburn River National Park
Munghorn Gap Nature Reserve
Wilpinjong Coal Mine
ML1628
ML1715
ML1691
ML1606
>100m overburden
OC1
OC2
OC3
OC4
Ulan-Wollar Rd
Total A1
Total Measured (Mt) IN OUT
<100 10.3 8.7
100-200 - -
200-400 - -
Total 10.3 8.7
19.0
Total Indicated (Mt) IN OUT
<100 0.3 1.1
100-200 - -
200-400 - -
Total 0.3 1.1
1.4
Total Inferred (Mt) IN OUT
<100 - 3
100-200 - -
200-400 - -
Total - 3
3
Inside OC1
Depth (m) | Measured Mt | Indicated Mt | Inferred Mt
<100 | 0.3 | - | -
100-200 | - | - | -
200-400 | - | - | -
Total | 0.3 | 0 | 0
Inside OC2
Depth (m) | Measured Mt | Indicated Mt | Inferred Mt
<100 | 0.6 | 0.2 | -
100-200 | - | - | -
200-400 | - | - | -
Total | 0.6 | 0.2 | 0
Inside OC3
Depth (m) | Measured Mt | Indicated Mt | Inferred Mt
<100 | 0.1 | - | -
100-200 | - | - | -
200-400 | - | - | -
Total | 0.1 | 0 | 0
Inside OC4
Depth (m) | Measured Mt | Indicated Mt | Inferred Mt
<100 | 9.3 | 0.1 | -
100-200 | - | - | -
200-400 | - | - | -
Total | 9.3 | 0.1 | 0
Legend
Drill hole intersecting A1 ply
with coal quality
without coal quality
not yet in geological model
Oxidation drilling
Moolarben lease
Ulan/Wilpinjong lease
National park/reserve
Planned open cut pit
Mined area
Road
Rail
Drainage
Interpreted fault
A1 ply subcrop
Basement/Gulgong Granite
Igneous features
Overburden contour (m)
Palaeochannel
Resource Classification *
Measured
Indicated
Inferred
* Limited to 100m overburden


YANCOAL AUSTRALIA LTD
MOOLARBEN COAL COMPLEX
Competent Person Report
Coal resources
Working Section 1Lower (WS1L)
Figure 7 December 2017
755000E
760000E
765000E
6435000N
6430000N
6425000N
6420000N
6415000N
Scale
kilometres
Ulan Coal Mine
Goulburn River National Park
Wilpinjong Coal Mine
Munghorn Gap Nature Reserve
To Merriwa
To Gulgong
To Mudgee
EL6288
EL7074
EL7073
ML1628
ML1715
ML1691
OC1
OC2
OC3
OC4
Total WS1L
Total Measured (Mt) IN OUT
<100 76.3 61.4
100-200 - 94.5
200-400 - 10.8
Total 76.3 166.7
243.0
Total Indicated (Mt) IN OUT
<100 5.2 35.9
100-200 - 43.8
200-400 - 4.5
Total 5.2 84.2
89.4
Total Inferred (Mt) IN OUT
<100 2 16
100-200 - 31
200-400 - 13
Total 2 60
62
Outside OC pits
Depth (m) Measured Mt Indicated Mt Inferred Mt
<100 61.4 35.9 16
100-200 94.5 43.8 31
200-400 10.8 4.5 13
Total 166.7 84.2 60
Inside OC1
Depth (m) Measured Mt Indicated Mt Inferred Mt
<100 1.9 - -
100-200 - - -
200-400 - - -
Total 1.9 0 0
Inside OC2
Depth (m) Measured Mt Indicated Mt Inferred Mt
<100 5.1 1.1 -
100-200 - - -
200-400 - - -
Total 5.1 1.1 0
Inside OC3
Depth (m) Measured Mt Indicated Mt Inferred Mt
<100 1.5 3.4 2
100-200 - - -
200-400 - - -
Total 1.5 3.4 2
Inside OC4
Depth (m) Measured Mt Indicated Mt Inferred Mt
<100 67.8 0.7 -
100-200 - - -
200-400 - - -
Total 67.8 0.7 0
Legend
Drill hole intersecting WS1L
with coal quality
without coal quality
not yet in geological model
Oxidation drilling
Moolarben lease
Ulan/Wilpinjong lease
National park/reserve
Planned open cut pit
Mined area
Road
Rail
Drainage
Interpreted fault
WS1L ply subcrop
Basement/Gulgong Granite
Igneous features
Overburden contour (m)
Palaeochannel
Resource Classification
Measured
Indicated
Inferred

COMPETENT PERSON RESOURCE REPORT - MOOLARBEN COAL COMPLEX

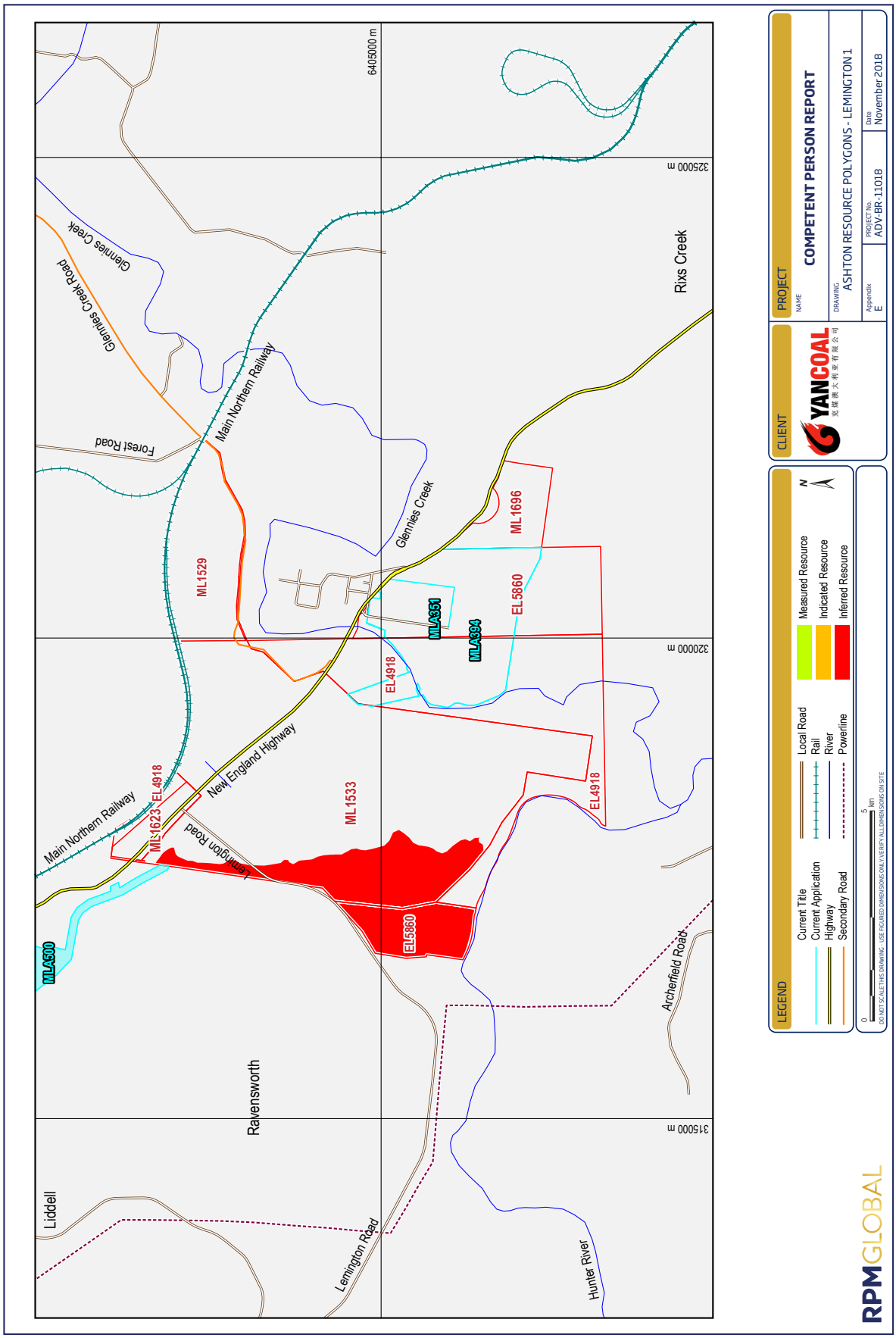


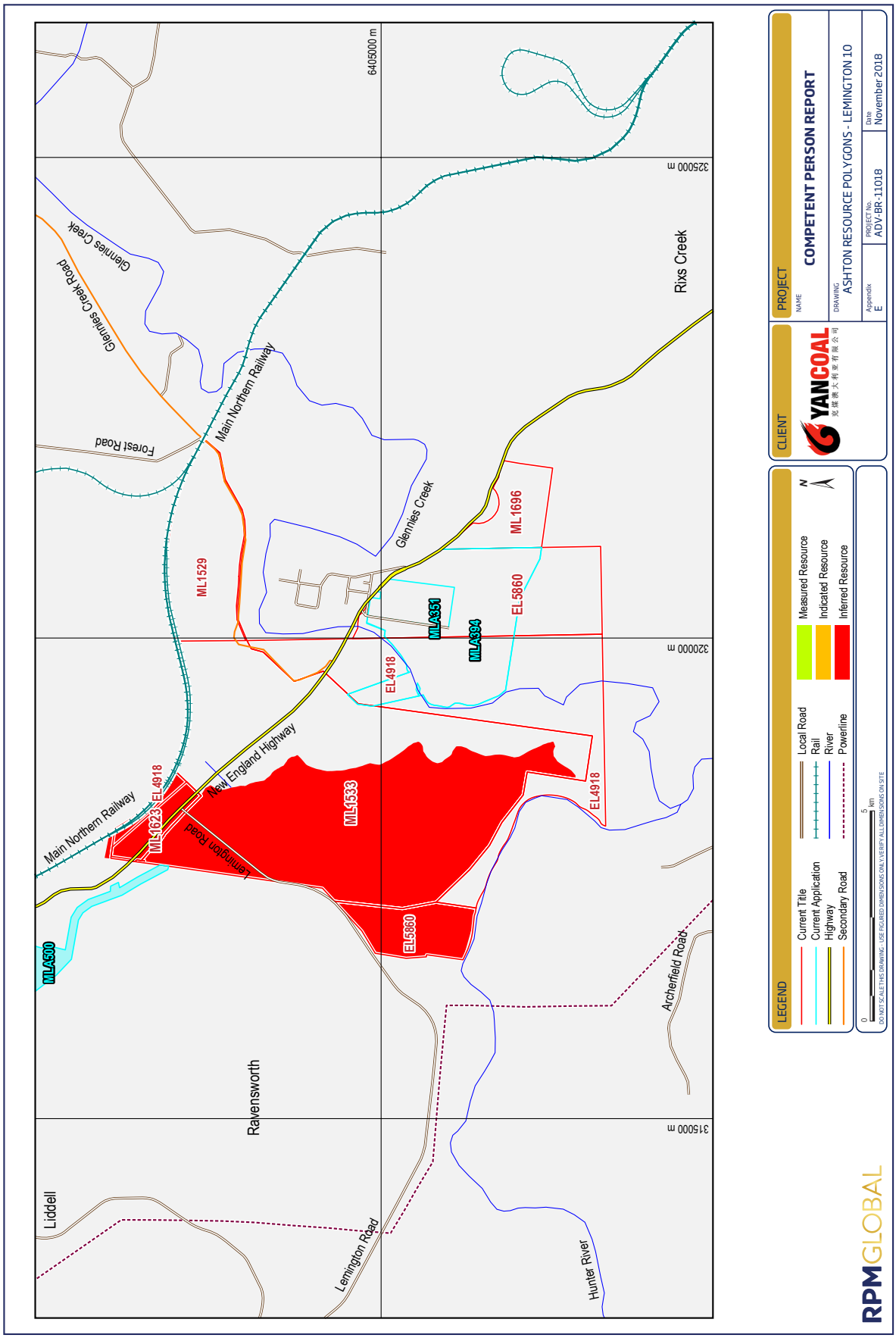

YANCOAL AUSTRALIA LTD
MOOLARBEN COAL COMPLEX
Competent Person Report
Coal resources
Ulan Seam - ELW and G plies
Figure 9 December 2017
755000E
760000E
765000E
6435000N
6430000N
6425000N
6420000N
6415000N
Scale
kilometres
N
Ulan Coal Mine
Goulburn River National Park
Munghorn Gap Nature Reserve
Wilpinjong Coal Mine
EL6288
EL7074
EL7073
ML1628
ML1715
ML1605
ML1606
ML1691
OC1
OC2
OC3
OC4
To Merriwa
To Gulgong
To Mudgee
Ulan Rd
Wollar Rd
ELW ply
Depth (m) | Measured
<100 | 32.0Mt
100-200 | 19.1Mt
200-400 | 0.4Mt
Total | 51.5Mt
ELW ply
Depth (m) | Inferred
<100 | 5Mt
100-200 | 9Mt
200-400 | -
Total | 14Mt
ELW ply
Depth (m) | Indicated
<100 | 14.0Mt
100-200 | 1.4Mt
200-400 | -
Total | 15.4Mt
G ply
Depth (m) | Measured
<100 | 2.4Mt
100-200 | -
200-400 | -
Total | 2.4Mt
Legend
Drill hole intersecting ELW ply
with coal quality
without coal quality
not yet in geological model
Drill hole intersecting G ply
with coal quality
without coal quality
Oxidation drilling
Moolarben lease
Ulan/Wilpinjong lease
National park/reserve
Planned open cut pit
Road
Rail
Drainage
Interpreted fault
ELW ply subcrop
Basement/Gulgong Granite
Igneous features
Overburden contour (m)
Palaeochannel
Resource Classification
Measured
Indicated
Inferred

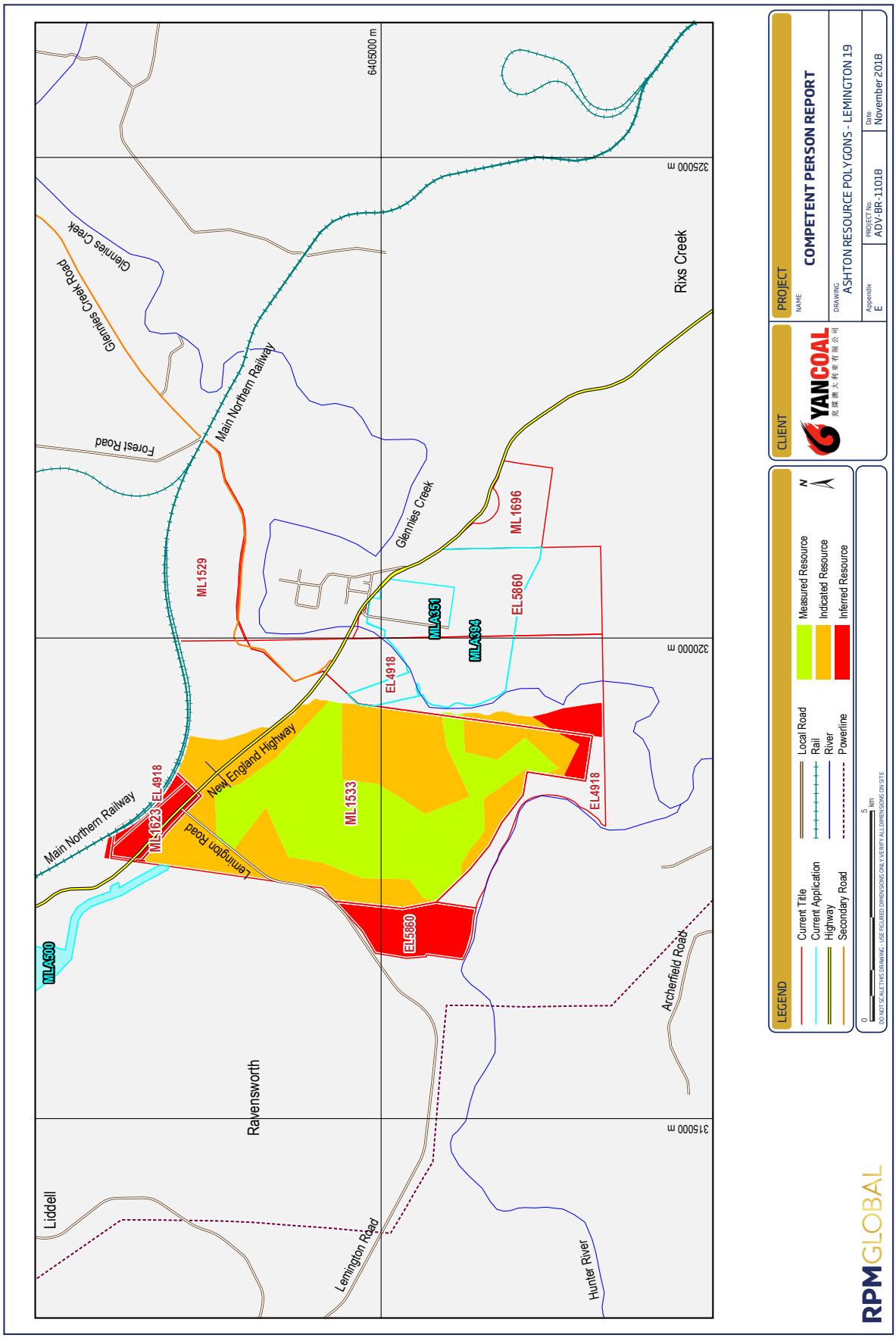
RPMGLOBAL

Resource Polygons

Ashton


6405000 m
3250000 m
3200000 m
3150000 m
Rixs Creek
Ravensworth
Liddell
Glennies Creek
Glennies Creek Road
Forest Road
Main Northern Railway
New England Highway
Lemington Road
Archerfield Road
Lemington Road
Hunter River
ML1529
ML1533
ML1623
ML1696
MLA500
MLA551
MLA594
EL4918
EL5860
EL5630
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Measured Resource
Indicated Resource
Inferred Resource
N
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY, VERIFY ALL DIMENSIONS ON SITE
RPMGLOBAL
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
ASHTON RESOURCE POLYGONS - LEMINGTON1
Appendix
E
PROJECT No.
ADV-BR-11018
Date
November 2018


6405000 m
3250000 m
3200000 m
3150000 m
Rixs Creek
Ravensworth
Liddell
Glennies Creek
Glennies Creek Road
Forest Road
Main Northern Railway
New England Highway
Lemington Road
Archerfield Road
Hunter River
Lemington Road
ML1529
ML1623
ML1533
ML1696
ML4351
ML4394
ML4500
EL4918
EL5860
EL5630
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Measured Resource
Indicated Resource
Inferred Resource
N
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY, VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
ASHTON RESOURCE POLYGONS - LEMINGTON 10
Appendix
E
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL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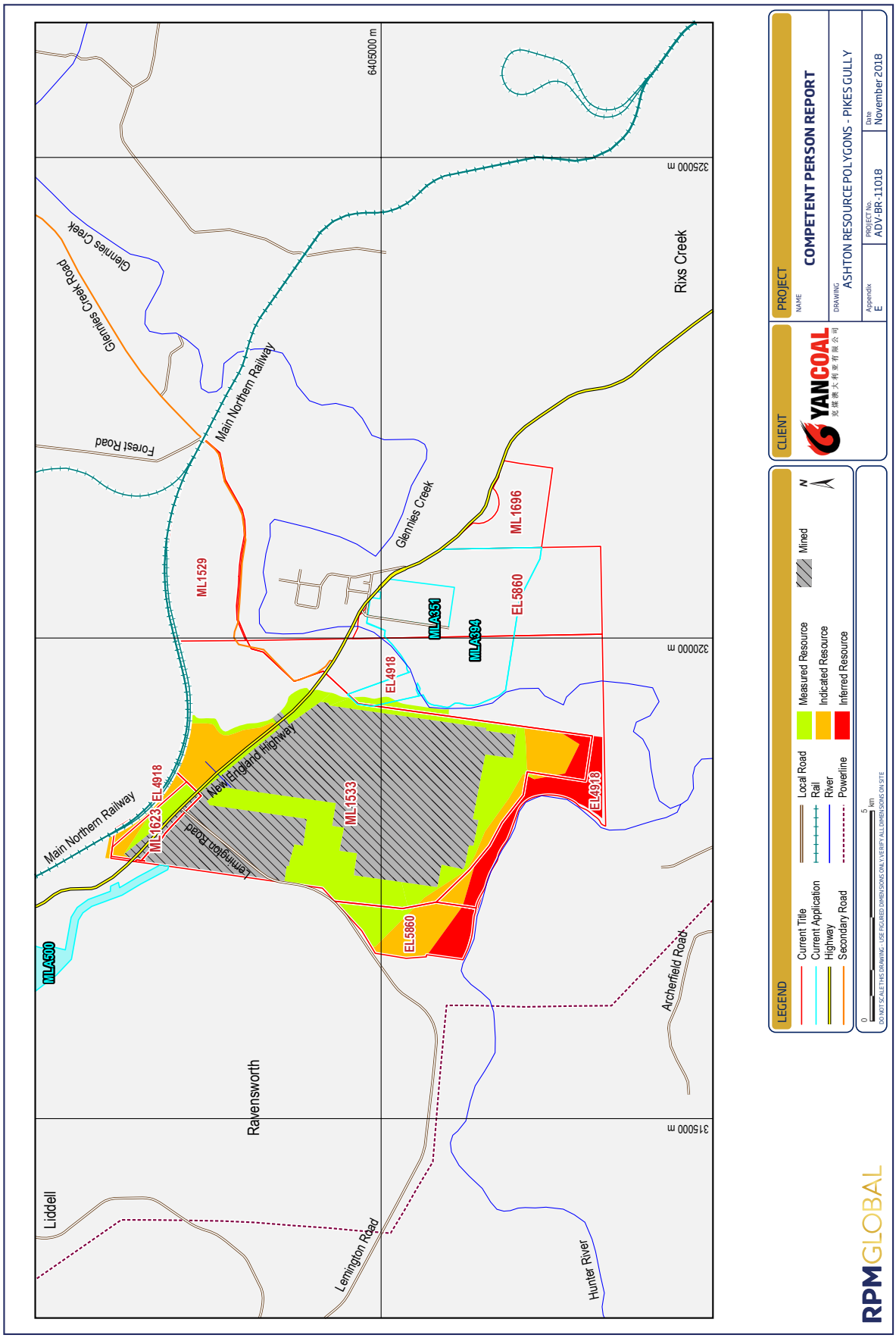
325000 m
320000 m
315000 m
Rixs Creek
Ravensworth
Liddell
Glennies Creek
Glennies Creek Road
Forest Road
Main Northern Railway
New England Highway
Lemington Road
Lemington Road
Archerfield Road
Hunter River
Glennies Creek
ML1529
ML1623
ML1533
ML1696
EL5860
EL4918
EL4918
EL4918
EL5630
MLA394
MLA351
MLA500
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Measured Resource
Indicated Resource
Inferred Resource
N
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY, VERIFY ALL DIMENSIONS ON SITE
RPMGLOBAL
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
ASHTON RESOURCE POLYGONS - LEMINGTON 19
Appendix
E
PROJECT No.
ADV-BR-11018
Date
November 2018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3200000 m
3150000 m
Rixs Creek
Ravensworth
Liddell
Glennies Creek
Glennies Creek Road
Forest Road
Main Northern Railway
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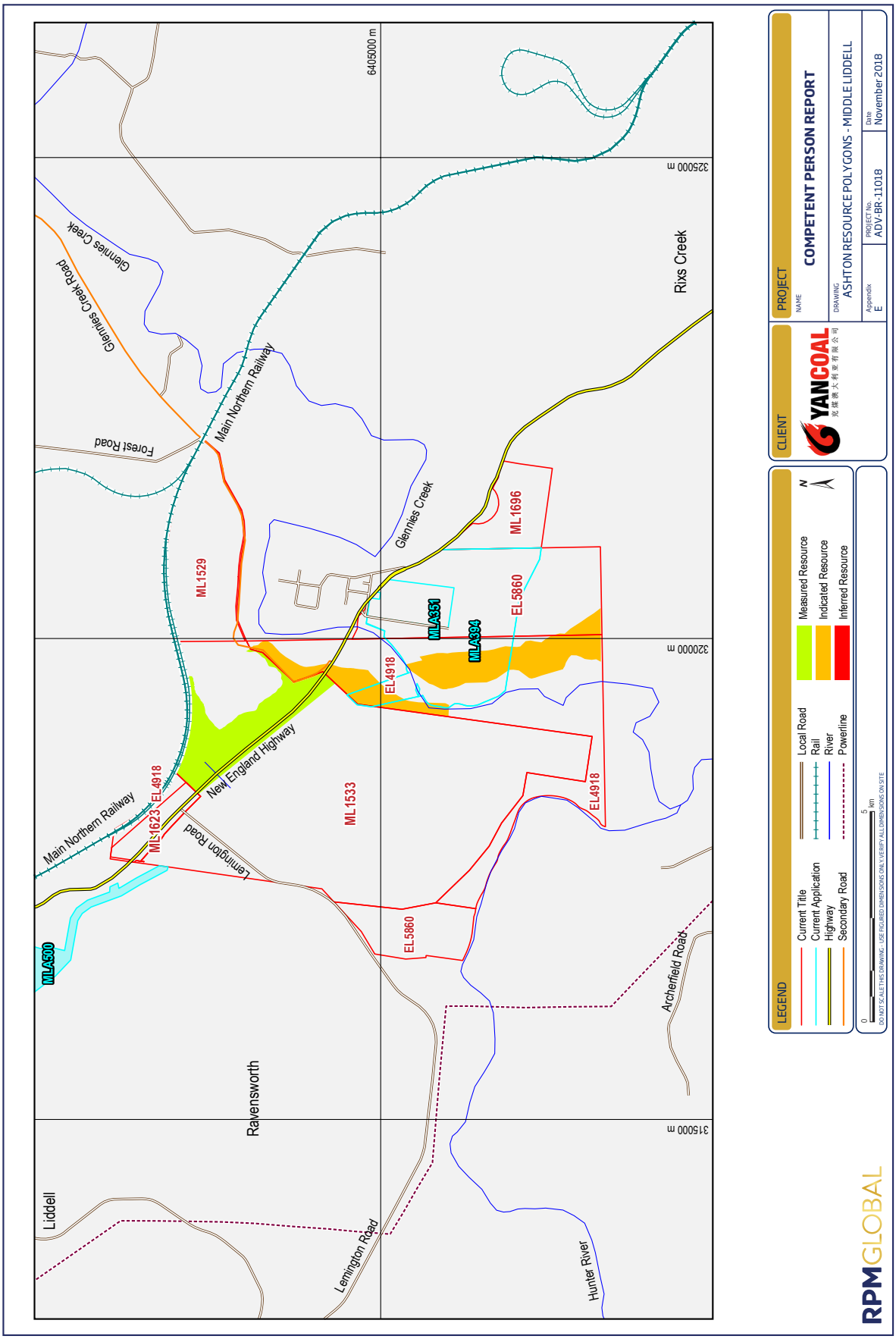
Lemington Road
Archerfield Road
Lemington Road
Hunter River
Glennies Creek
ML1529
ML1696
EL5860
MLA351
MLA394
EL4918
ML1533
EL4918
EL4918
ML1623
MLA500
EL5860
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Measured Resource
Indicated Resource
Inferred Resource
Mined
N
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY, VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
ASHTON RESOURCE POLYGONS - PIKES GULLY
Appendix
E
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL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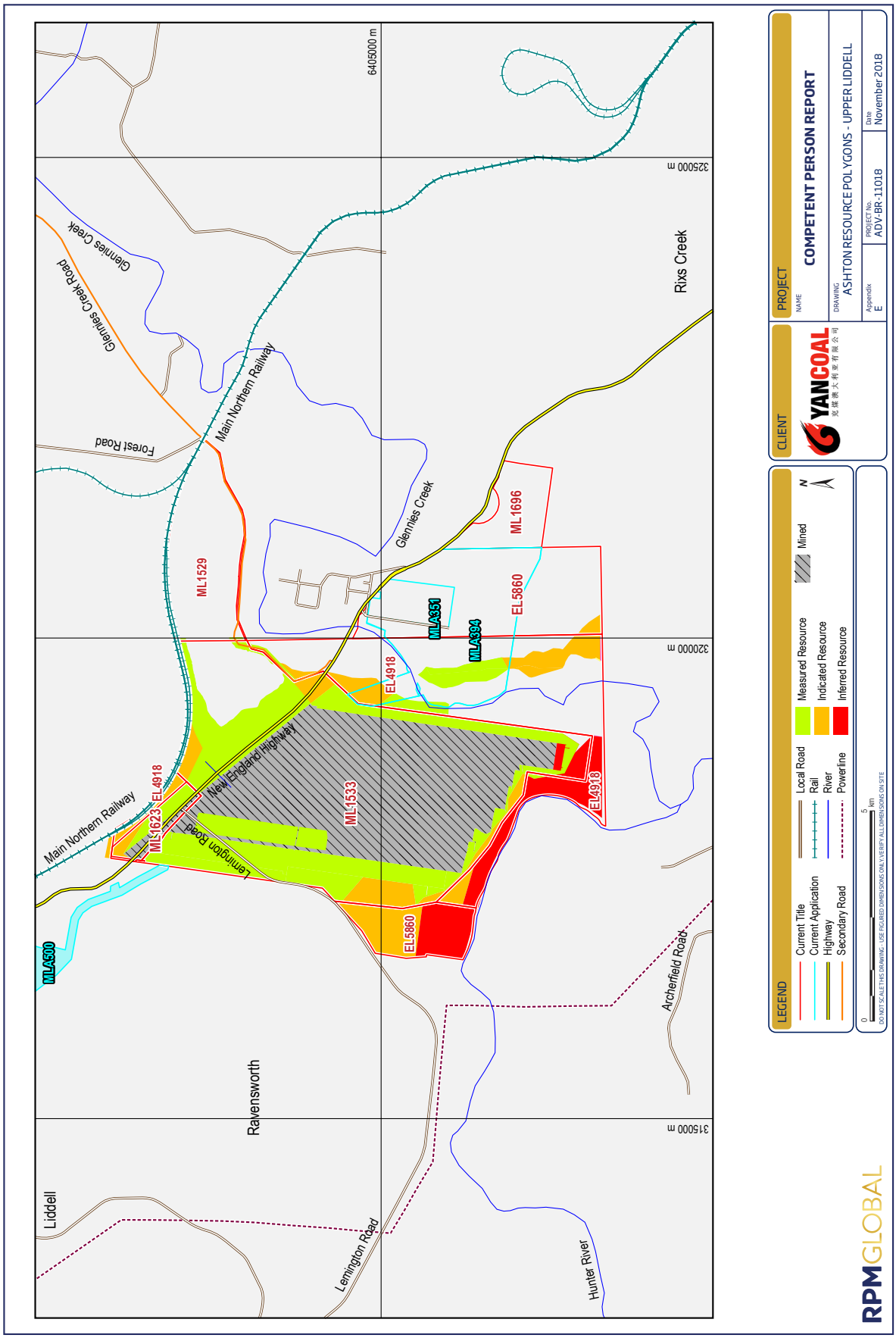
3200000 m
3150000 m
Rixs Creek
Ravensworth
Liddell
Glennies Creek
Glennies Creek Road
Forest Road
Main Northern Railway
New England Highway
Lemington Road
Archerfield Road
Hunter River
ML1529
ML1533
ML1623
ML1696
MLA500
MLA551
MLA394
EL4918
EL5860
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Measured Resource
Indicated Resource
Inferred Resource
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY, VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
ASHTON RESOURCE POLYGONS - MIDDLE LIDDELL
Appendix
E
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL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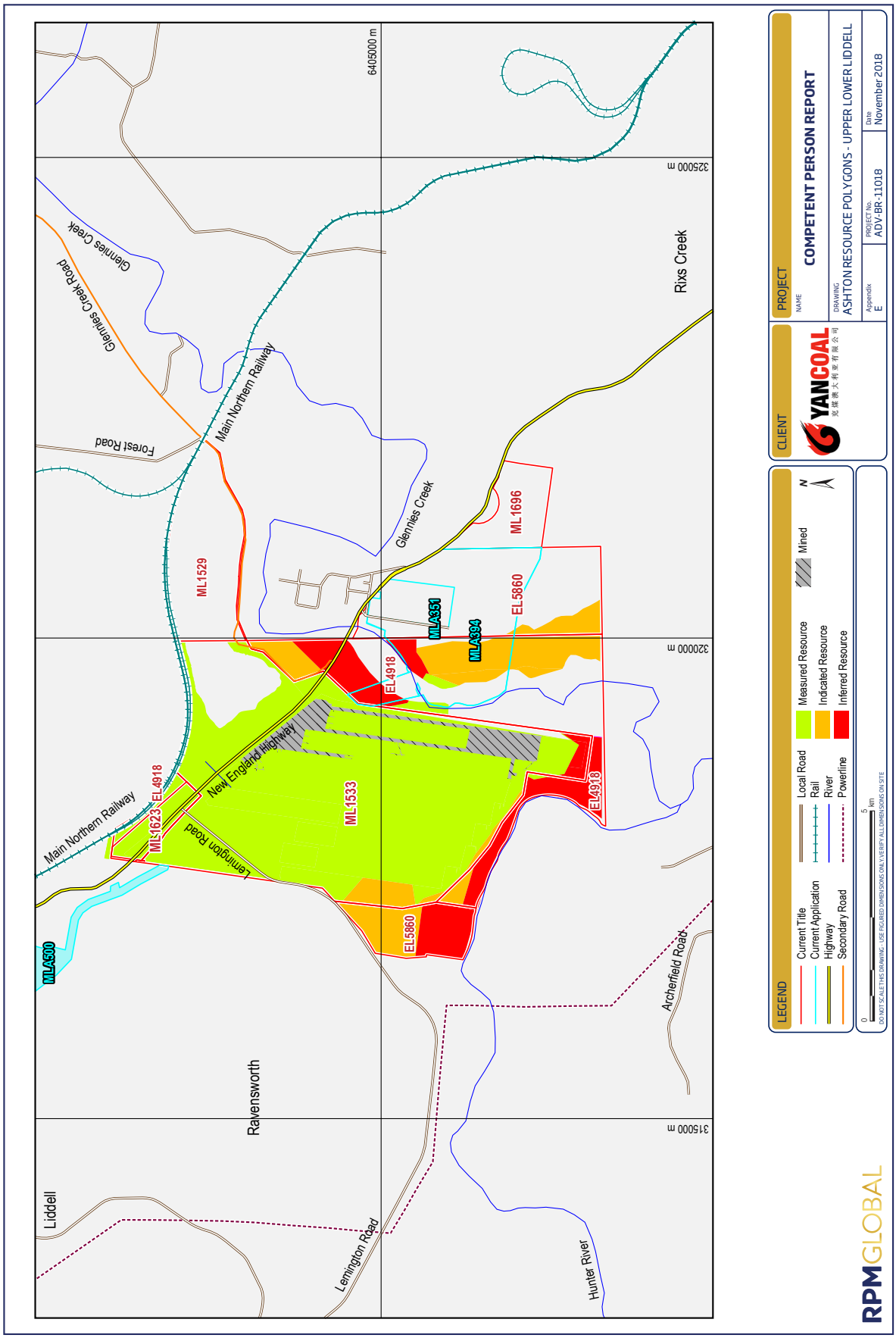
3200000 m
3150000 m
Rixs Creek
Ravensworth
Liddell
Glennies Creek
Glennies Creek Road
Forest Road
Main Northern Railway
New England Highway
Lemington Road
Lemington Road
Archerfield Road
Hunter River
Glennies Creek
ML1529
ML1533
ML1623
ML1696
MLA500
MLA351
MLA394
EL4918
EL4918
EL4918
EL5860
EL5860
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Measured Resource
Indicated Resource
Inferred Resource
Mined
N
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY, VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
ASHTON RESOURCE POLYGONS - UPPER LIDDELL
Appendix
E
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL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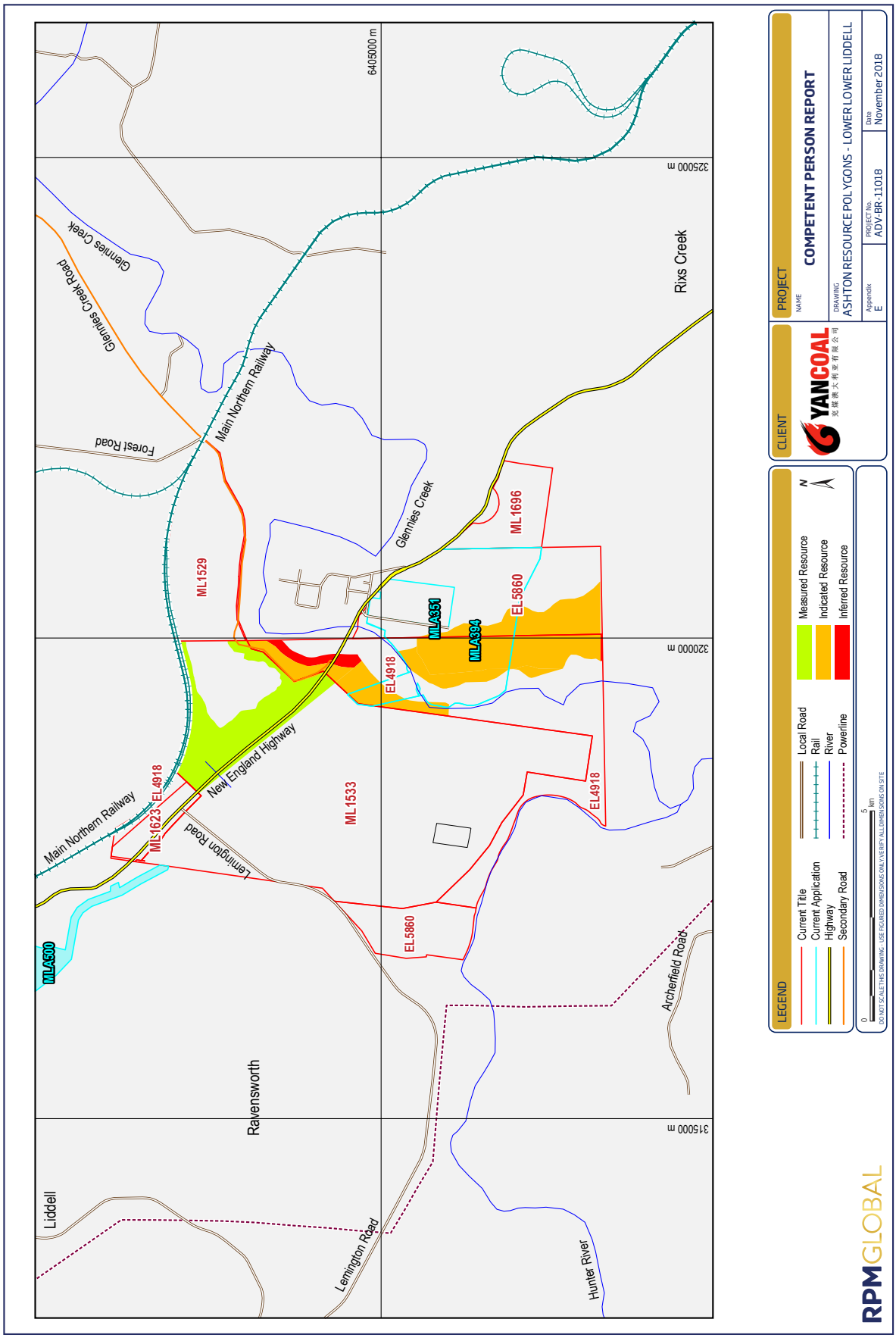
325000 m
320000 m
315000 m
Rixs Creek
Ravensworth
Liddell
Glennies Creek
Glennies Creek Road
Forest Road
Main Northern Railway
New England Highway
Lemington Road
Archerfield Road
Hunter River
ML1529
ML1533
ML1623
ML1696
MLA500
MLA351
MLA394
EL4918
EL5860
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Measured Resource
Indicated Resource
Inferred Resource
Mined
N
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY, VERIFY ALL DIMENSIONS ON SITE
RPMGLOBAL
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
ASHTON RESOURCE POLYGONS - UPPER LOWER LIDDELL
Appendix
E
PROJECT No.
ADV-BR-11018
Date
November 2018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3200000 m
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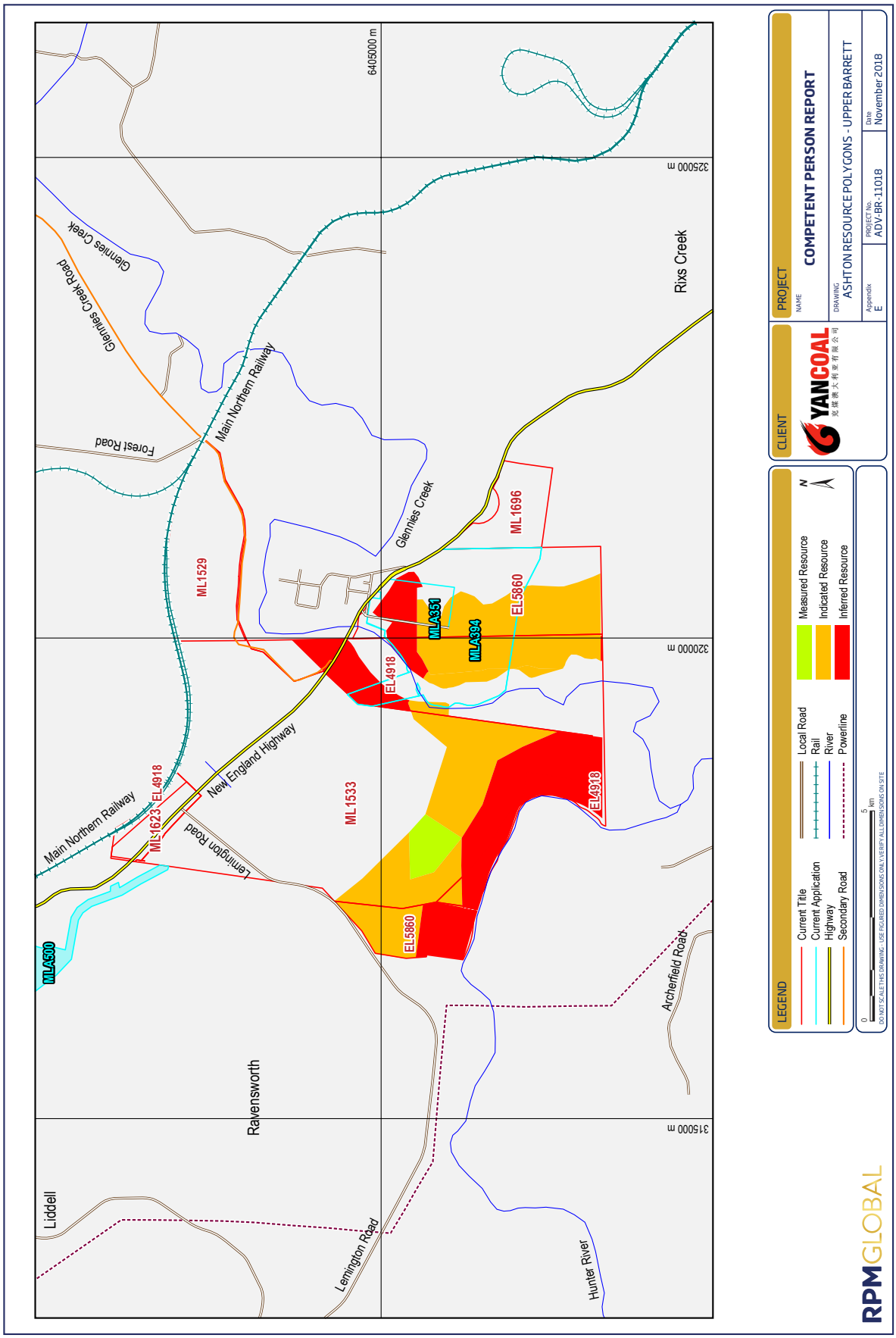
Ravensworth
Liddell
Glennies Creek
Glennies Creek Road
Forest Road
Main Northern Railway
New England Highway
Lemington Road
Archerfield Road
Hunter River
ML1529
ML1533
ML1623
ML1696
MLA500
MLA551
MLA594
EL4918
EL5860
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Measured Resource
Indicated Resource
Inferred Resource
N
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY, VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
ASHTON RESOURCE POLYGONS - LOWER LOWER LIDDELL
Appendix
E
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL


6405000 m
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3200000 m
3150000 m
Rixs Creek
Ravensworth
Liddell
Glennies Creek
Glennies Creek Road
Forest Road
Main Northern Railway
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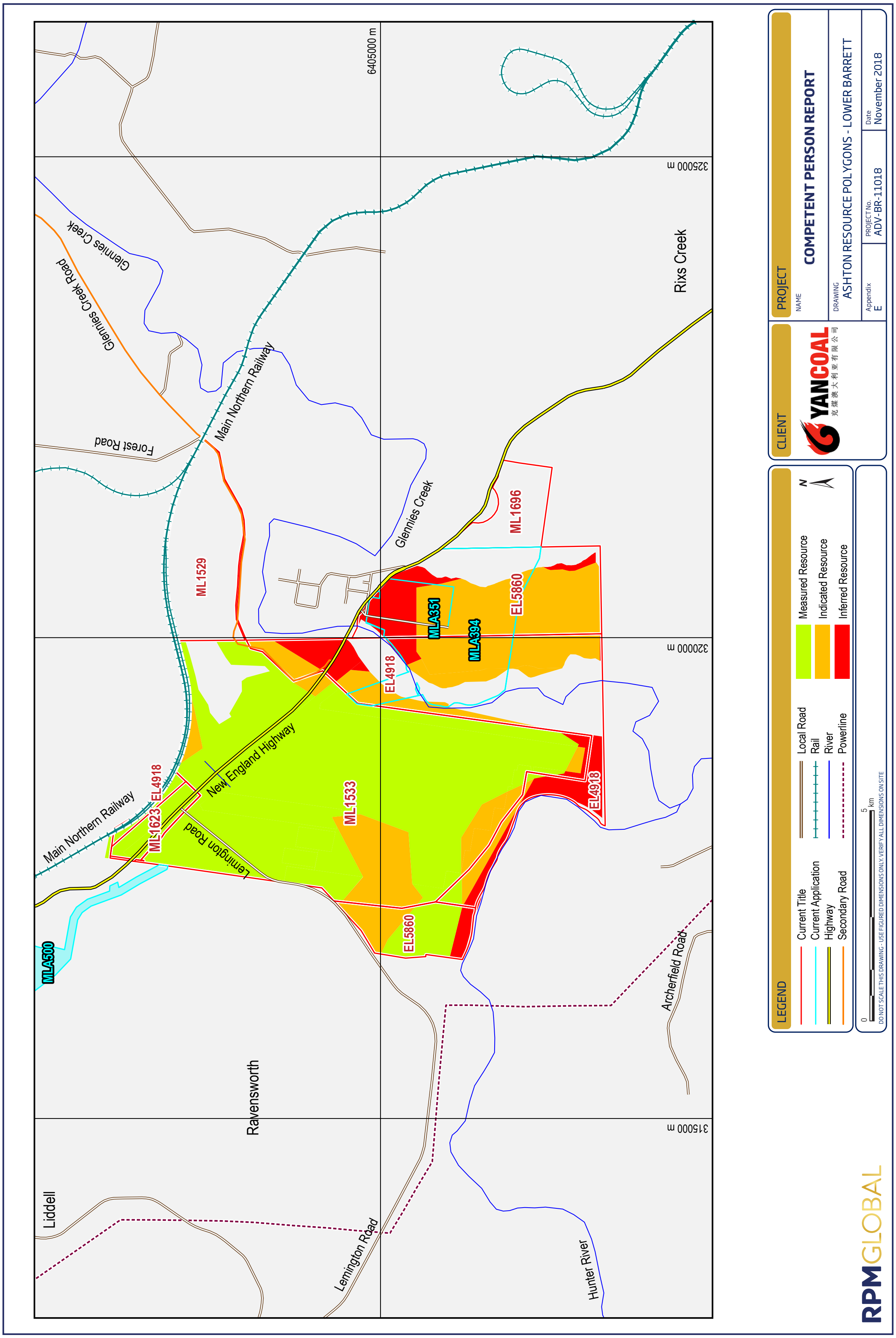
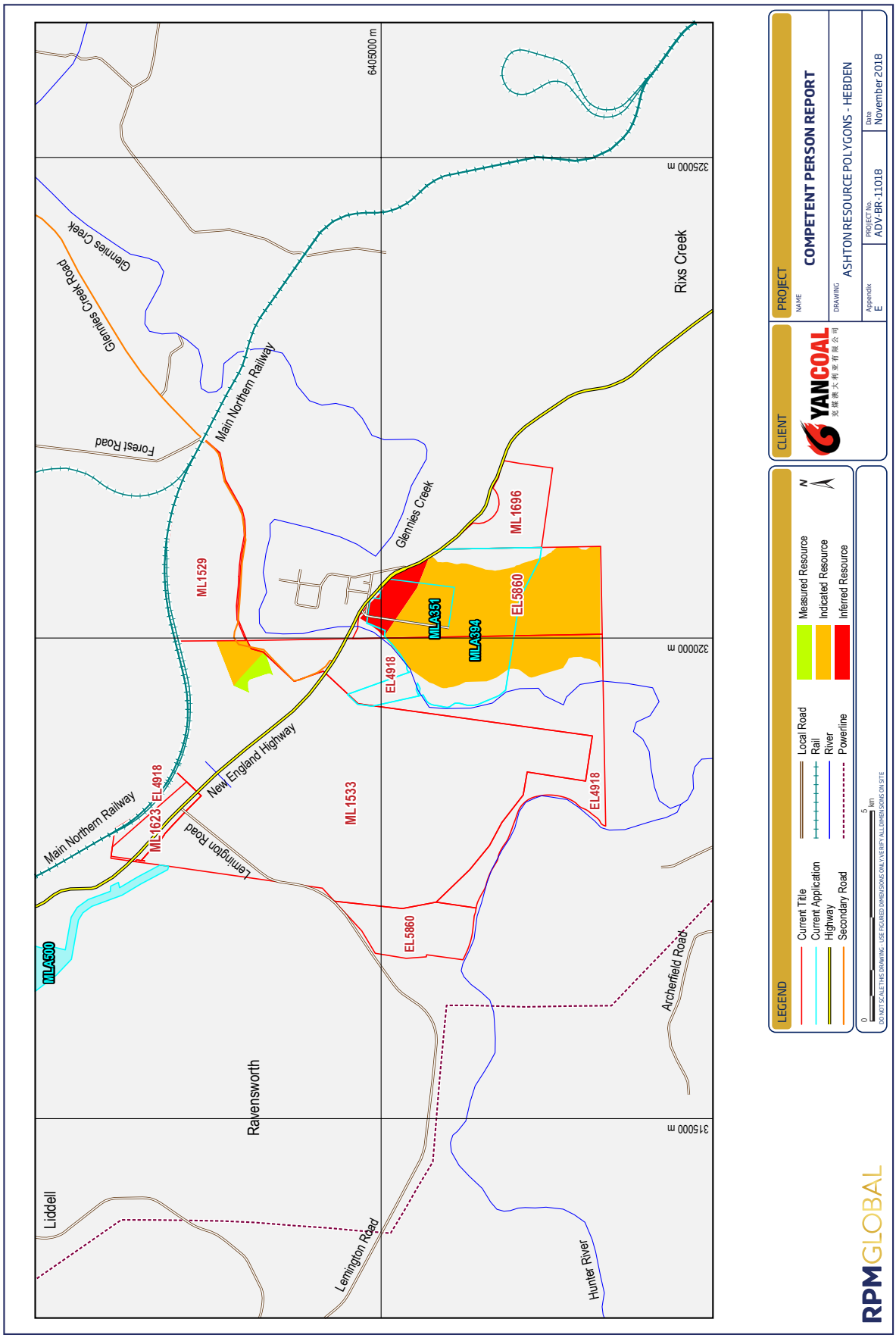
Lemington Road
Archerfield Road
Hunter River
ML1529
ML1533
ML1623
ML1696
MLA394
MLA351
MLA500
EL4918
EL5860
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Measured Resource
Indicated Resource
Inferred Resource
N
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY, VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
ASHTON RESOURCE POLYGONS - UPPER BARRETT
Appendix
E
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL


6405000 m
325000 m
320000 m
315000 m
Glennies Creek Road
Glennies Creek
Forest Road
Main Northern Railway
ML1529
Glennies Creek
ML1696
Rixs Creek
EL5860
MLA351
MLA394
EL4918
ML1533
New England Highway
Lemington Road
ML1623
EL4918
Main Northern Railway
EL5860
EL4918
MLA500
Archerfield Road
Ravensworth
Liddell
Lemington Road
Hunter River
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Measured Resource
Indicated Resource
Inferred Resource
N
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
ASHTON RESOURCE POLYGONS - LOWER BARRETT
Appendix
E
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL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Rixs Creek
Ravensworth
Liddell
Glennies Creek Road
Forest Road
Main Northern Railway
Glennies Creek
New England Highway
Lemington Road
Archerfield Road
Hunter River
ML1529
ML1696
ML1533
ML1623
MLA351
MLA394
MLA500
EL4918
EL5860
LEGEND
Current Title
Current Application
Highway
Secondary Road
Local Road
Rail
River
Powerline
Measured Resource
Indicated Resource
Inferred Resource
N
0
5
km
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY, VERIFY ALL DIMENSIONS ON SITE
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
ASHTON RESOURCE POLYGONS - HEBDEN
Appendix
E
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL

RPMGLOBAL

Resource Polygons

Yarrabee

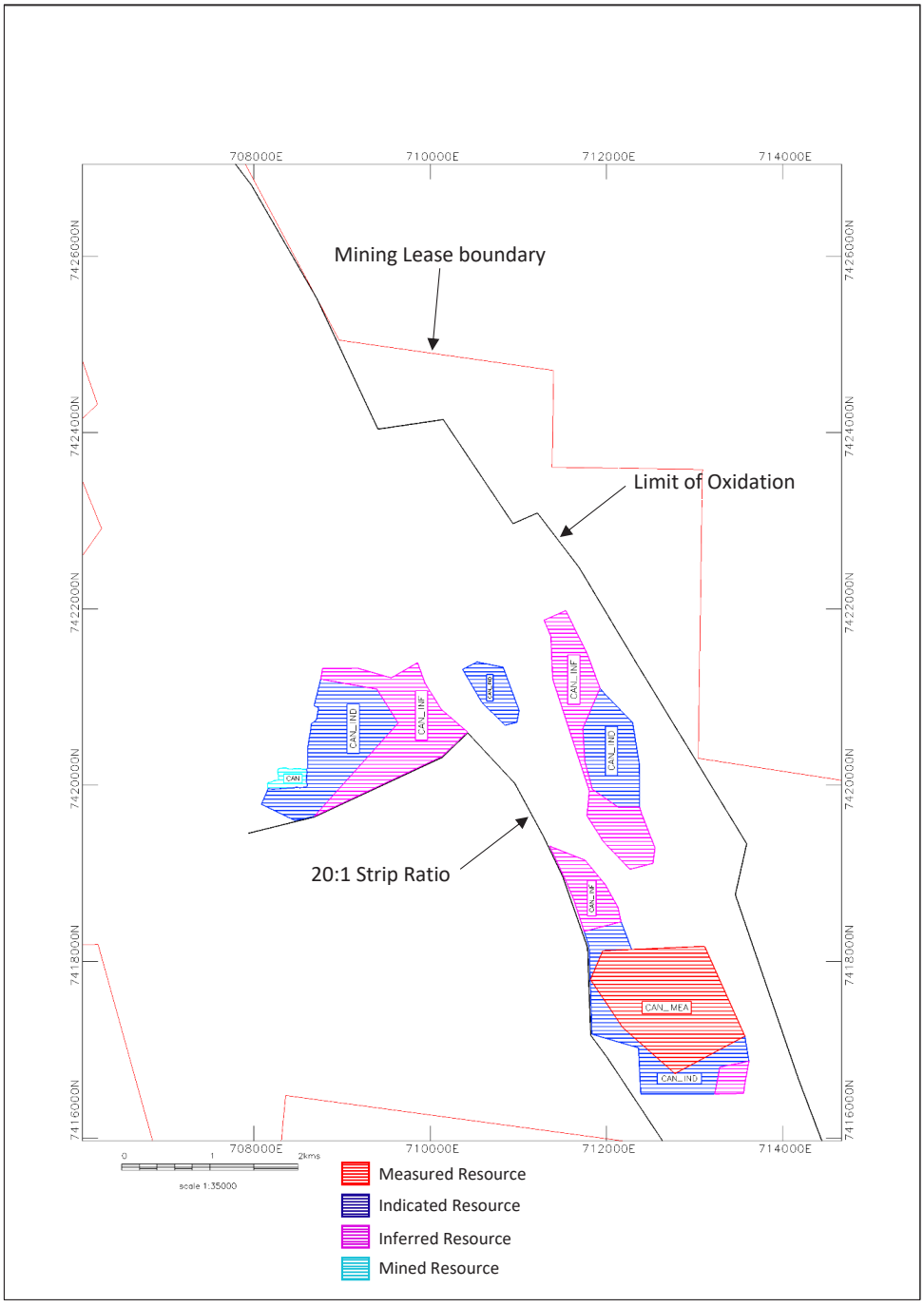


Figure 1 Yarrabee East Cancer Resource Polygons

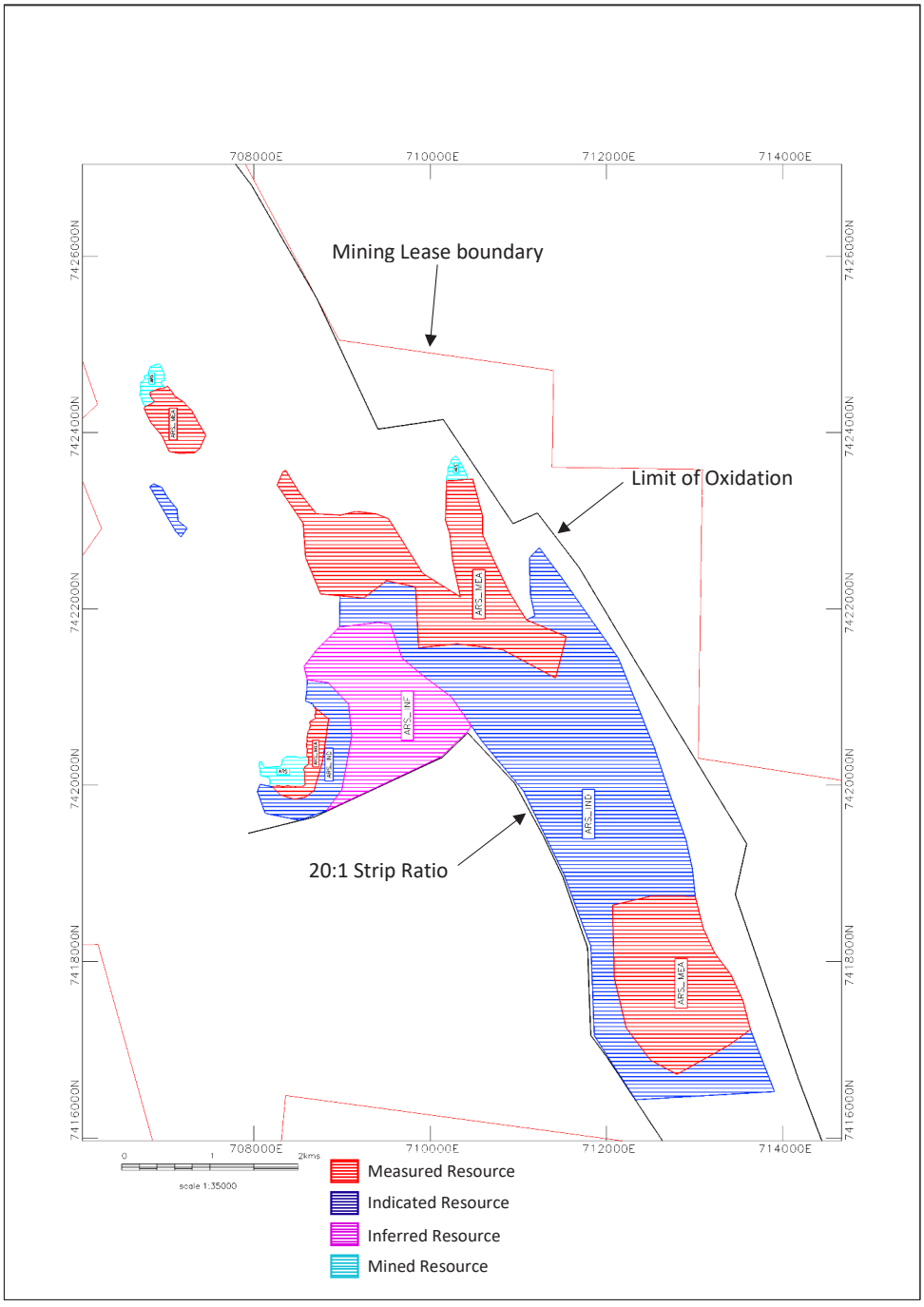


Figure 3 Yarrabee East Aries Resource Polygons

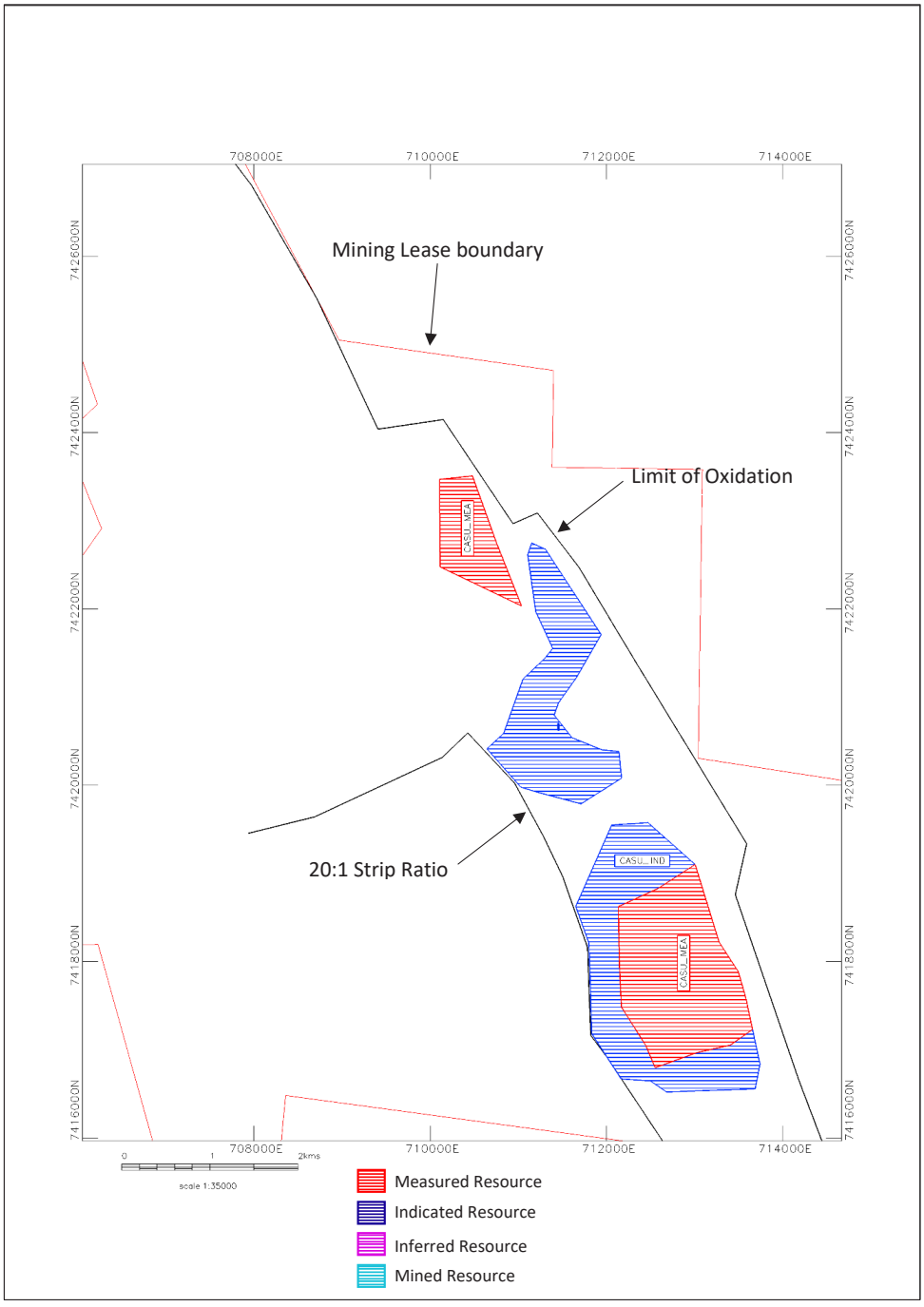


Figure 5 Yarrabee East Castor Upper Resource Polygons

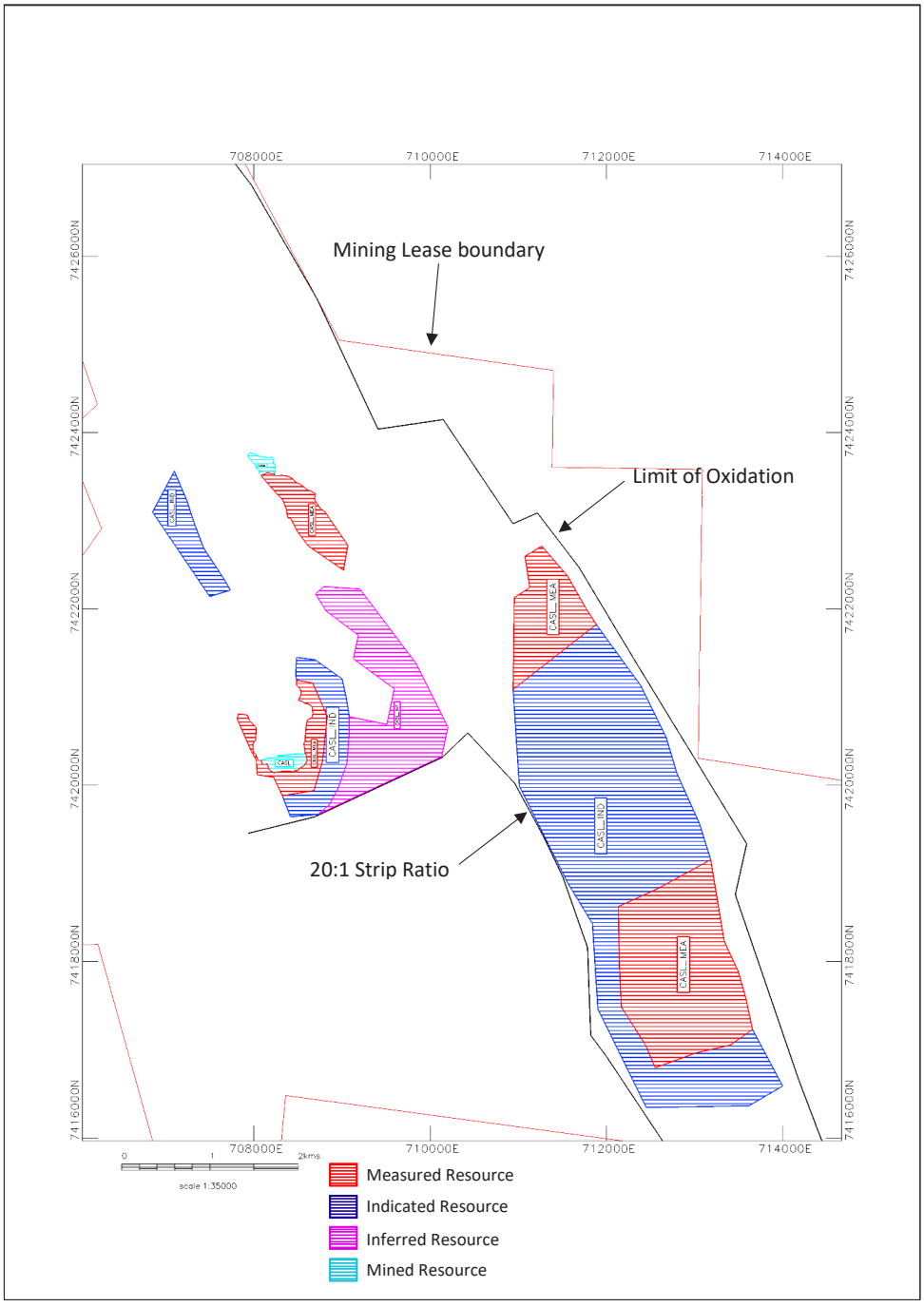


Figure 7 Yarrabee East Castor Upper Resource Polygons

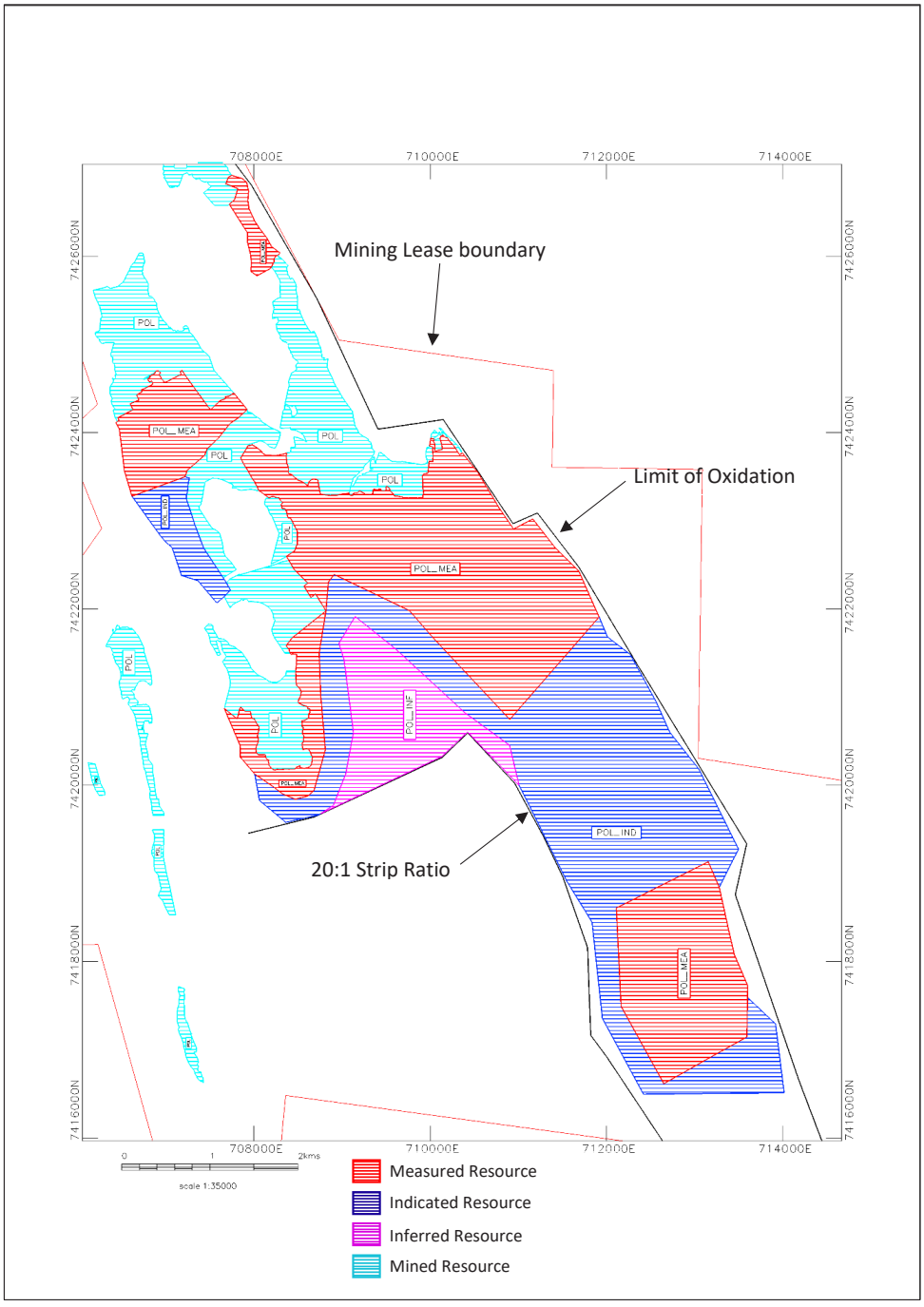


Figure 9 Yarrabee East Pollux Resource Polygons

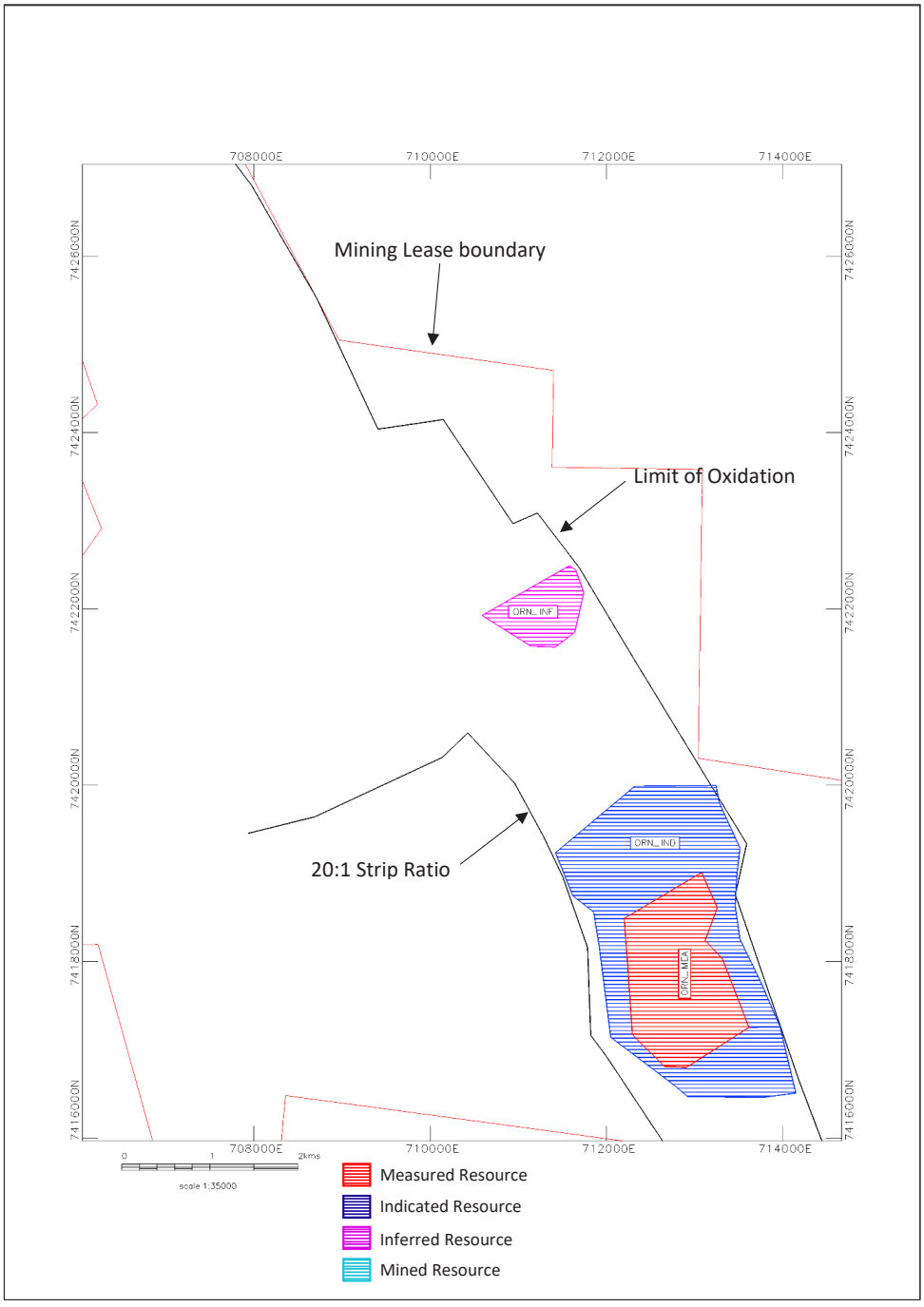


Figure 11 Yarrabee East Orion Resource Polygons

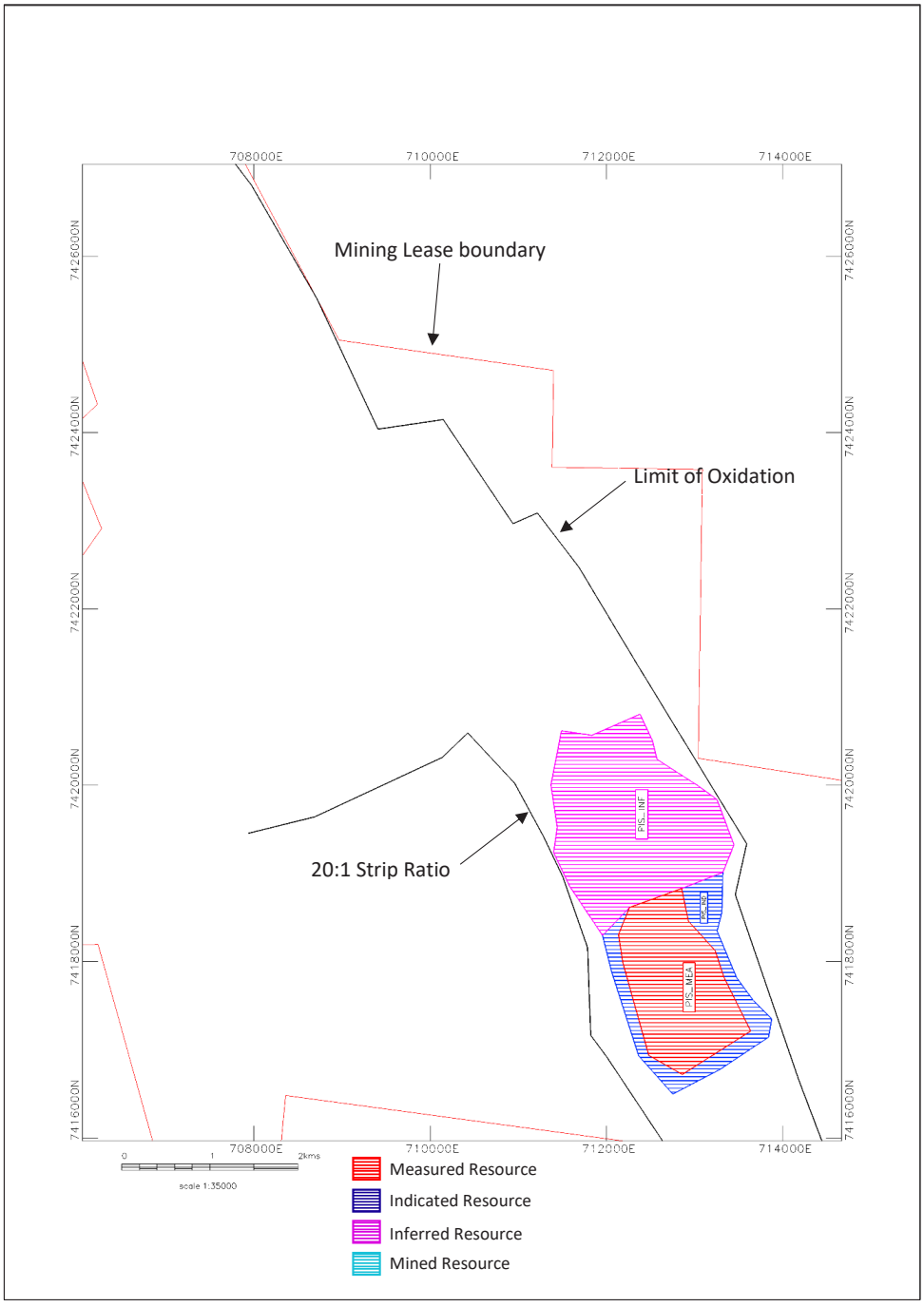


Figure 13 Yarrabee East Pisces Resource Polygons

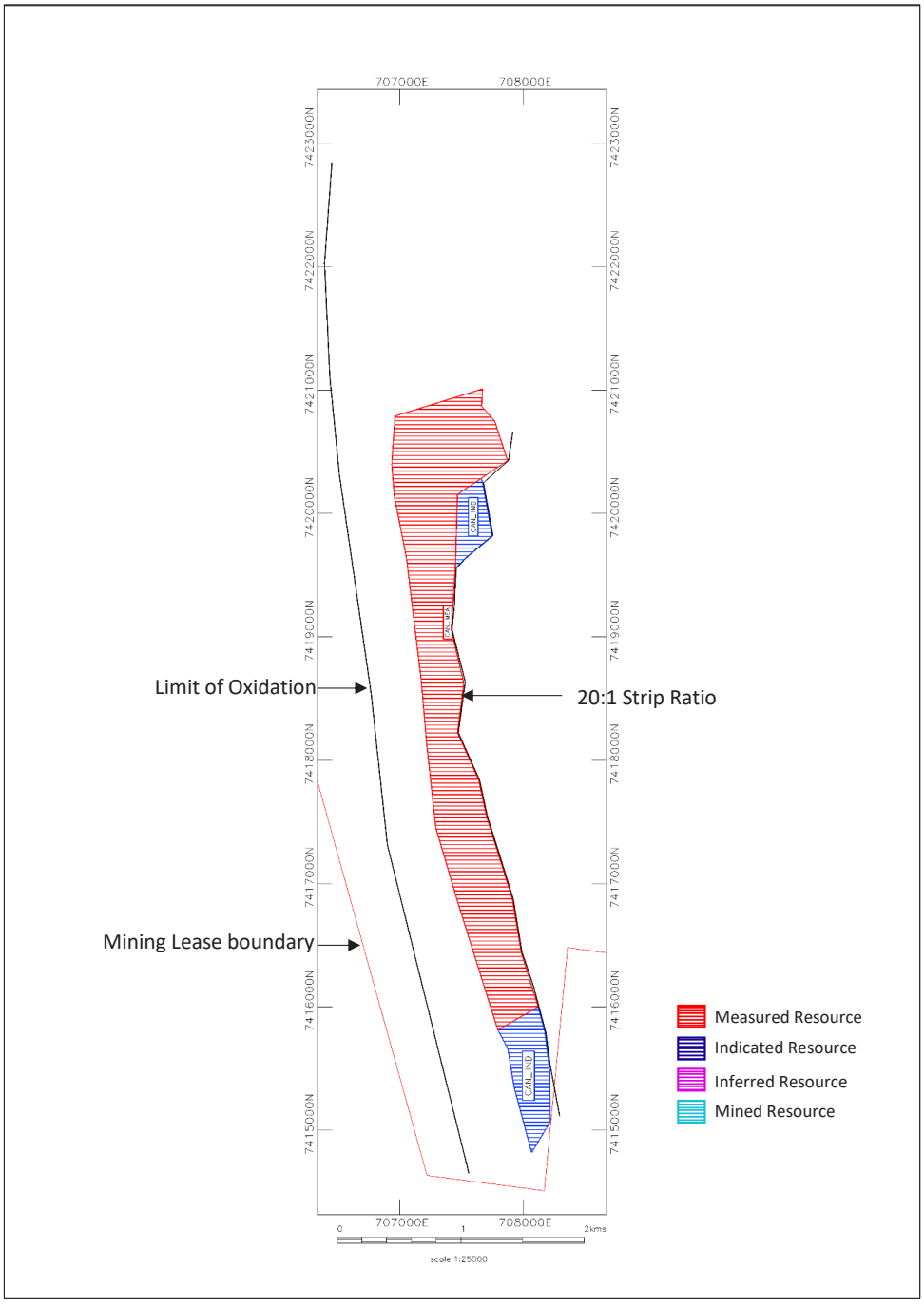


Figure 21 Domain 2 Cancer Resource Polygons

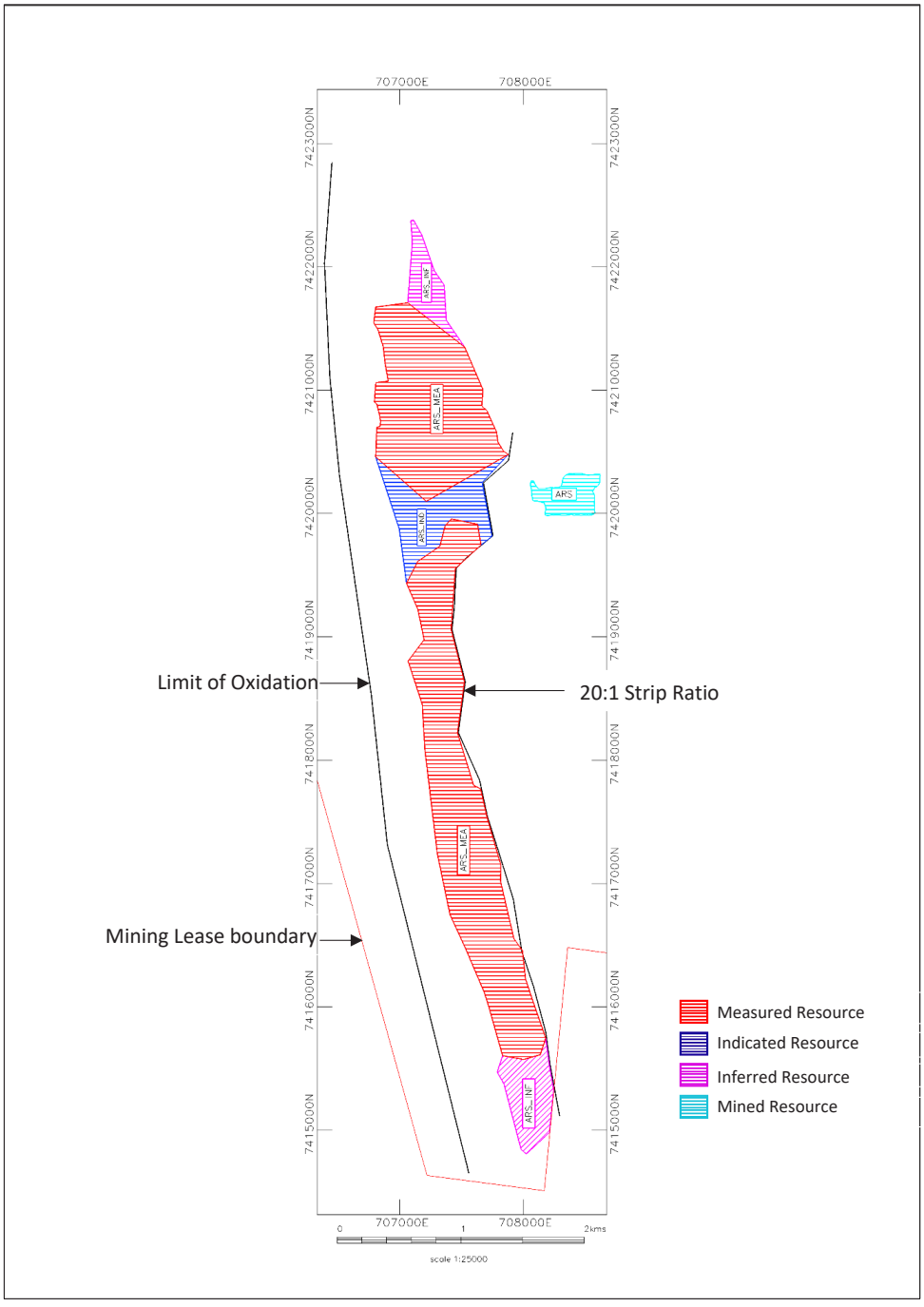


Figure 23 Domain 2 Aries Resource Polygons

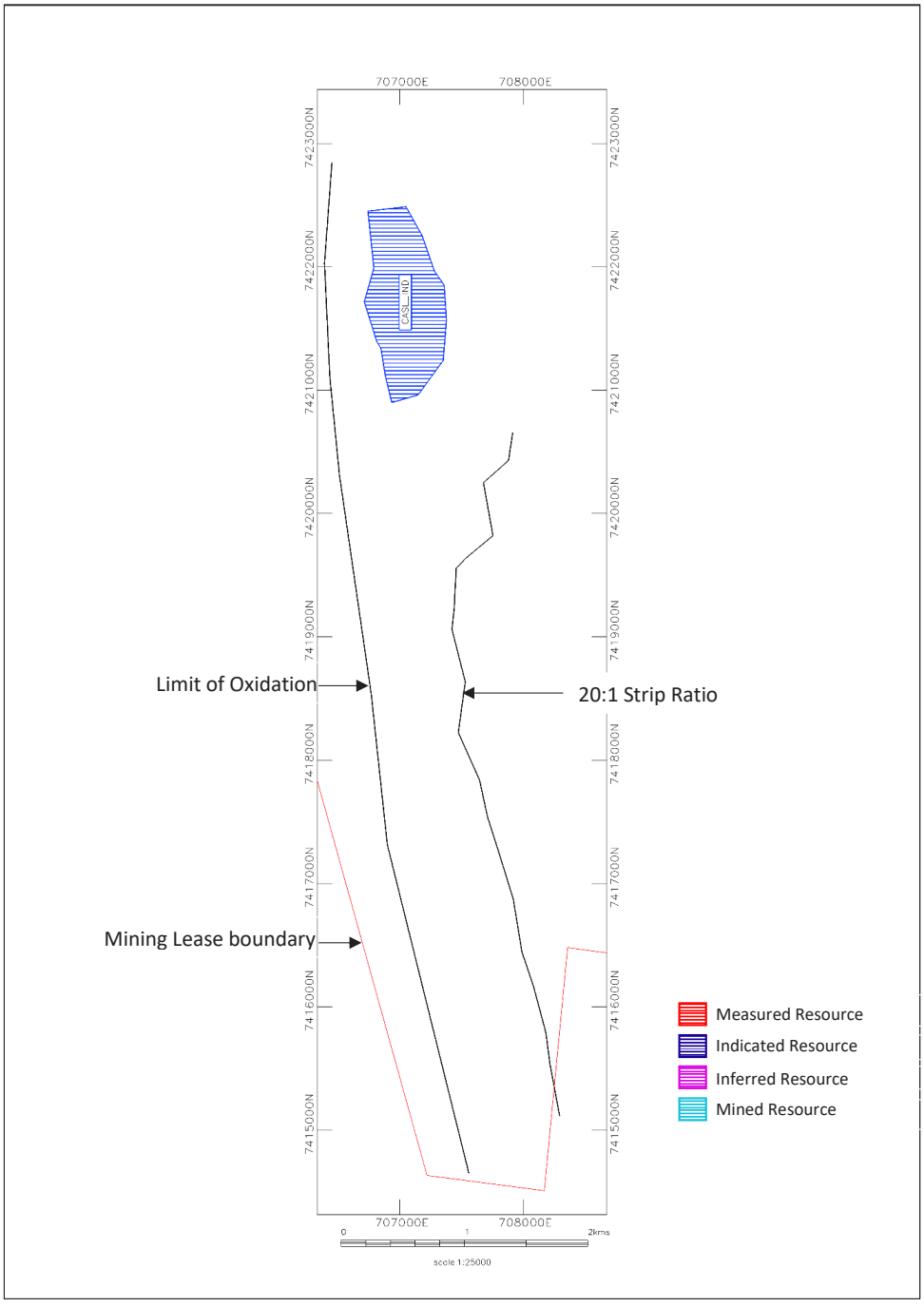


Figure 25 Domain 2 Castor Lower Resource Polygons

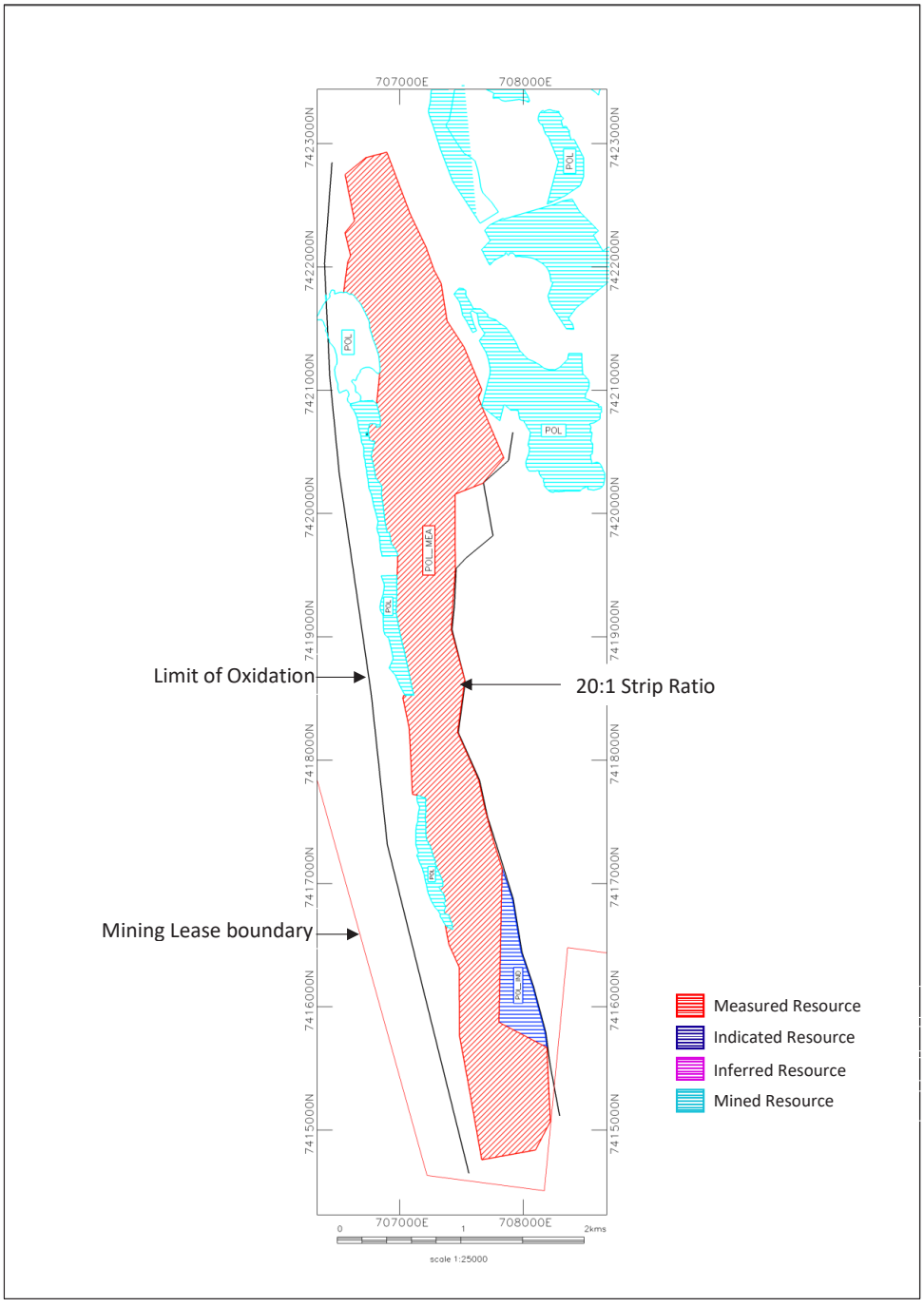


Figure 27 Domain 2 Pollux Resource Polygons

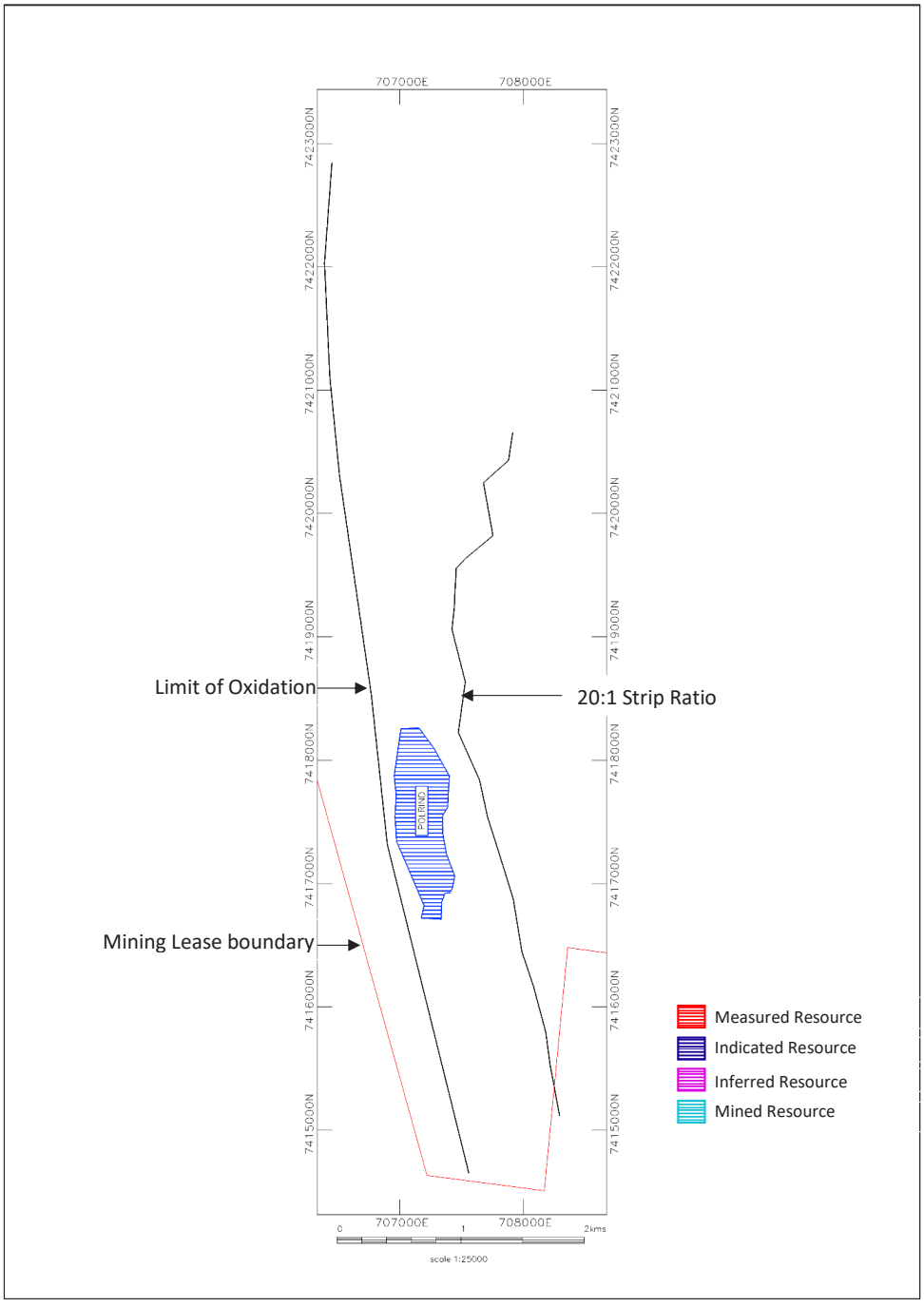


Figure 29 Domain 2 Pisces Upper Resource Polygons

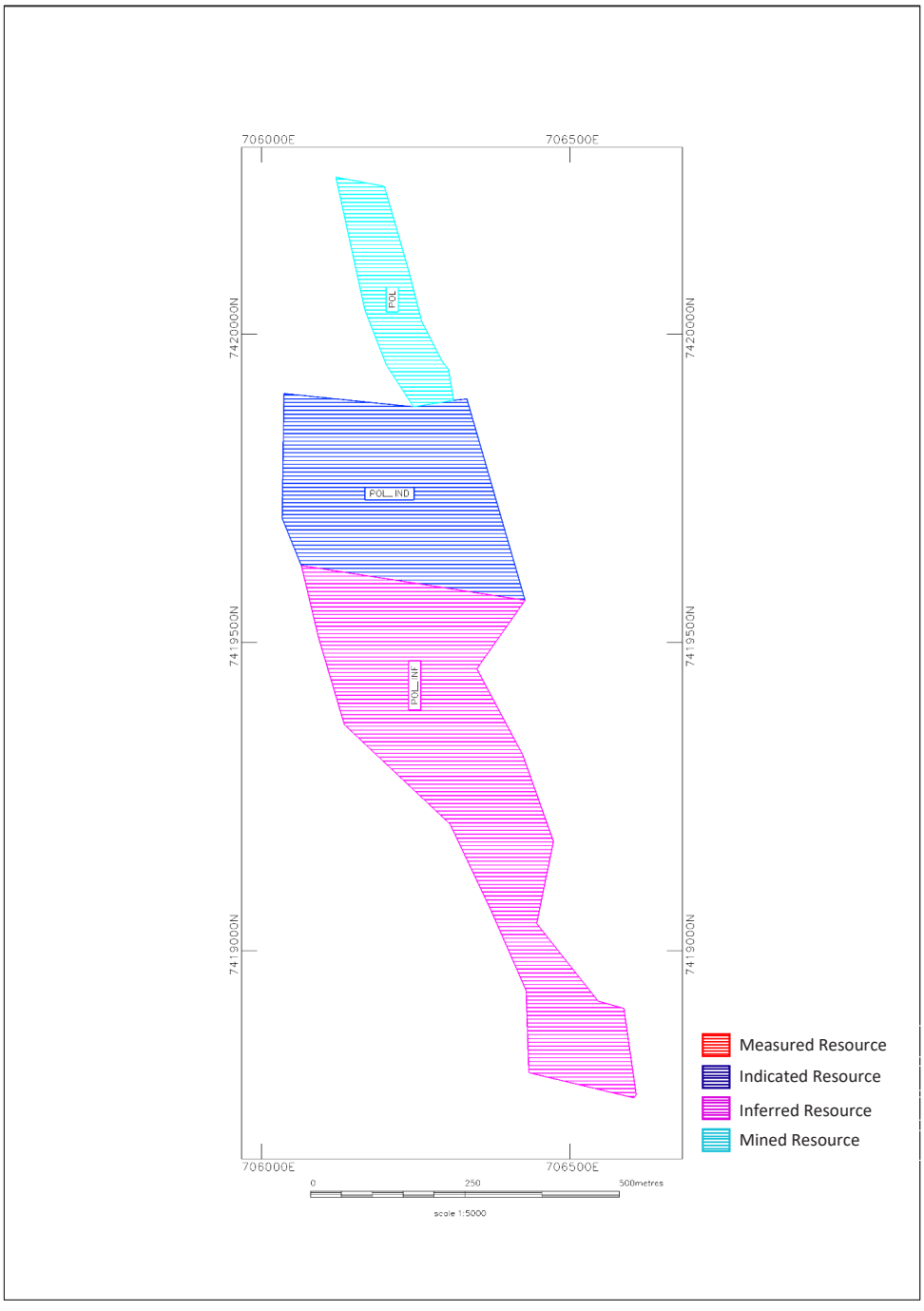


Figure 37 Domain 3 Pollux Resource Polygons

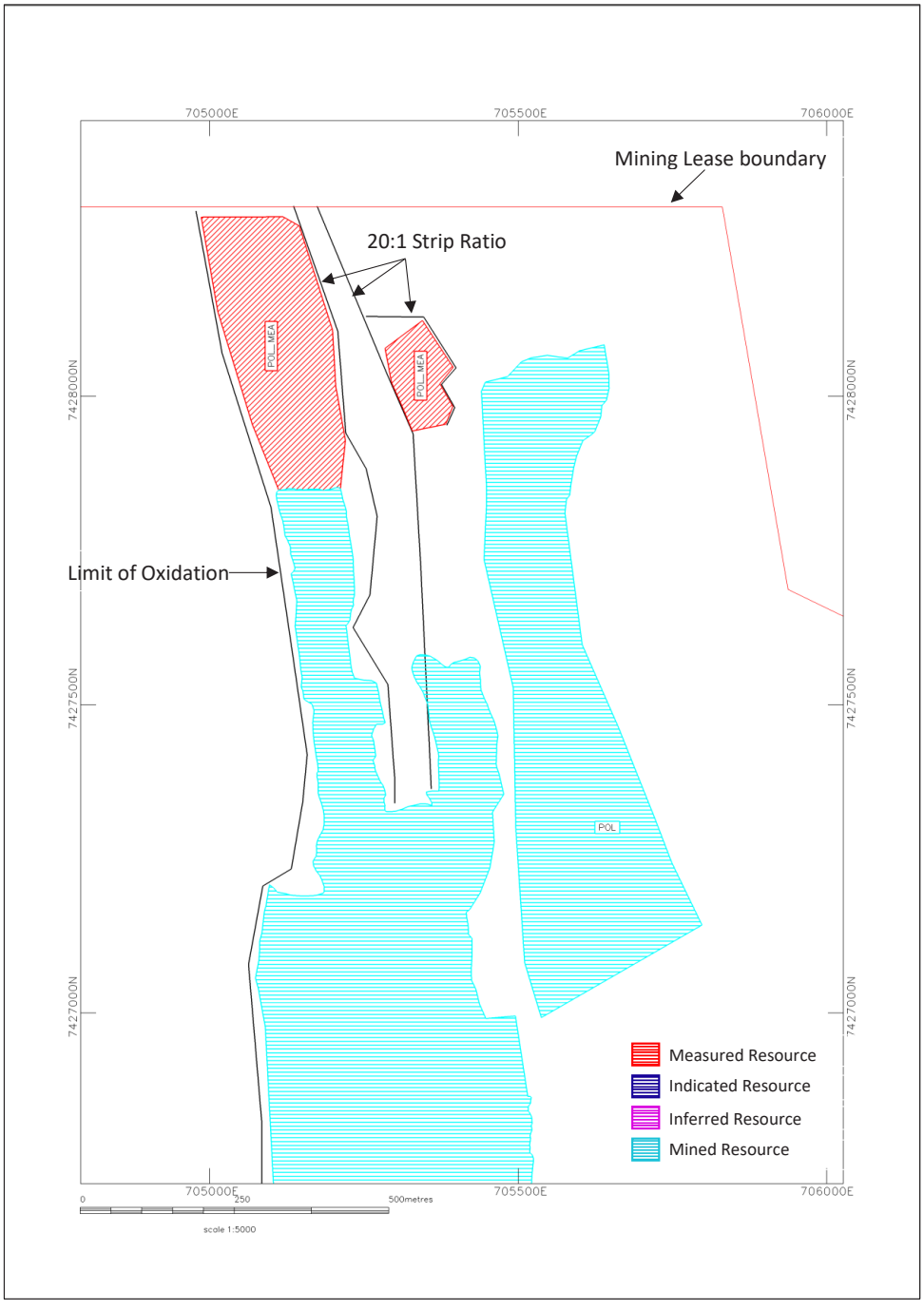


Figure 42 Domain 5 Pollux Resource Polygons

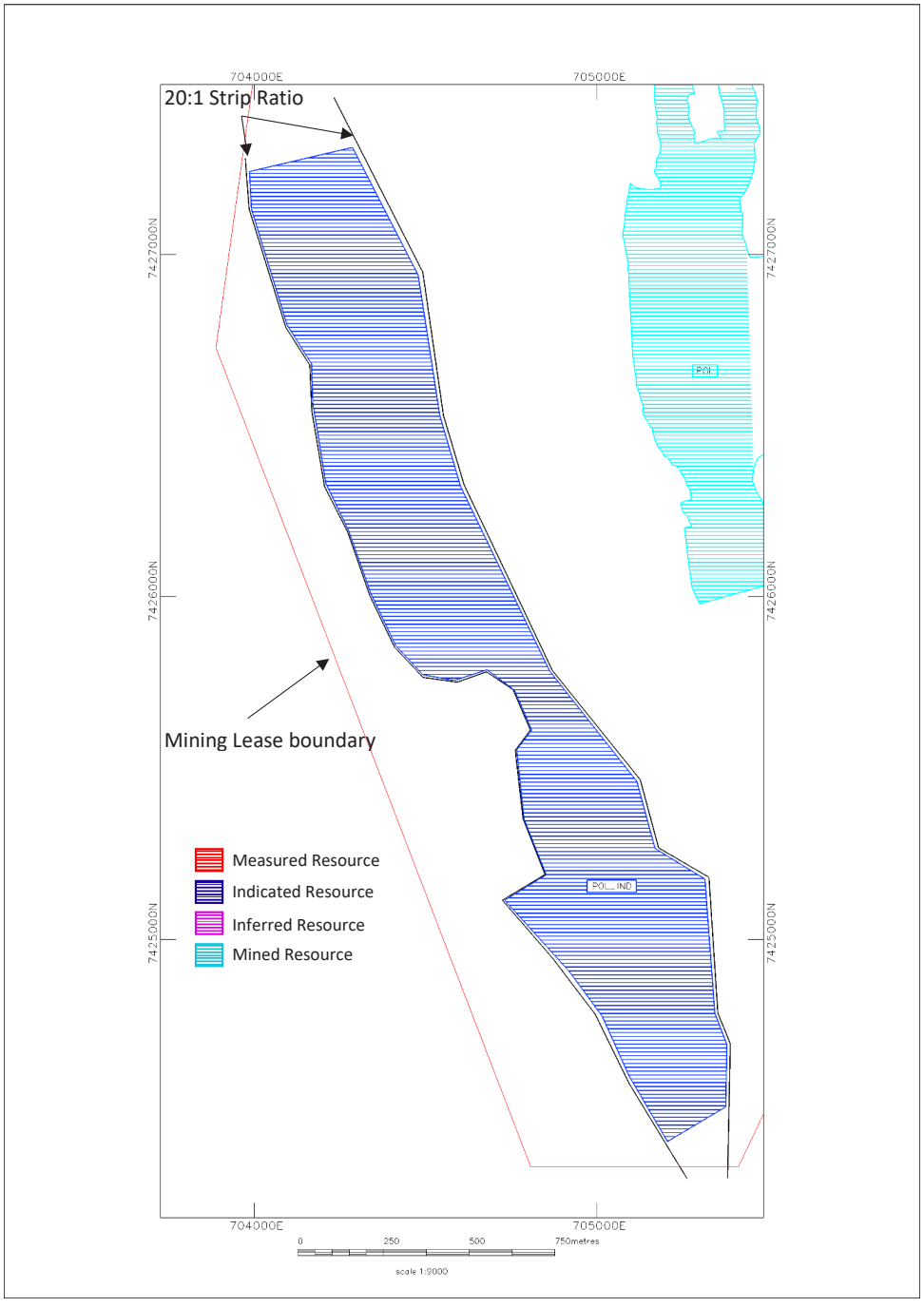
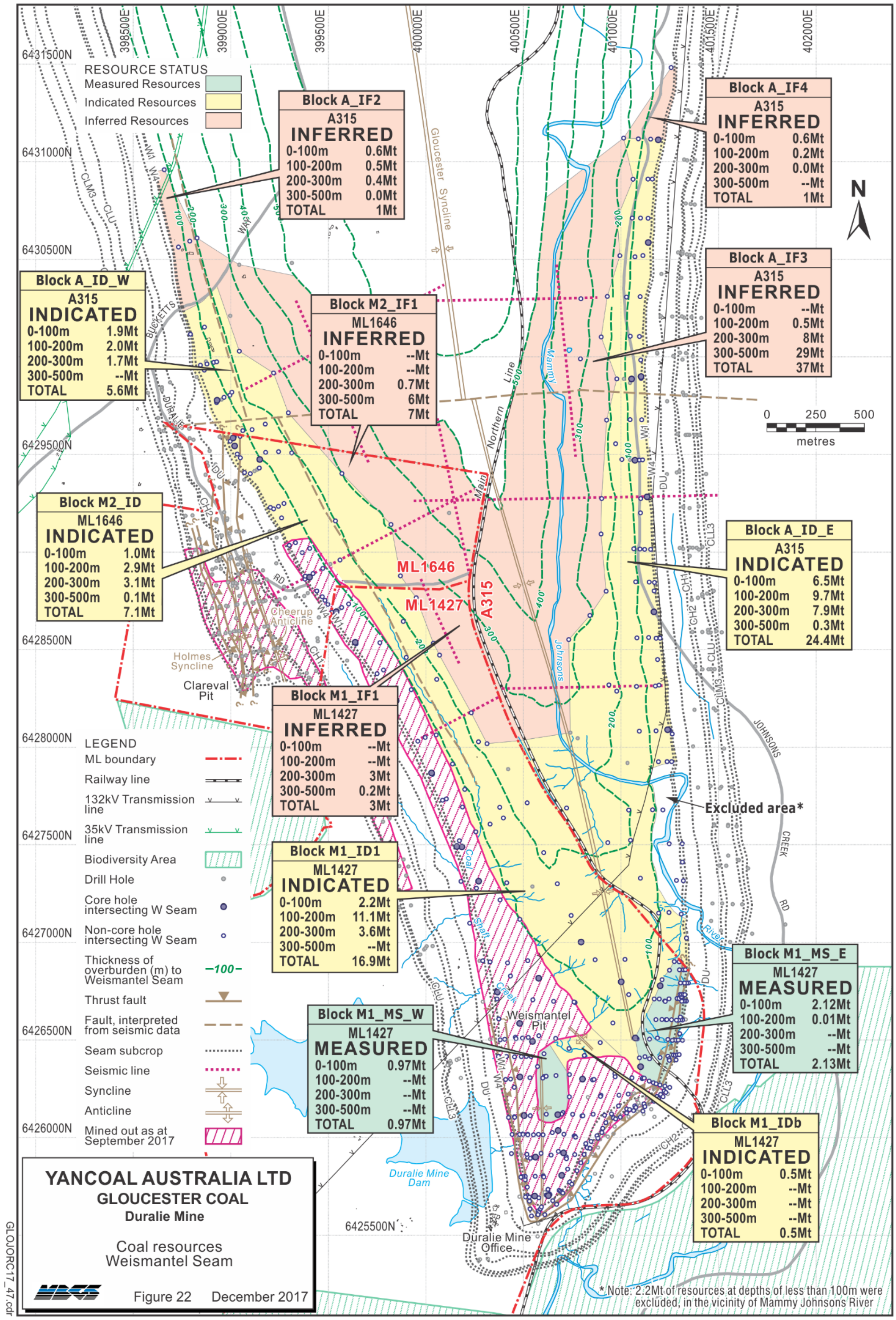


Figure 47 Domain 6 Pollux Resource Polygons

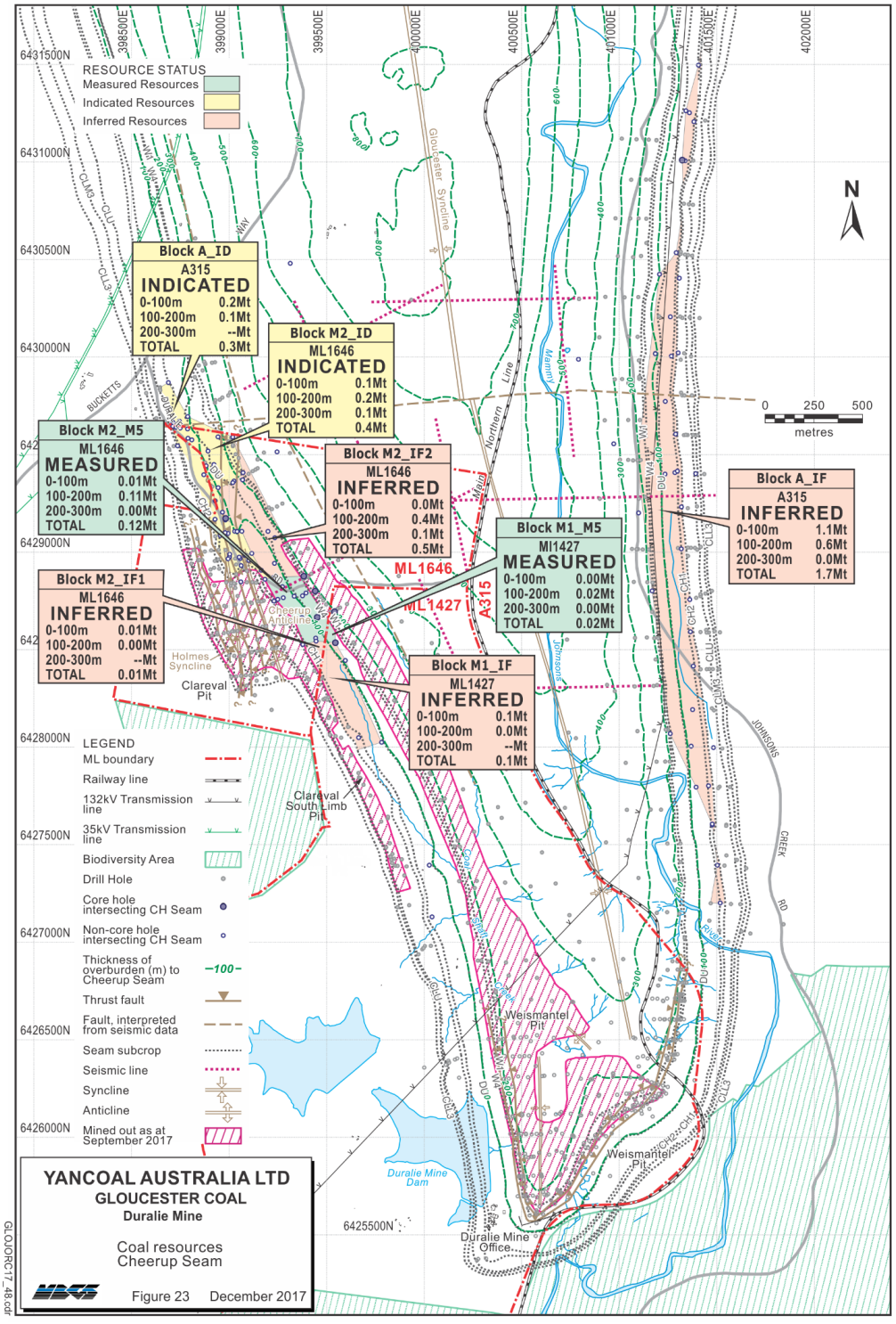
RPMGLOBAL

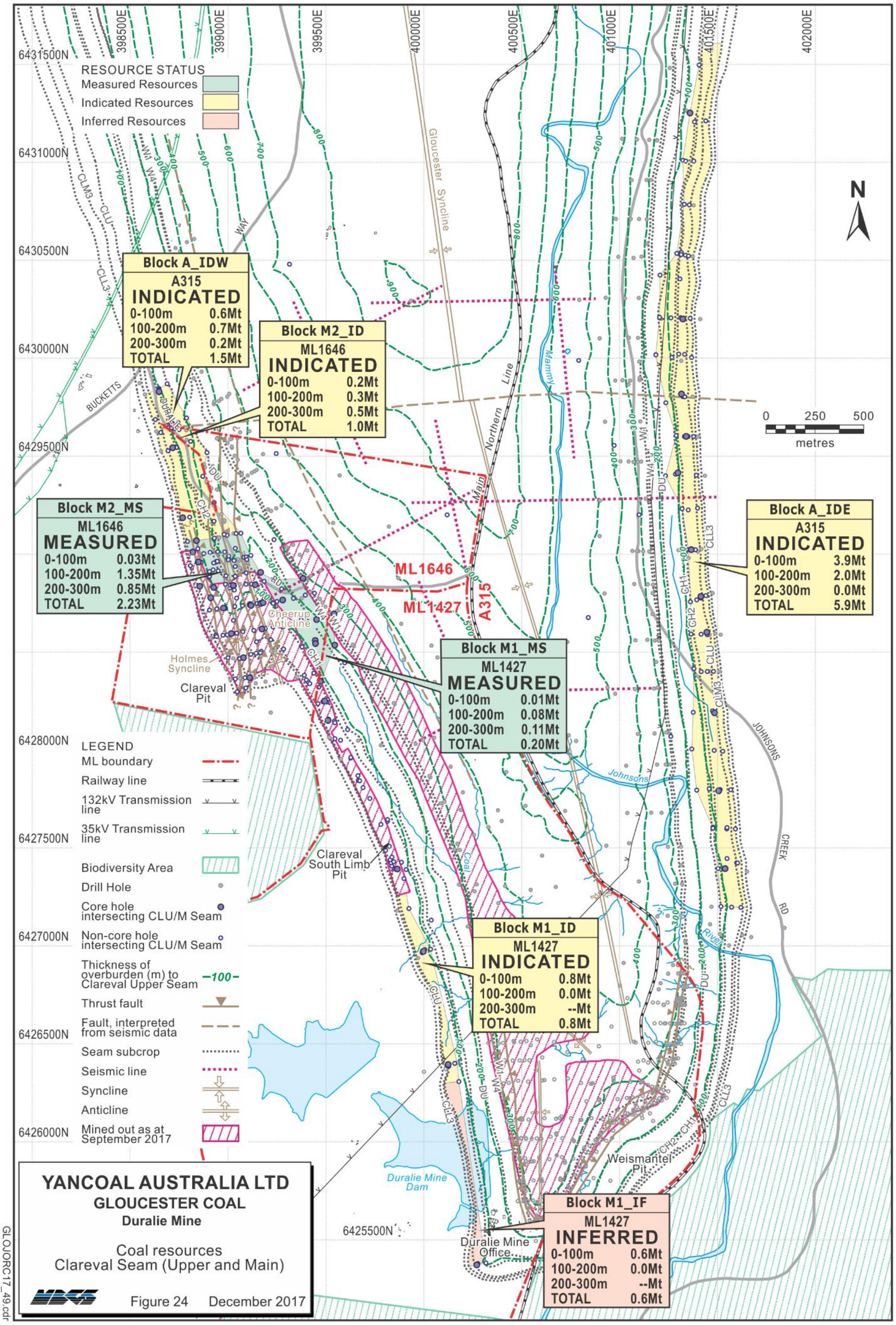
Resource Polygons

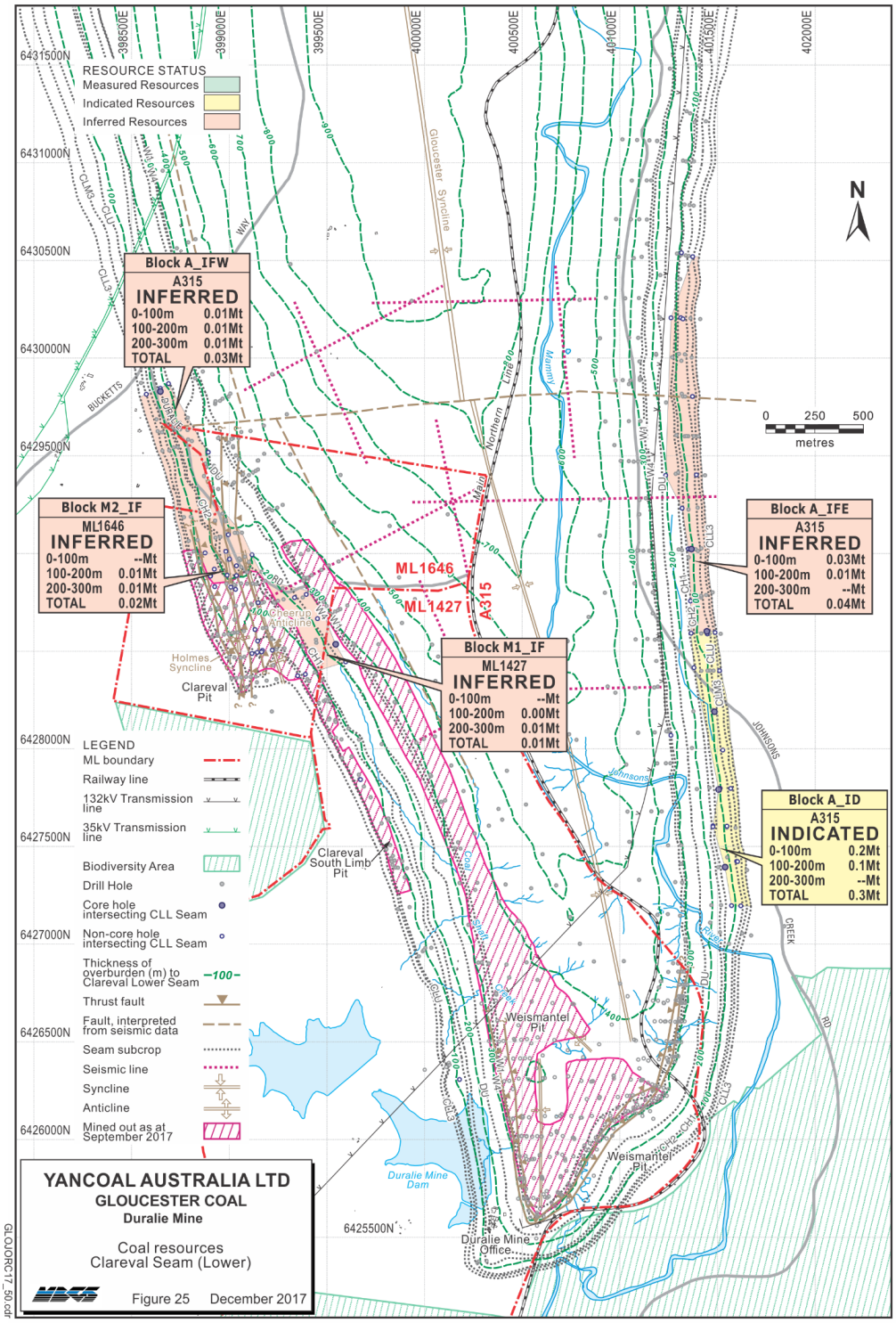
Stratford Duralie

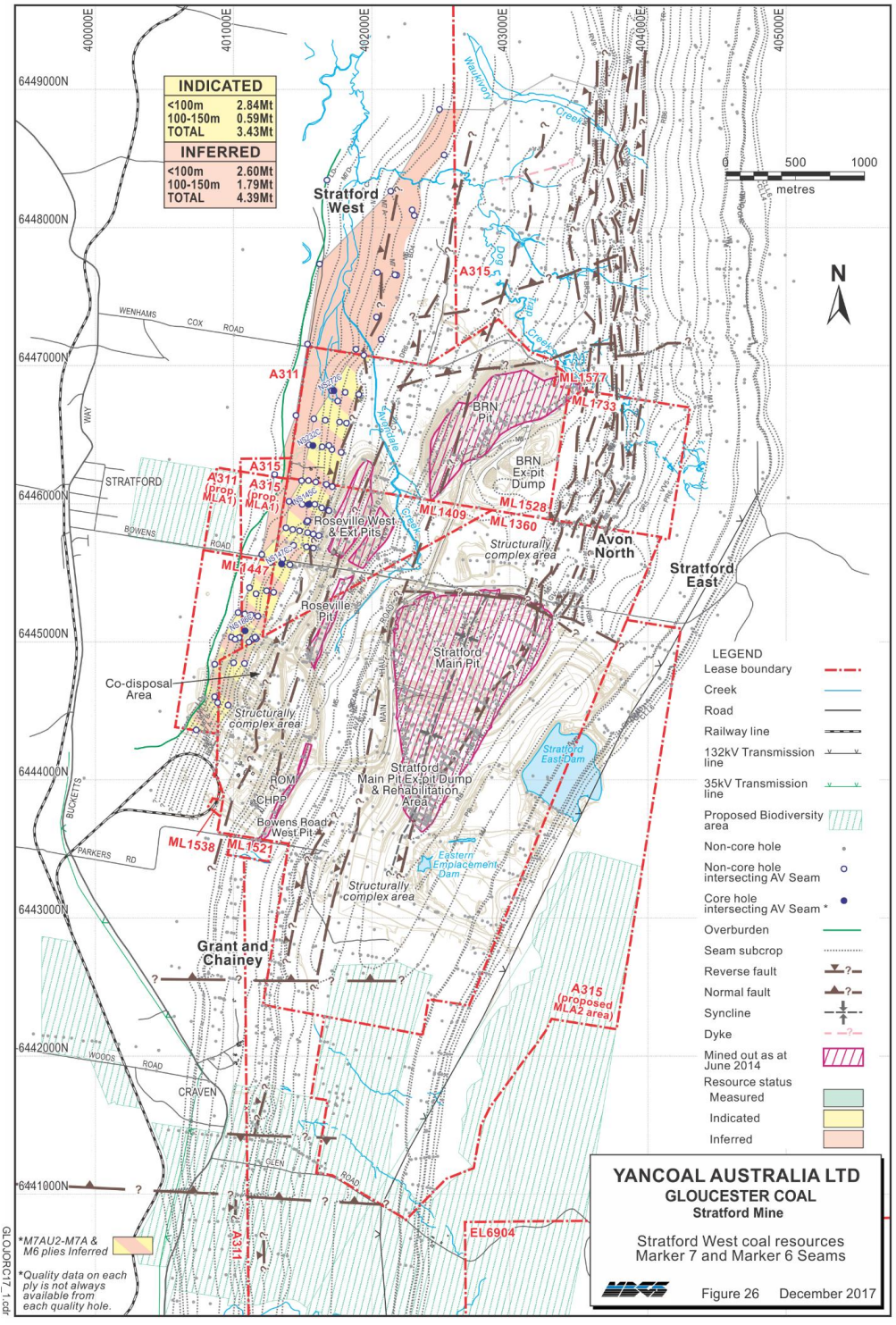


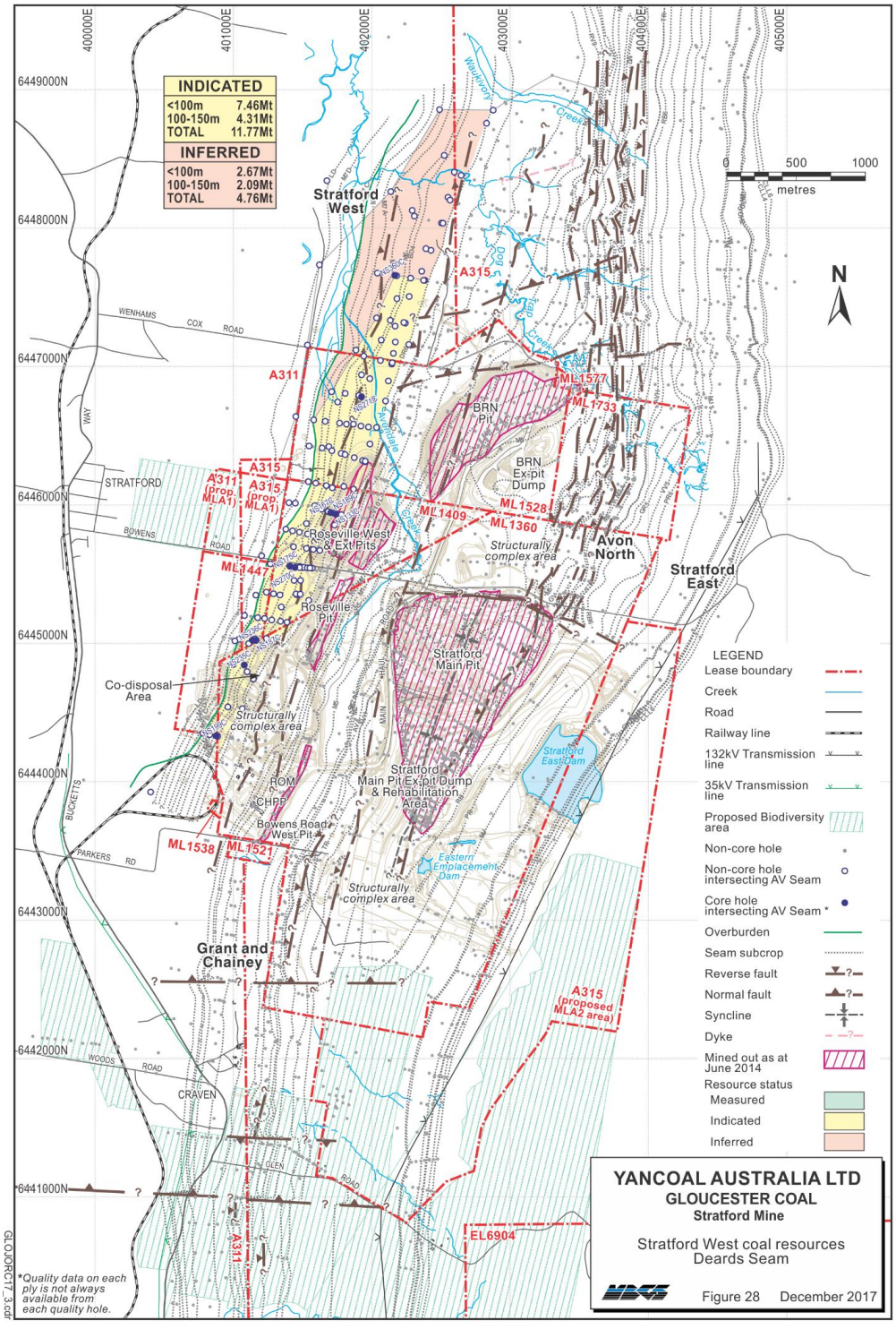
RESOURCE STATUS
Measured Resources
Indicated Resources
Inferred Resources
Block A_IF2
A315
INFERRED
0-100m 0.6Mt
100-200m 0.5Mt
200-300m 0.4Mt
300-500m 0.0Mt
TOTAL 1Mt
Block A_IF4
A315
INFERRED
0-100m 0.6Mt
100-200m 0.2Mt
200-300m 0.0Mt
300-500m --Mt
TOTAL 1Mt
Block A_IF3
A315
INFERRED
0-100m --Mt
100-200m 0.5Mt
200-300m 8Mt
300-500m 29Mt
TOTAL 37Mt
Block A_ID_W
A315
INDICATED
0-100m 1.9Mt
100-200m 2.0Mt
200-300m 1.7Mt
300-500m --Mt
TOTAL 5.6Mt
Block M2_IF1
ML1646
INFERRED
0-100m --Mt
100-200m --Mt
200-300m 0.7Mt
300-500m 6Mt
TOTAL 7Mt
Block M2_ID
ML1646
INDICATED
0-100m 1.0Mt
100-200m 2.9Mt
200-300m 3.1Mt
300-500m 0.1Mt
TOTAL 7.1Mt
Block A_ID_E
A315
INDICATED
0-100m 6.5Mt
100-200m 9.7Mt
200-300m 7.9Mt
300-500m 0.3Mt
TOTAL 24.4Mt
Block M1_IF1
ML1427
INFERRED
0-100m --Mt
100-200m --Mt
200-300m 3Mt
300-500m 0.2Mt
TOTAL 3Mt
Block M1_ID1
ML1427
INDICATED
0-100m 2.2Mt
100-200m 11.1Mt
200-300m 3.6Mt
300-500m --Mt
TOTAL 16.9Mt
Block M1_MS_E
ML1427
MEASURED
0-100m 2.12Mt
100-200m 0.01Mt
200-300m --Mt
300-500m --Mt
TOTAL 2.13Mt
Block M1_MS_W
ML1427
MEASURED
0-100m 0.97Mt
100-200m --Mt
200-300m --Mt
300-500m --Mt
TOTAL 0.97Mt
Block M1_IDb
ML1427
INDICATED
0-100m 0.5Mt
100-200m --Mt
200-300m --Mt
300-500m --Mt
TOTAL 0.5Mt
ML1646
ML1427
A315
Excluded area*
N
0 250 500
metres
Gloucester Syncline
Cheerup Anticline
Holmes Syncline
Clareval Pit
Weismantel Pit
Duralie Mine Dam
Duralie Mine Office
Northern Line
Mammy Johnsons River
JOHNSONS CREEK RD
398500E
399000E
399500E
400000E
400500E
401000E
401500E
402000E
6431500N
6431000N
6430500N
6429500N
6428500N
6428000N
6427500N
6427000N
6426500N
6426000N
6425500N
LEGEND
ML boundary
Railway line
132kV Transmission line
35kV Transmission line
Biodiversity Area
Drill Hole
Core hole intersecting W Seam
Non-core hole intersecting W Seam
Thickness of overburden (m) to Weismantel Seam
Thrust fault
Fault, interpreted from seismic data
Seam subcrop
Seismic line
Syncline
Anticline
Mined out as at September 2017
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Duralie Mine
Coal resources
Weismantel Seam
Figure 22 December 2017
GLOJORC17_47.cdr
* Note: 2.2Mt of resources at depths of less than 100m were excluded, in the vicinity of Mammy Johnsons River

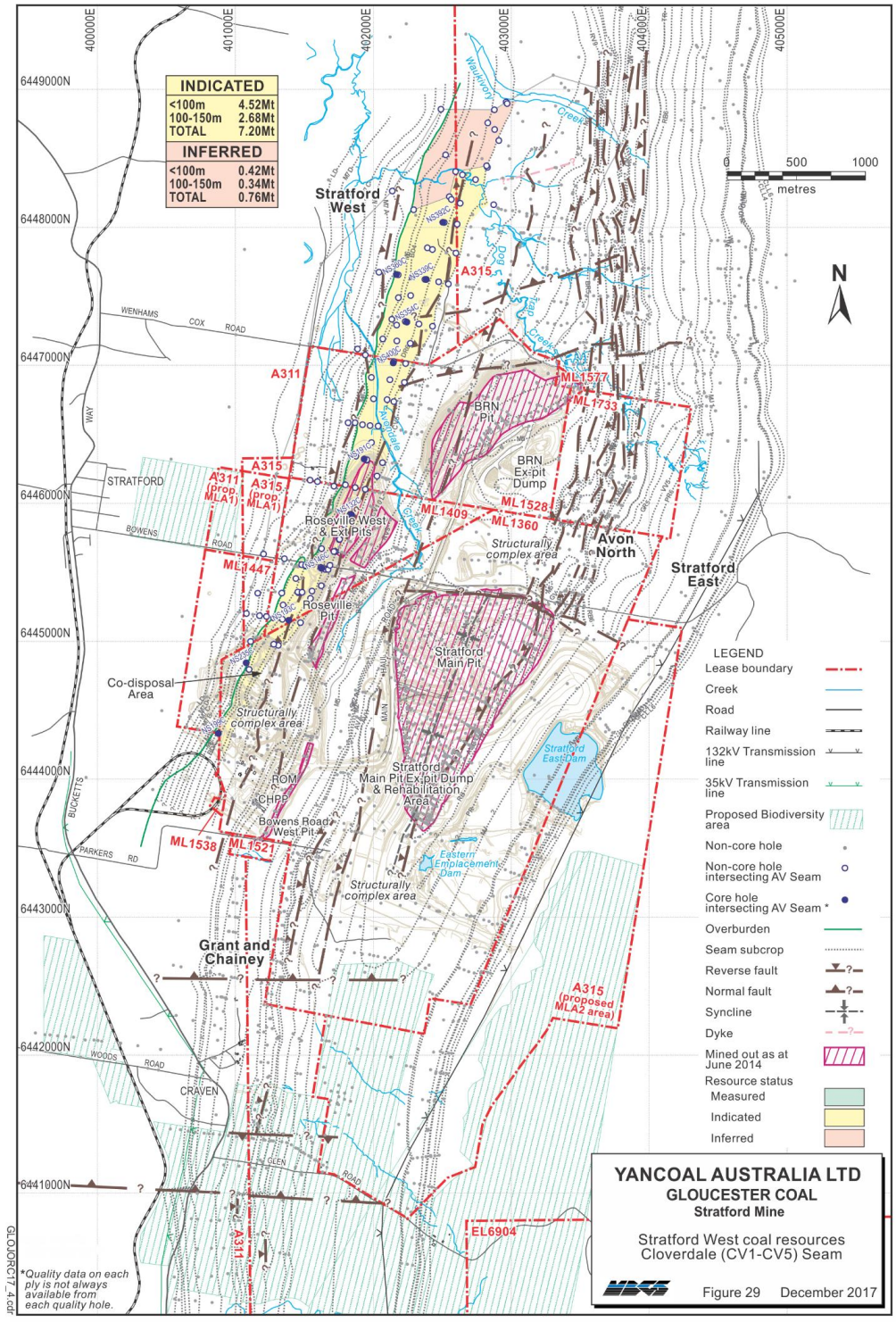

RESOURCE STATUS
Measured Resources
Indicated Resources
Inferred Resources
Block A_ID
A315
INDICATED
0-100m 0.2Mt
100-200m 0.1Mt
200-300m --Mt
TOTAL 0.3Mt
Block M2_ID
ML1646
INDICATED
0-100m 0.1Mt
100-200m 0.2Mt
200-300m 0.1Mt
TOTAL 0.4Mt
Block M2_M5
ML1646
MEASURED
0-100m 0.01Mt
100-200m 0.11Mt
200-300m 0.00Mt
TOTAL 0.12Mt
Block M2_IF2
ML1646
INFERRED
0-100m 0.0Mt
100-200m 0.4Mt
200-300m 0.1Mt
TOTAL 0.5Mt
Block M2_IF1
ML1646
INFERRED
0-100m 0.01Mt
100-200m 0.00Mt
200-300m --Mt
TOTAL 0.01Mt
Block M1_M5
MI1427
MEASURED
0-100m 0.00Mt
100-200m 0.02Mt
200-300m 0.00Mt
TOTAL 0.02Mt
Block M1_IF
ML1427
INFERRED
0-100m 0.1Mt
100-200m 0.0Mt
200-300m --Mt
TOTAL 0.1Mt
Block A_IF
A315
INFERRED
0-100m 1.1Mt
100-200m 0.6Mt
200-300m 0.0Mt
TOTAL 1.7Mt
ML1646
ML1427
A315
N
0 250 500
metres
Gloucester Syncline
Northern Line
Cheerup Anticline
Holmes Syncline
Clareval Pit
Clareval South Limb Pit
Weismantel Pit
Duralie Mine Dam
Duralie Mine Office
LEGEND
ML boundary
Railway line
132kV Transmission line
35kV Transmission line
Biodiversity Area
Drill Hole
Core hole intersecting CH Seam
Non-core hole intersecting CH Seam
Thickness of overburden (m) to Cheerup Seam
Thrust fault
Fault, interpreted from seismic data
Seam subcrop
Seismic line
Syncline
Anticline
Mined out as at September 2017
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Duralie Mine
Coal resources
Cheerup Seam
Figure 23 December 2017
GLO/ORC17_48.cdr

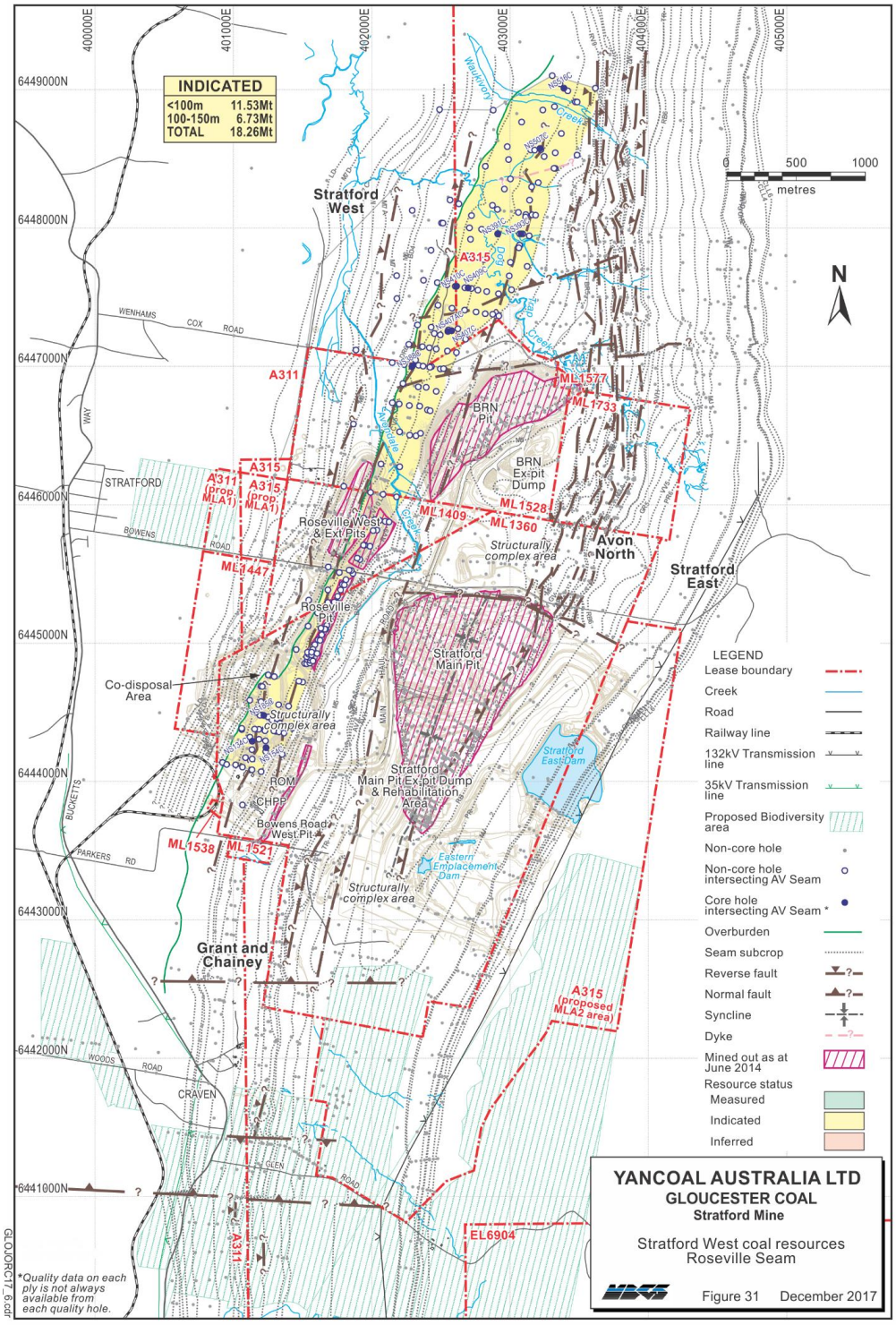

RESOURCE STATUS
Measured Resources
Indicated Resources
Inferred Resources
Block A_IDW
A315
INDICATED
0-100m 0.6Mt
100-200m 0.7Mt
200-300m 0.2Mt
TOTAL 1.5Mt
Block M2_ID
ML1646
INDICATED
0-100m 0.2Mt
100-200m 0.3Mt
200-300m 0.5Mt
TOTAL 1.0Mt
Block M2_MS
ML1646
MEASURED
0-100m 0.03Mt
100-200m 1.35Mt
200-300m 0.85Mt
TOTAL 2.23Mt
Block A_IDE
A315
INDICATED
0-100m 3.9Mt
100-200m 2.0Mt
200-300m 0.0Mt
TOTAL 5.9Mt
Block M1_MS
ML1427
MEASURED
0-100m 0.01Mt
100-200m 0.08Mt
200-300m 0.11Mt
TOTAL 0.20Mt
Block M1_ID
ML1427
INDICATED
0-100m 0.8Mt
100-200m 0.0Mt
200-300m --Mt
TOTAL 0.8Mt
Block M1_IF
ML1427
INFERRED
0-100m 0.6Mt
100-200m 0.0Mt
200-300m --Mt
TOTAL 0.6Mt
ML1646
ML1427
A315
N
0 250 500
metres
Gloucester Syncline
Northern Line
Cheerup Anticline
Holmes Syncline
Clareval Pit
Clareval South Limb Pit
Weismantel Pit
Duralie Mine Dam
Duralie Mine Office
JOHNSONS CREEK RD
LEGEND
ML boundary
Railway line
132kV Transmission line
35kV Transmission line
Biodiversity Area
Drill Hole
Core hole intersecting CLU/M Seam
Non-core hole intersecting CLU/M Seam
Thickness of overburden (m) to Clareval Upper Seam
Thrust fault
Fault, interpreted from seismic data
Seam subcrop
Seismic line
Syncline
Anticline
Mined out as at September 2017
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Duralie Mine
Coal resources
Clareval Seam (Upper and Main)
Figure 24 December 2017
GLOJORC17_49.cdr

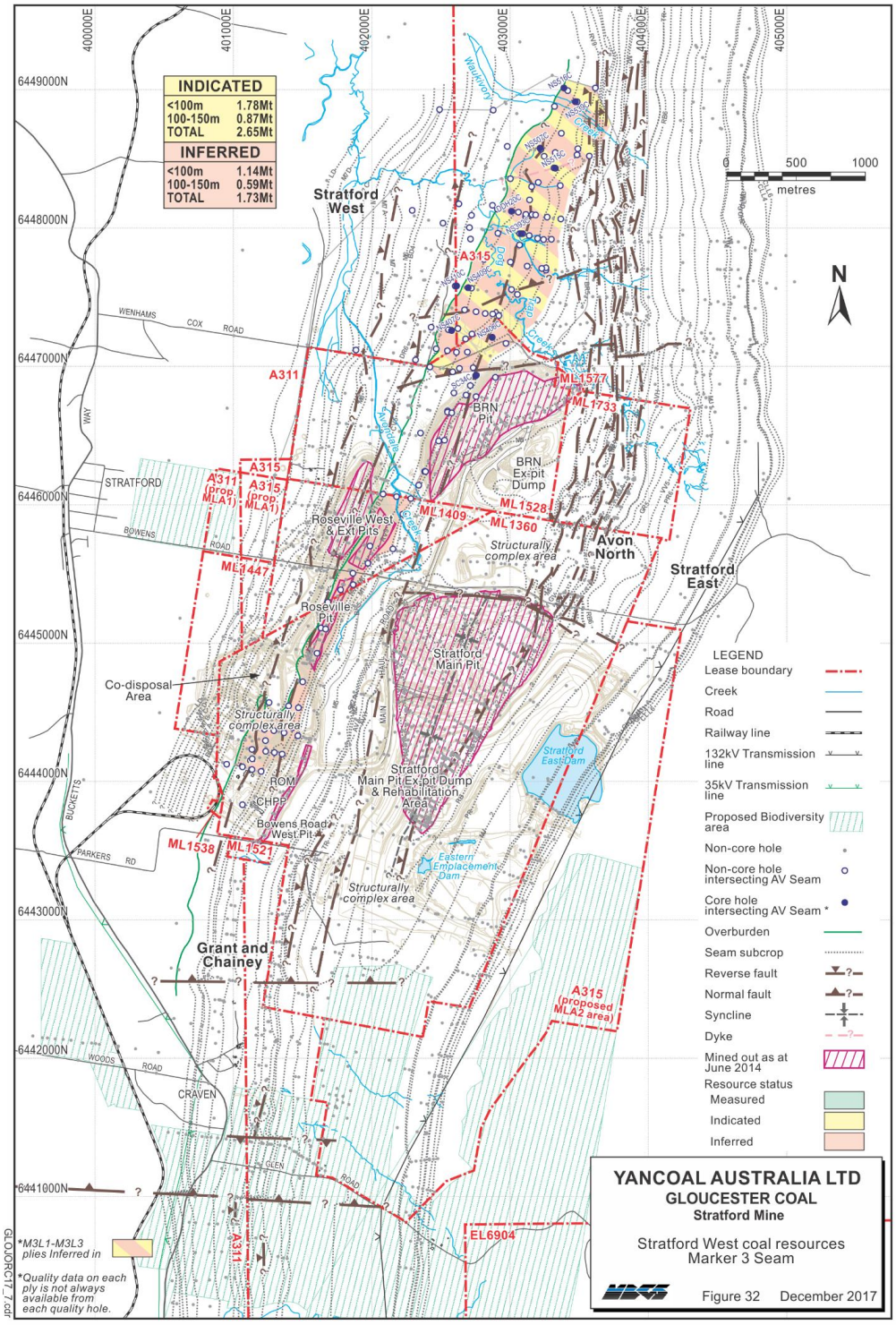

RESOURCE STATUS
Measured Resources
Indicated Resources
Inferred Resources
Block A_IFW
A315
INFERRED
0-100m 0.01Mt
100-200m 0.01Mt
200-300m 0.01Mt
TOTAL 0.03Mt
Block M2_IF
ML1646
INFERRED
0-100m --Mt
100-200m 0.01Mt
200-300m 0.01Mt
TOTAL 0.02Mt
Block M1_IF
ML1427
INFERRED
0-100m --Mt
100-200m 0.00Mt
200-300m 0.01Mt
TOTAL 0.01Mt
Block A_IFE
A315
INFERRED
0-100m 0.03Mt
100-200m 0.01Mt
200-300m --Mt
TOTAL 0.04Mt
Block A_ID
A315
INDICATED
0-100m 0.2Mt
100-200m 0.1Mt
200-300m --Mt
TOTAL 0.3Mt
ML1646
ML1427
A315
N
0 250 500
metres
LEGEND
ML boundary
Railway line
132kV Transmission line
35kV Transmission line
Biodiversity Area
Drill Hole
Core hole intersecting CLL Seam
Non-core hole intersecting CLL Seam
Thickness of overburden (m) to Clareval Lower Seam
Thrust fault
Fault, interpreted from seismic data
Seam subcrop
Seismic line
Syncline
Anticline
Mined out as at September 2017
Gloucester Syncline
Holmes Syncline
Cheerup Anticline
Clareval Pit
Clareval South Limb Pit
Weismantel Pit
Duralie Mine Dam
Duralie Mine Office
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Duralie Mine
Coal resources
Clareval Seam (Lower)
Figure 25 December 2017
GLOUORC17_50.cdr

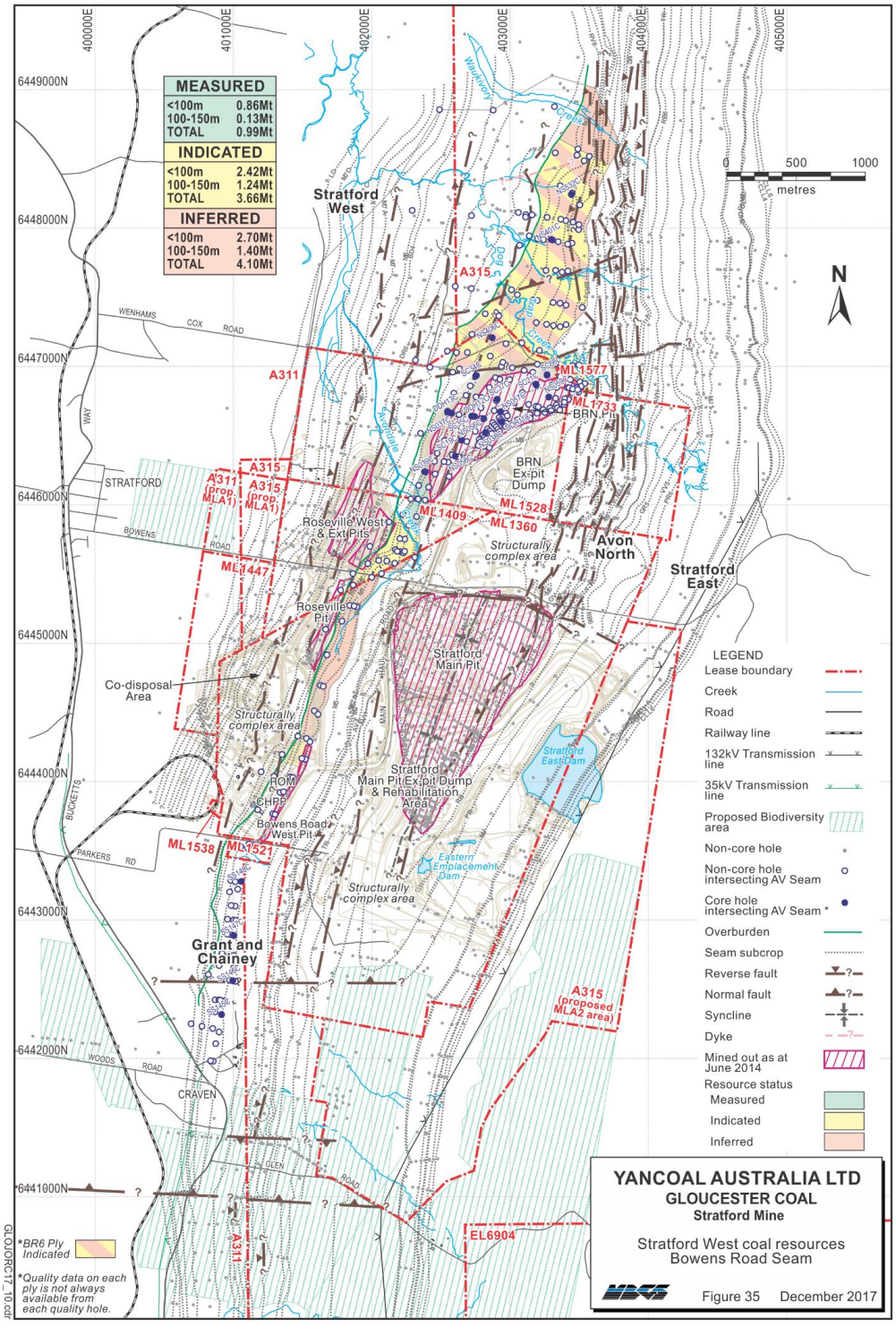

INDICATED
<100m 2.84Mt
100-150m 0.59Mt
TOTAL 3.43Mt
INFERRED
<100m 2.60Mt
100-150m 1.79Mt
TOTAL 4.39Mt
Stratford West
Avon North
Stratford East
BRN Pit
BRN Ex-pit Dump
Roseville West & Ext Pits
Roseville Pit
Stratford Main Pit
Stratford Main Pit Ex-pit Dump & Rehabilitation Area
Co-disposal Area
Structurally complex area
ROM
CHPP
Bowens Road West Pit
Stratford East Dam
Eastern Emplacement Dam
Grant and Chainey
A315 (proposed MLA2 area)
EL6904
ML1577
ML1733
ML1409
ML1528
ML1360
ML1447
ML1538
ML1521
A311
A315
A311 (prop MLA1)
A315 (prop MLA1)
STRATFORD
CRAVEN
WENHAMS COX ROAD
BOWENS ROAD
WOODS ROAD
PARKERS RD
BUCKETTS WAY
0 500 1000
metres
N
LEGEND
Lease boundary
Creek
Road
Railway line
132kV Transmission line
35kV Transmission line
Proposed Biodiversity area
Non-core hole
Non-core hole intersecting AV Seam
Core hole intersecting AV Seam *
Overburden
Seam subcrop
Reverse fault
Normal fault
Syncline
Dyke
Mined out as at June 2014
Resource status
Measured
Indicated
Inferred
*M7AU2-M7A & M6 plies Inferred
*Quality data on each ply is not always available from each quality hole.
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Stratford Mine
Stratford West coal resources
Marker 7 and Marker 6 Seams
Figure 26 December 2017
GLOJORC17_1.cdr

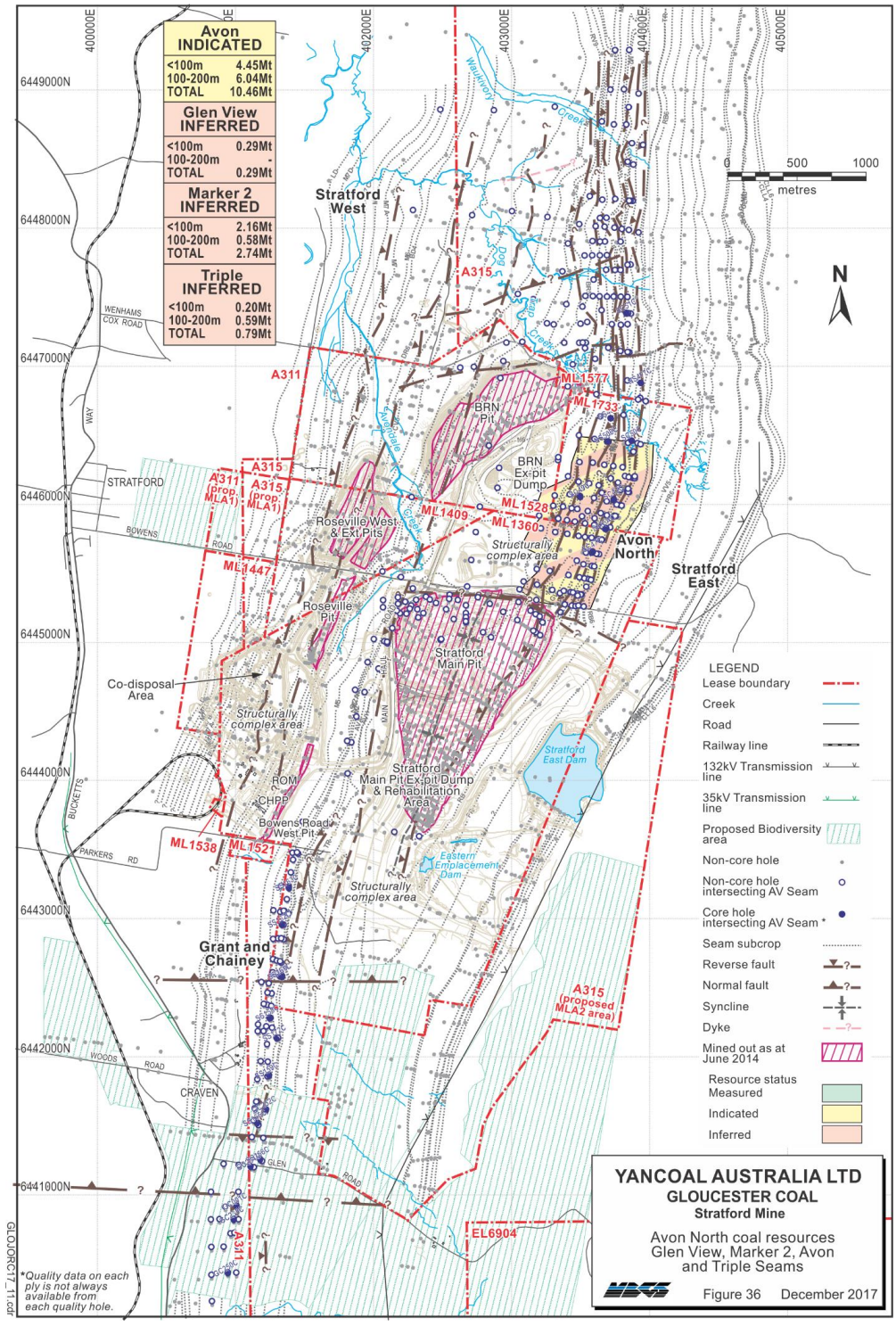

INDICATED
<100m 7.46Mt
100-150m 4.31Mt
TOTAL 11.77Mt
INFERRED
<100m 2.67Mt
100-150m 2.09Mt
TOTAL 4.76Mt
400000E
401000E
402000E
403000E
404000E
405000E
6449000N
6448000N
6447000N
6446000N
6445000N
6444000N
6443000N
6442000N
6441000N
0 500 1000
metres
N
Stratford West
Avon North
Stratford East
Grant and Chainey
Co-disposal Area
Roseville West & Ext Pits
Roseville Pit
BRN Pit
BRN Ex-pit Dump
Stratford Main Pit
Stratford Main Pit Ex-pit Dump & Rehabilitation Area
Bowens Road West Pit
ROM
CHPP
Eastern Emplacement Dam
Stratford East Dam
Structurally complex area
A315
A311
A315 (prop. MLA1)
A311 (prop. MLA1)
ML1577
ML1733
ML1528
ML1360
ML1409
ML1447
ML1538
ML152
A315 (proposed MLA2 area)
EL6904
STRATFORD
WENHAMS COX ROAD
BOWENS ROAD
PARKERS RD
WOODS ROAD
CRAVEN
GLEN ROAD
BUCKETTS WAY
LEGEND
Lease boundary
Creek
Road
Railway line
132kV Transmission line
35kV Transmission line
Proposed Biodiversity area
Non-core hole
Non-core hole intersecting AV Seam
Core hole intersecting AV Seam *
Overburden
Seam subcrop
Reverse fault
Normal fault
Syncline
Dyke
Mined out as at June 2014
Resource status
Measured
Indicated
Inferred
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Stratford Mine
Stratford West coal resources
Deards Seam
Figure 28 December 2017
*Quality data on each ply is not always available from each quality hole.
GLOJORC17_3.cdr

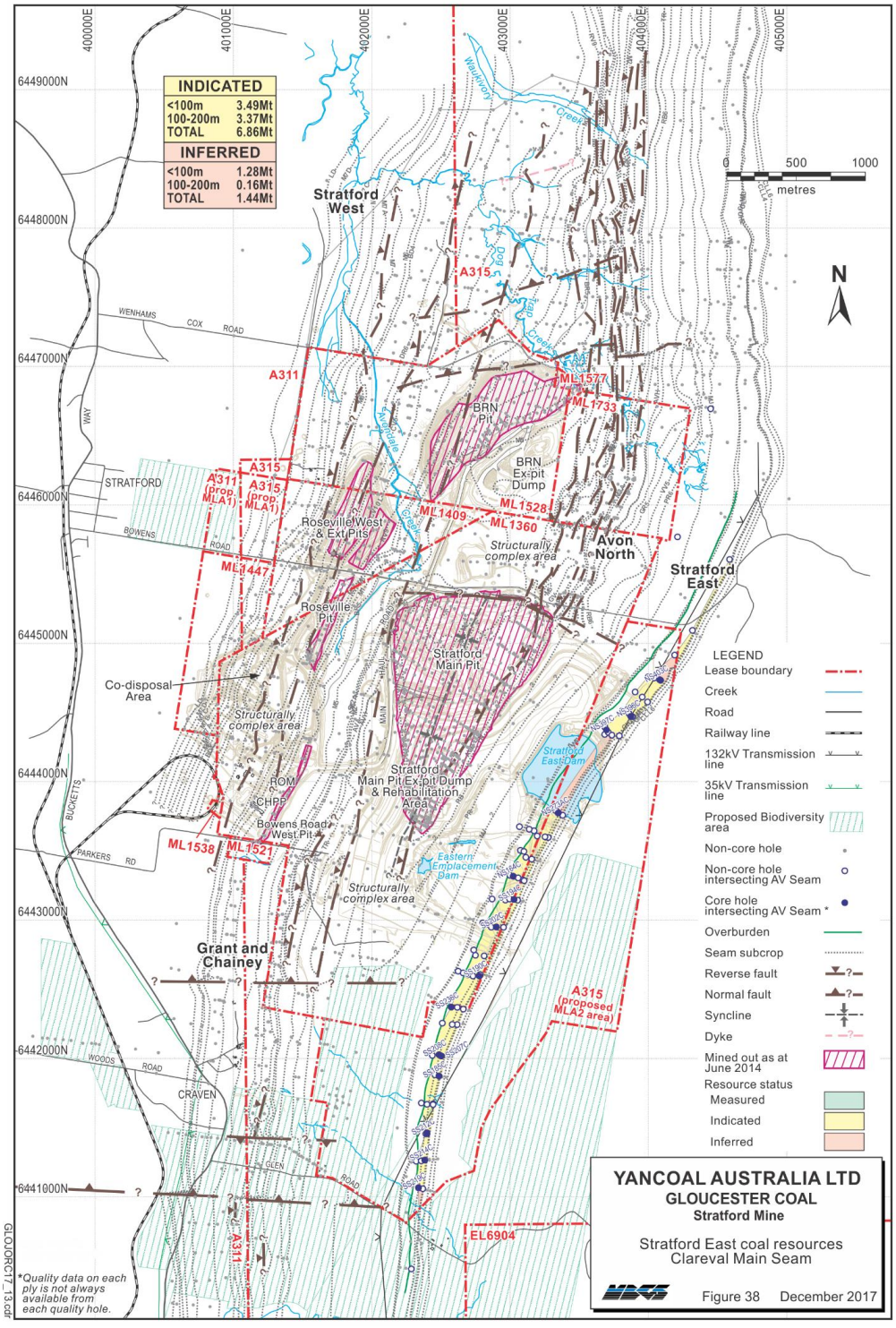

INDICATED
<100m 4.52Mt
100-150m 2.68Mt
TOTAL 7.20Mt
INFERRED
<100m 0.42Mt
100-150m 0.34Mt
TOTAL 0.76Mt
400000E
401000E
402000E
403000E
404000E
405000E
6449000N
6448000N
6447000N
6446000N
6445000N
6444000N
6443000N
6442000N
6441000N
0 500 1000
metres
N
Stratford West
Avon North
Stratford East
Grant and Chainey
Co-disposal Area
BRN Pit
BRN Ex-pit Dump
Roseville West & Ext Pits
Roseville Pit
Stratford Main Pit
Stratford Main Pit Ex-pit Dump & Rehabilitation Area
Structurally complex area
ROM
CHPP
Bowens Road West Pit
Stratford East Dam
Eastern Emplacement Dam
A315
A311
A315 (prop. MLA1)
A311 (prop. MLA1)
A315 (proposed MLA2 area)
ML1577
ML1733
ML1528
ML1409
ML1360
ML1447
ML1538
ML1521
EL6904
WENHAMS COX ROAD
STRATFORD
BOWENS ROAD
PARKERS RD
WOODS ROAD
CRAVEN
BUCKETTS WAY
LEGEND
Lease boundary
Creek
Road
Railway line
132kV Transmission line
35kV Transmission line
Proposed Biodiversity area
Non-core hole
Non-core hole intersecting AV Seam
Core hole intersecting AV Seam *
Overburden
Seam subcrop
Reverse fault
Normal fault
Syncline
Dyke
Mined out as at June 2014
Resource status
Measured
Indicated
Inferred
*Quality data on each ply is not always available from each quality hole.
GLOUDRC17_4.cdr
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Stratford Mine
Stratford West coal resources
Cloverdale (CV1-CV5) Seam
Figure 29 December 2017

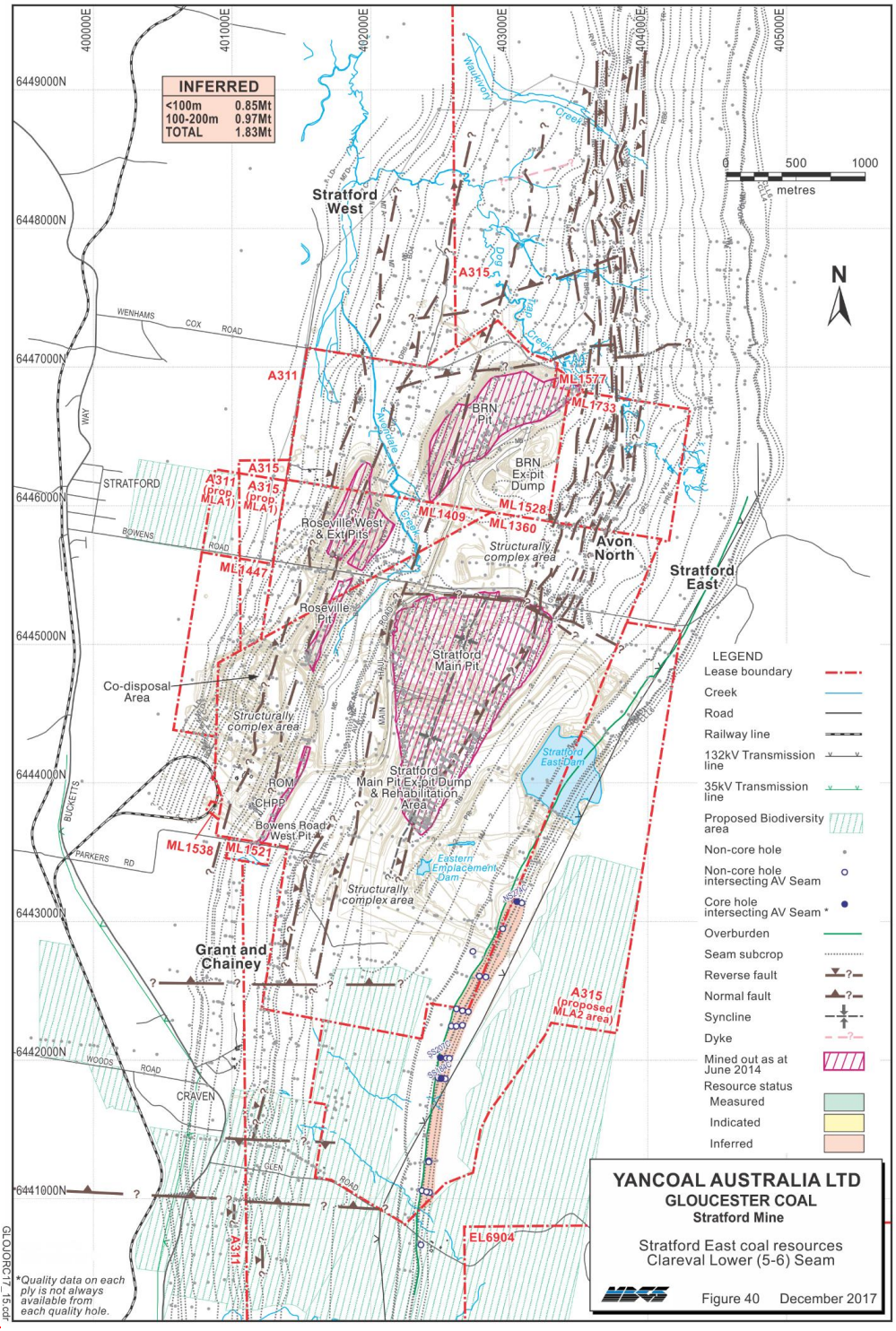

INDICATED
<100m 11.53Mt
100-150m 6.73Mt
TOTAL 18.26Mt
0 500 1000
metres
N
Stratford West
Avon North
Stratford East
Roseville West & Ext Pits
Roseville Pit
BRN Pit
BRN Ex-pit Dump
Stratford Main Pit
Stratford Main Pit Ex-pit Dump & Rehabilitation Area
Co-disposal Area
ROM
CHPP
Bowens Road West Pit
Grant and Chainey
Structurally complex area
Eastern Emplacement Dam
Stratford East Dam
A315
A311
A315 (Prop. MLA1)
A311 (Prop. MLA1)
A315 (proposed MLA2 area)
ML1577
ML1733
ML1409
ML1528
ML1360
ML1447
ML1538
ML1521
EL6904
LEGEND
Lease boundary
Creek
Road
Railway line
132kV Transmission line
35kV Transmission line
Proposed Biodiversity area
Non-core hole
Non-core hole intersecting AV Seam
Core hole intersecting AV Seam *
Overburden
Seam subcrop
Reverse fault
Normal fault
Syncline
Dyke
Mined out as at June 2014
Resource status
Measured
Indicated
Inferred
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Stratford Mine
Stratford West coal resources
Roseville Seam
Figure 31 December 2017
*Quality data on each ply is not always available from each quality hole.
GLOJORC17_6.cdr

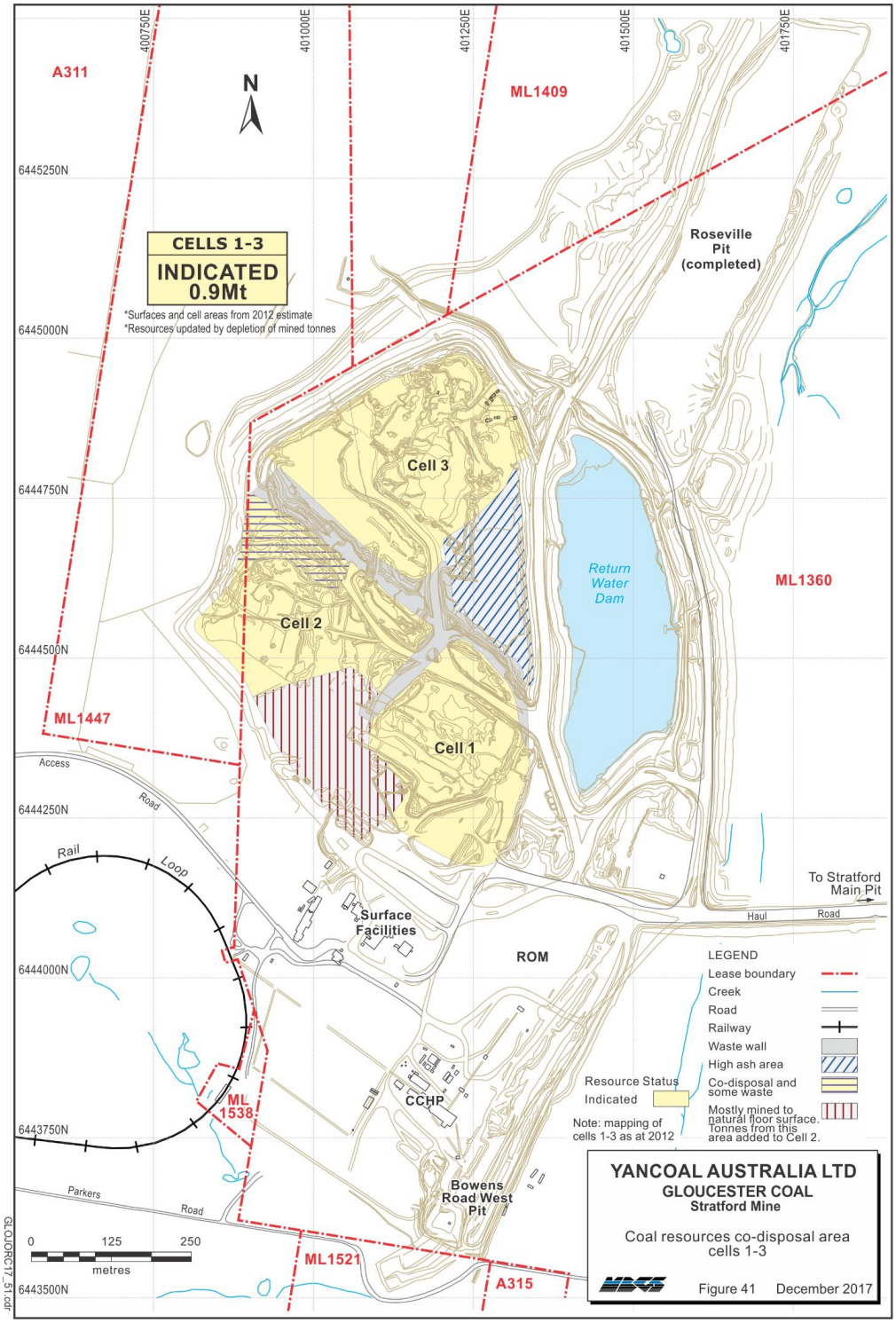

INDICATED
<100m 1.78Mt
100-150m 0.87Mt
TOTAL 2.65Mt
INFERRED
<100m 1.14Mt
100-150m 0.59Mt
TOTAL 1.73Mt
0 500 1000
metres
N
Stratford West
Avon North
Stratford East
Grant and Chainey
BRN Pit
BRN Ex-pit Dump
Roseville West & Ext Pits
Roseville Pit
Stratford Main Pit
Stratford Main Pit Ex-pit Dump & Rehabilitation Area
Co-disposal Area
ROM
CHPP
Bowens Road West Pit
Structurally complex area
Stratford East Dam
Eastern Emplacement Dam
A315
A311
A315 (Prop. MLA1)
A311 (Prop. MLA1)
A315 (proposed MLA2 area)
ML1577
ML1733
ML1528
ML1409
ML1360
ML1447
ML1538
ML1521
EL6904
STRATFORD
CRAVEN
WENHAMS COX ROAD
BOWENS ROAD
PARKERS RD
WOODS ROAD
GLEN ROAD
BUCKETTS WAY
LEGEND
Lease boundary
Creek
Road
Railway line
132kV Transmission line
35kV Transmission line
Proposed Biodiversity area
Non-core hole
Non-core hole intersecting AV Seam
Core hole intersecting AV Seam *
Overburden
Seam subcrop
Reverse fault
Normal fault
Syncline
Dyke
Mined out at June 2014
Resource status
Measured
Indicated
Inferred
*M3L1-M3L3 plies Inferred in
*Quality data on each ply is not always available from each quality hole.
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Stratford Mine
Stratford West coal resources
Marker 3 Seam
Figure 32 December 2017
GLOUORC17_7.cdr

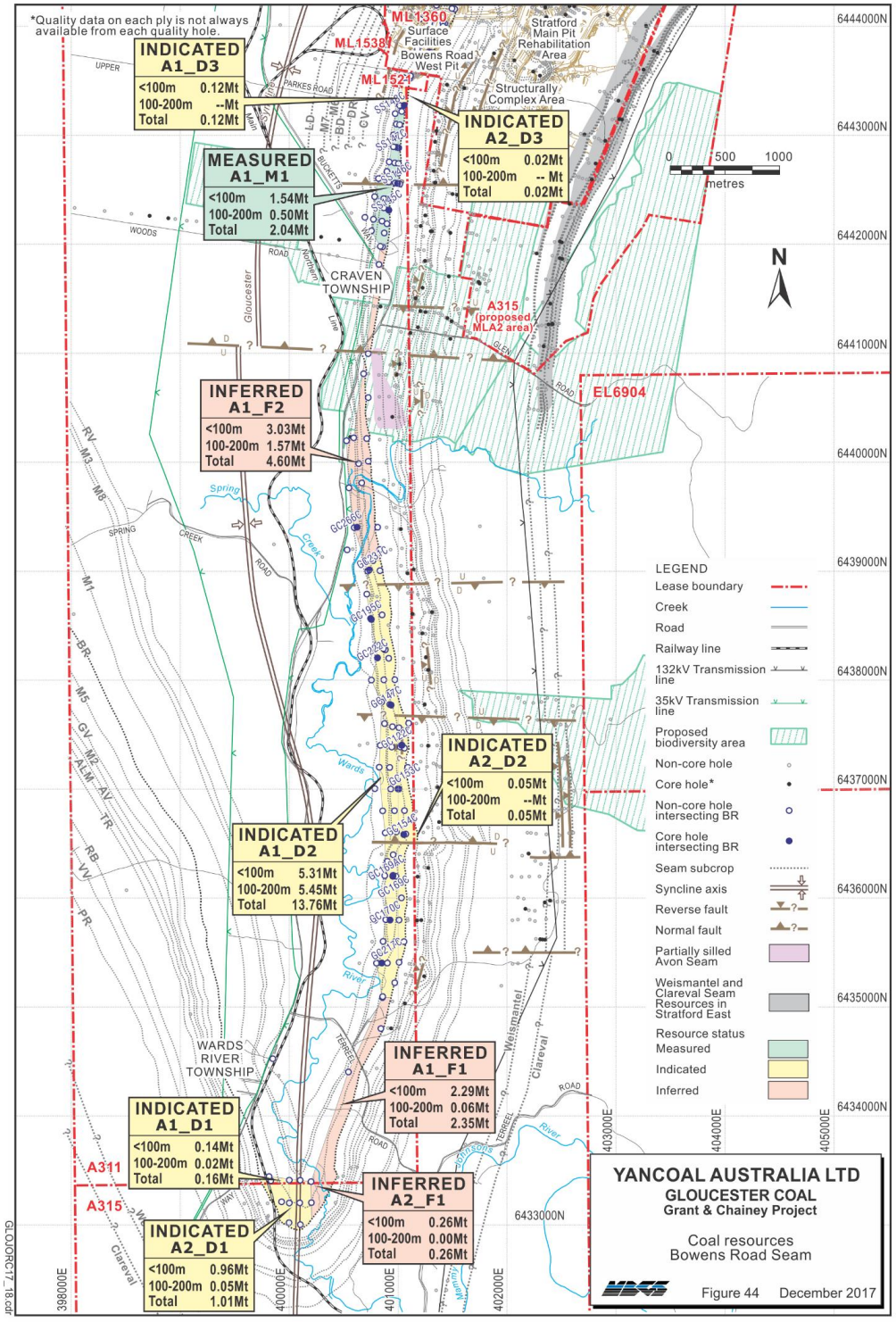

MEASURED
<100m 0.86Mt
100-150m 0.13Mt
TOTAL 0.99Mt
INDICATED
<100m 2.42Mt
100-150m 1.24Mt
TOTAL 3.66Mt
INFERRED
<100m 2.70Mt
100-150m 1.40Mt
TOTAL 4.10Mt
400000E
401000E
402000E
403000E
404000E
405000E
6449000N
6448000N
6447000N
6446000N
6445000N
6444000N
6443000N
6442000N
6441000N
0 500 1000
metres
N
Stratford West
Avon North
Stratford East
Grant and Chainey
STRATFORD
WENHAMS COX ROAD
BOWENS ROAD
PARKERS RD
WOODS ROAD
CRAVEN
A315
A311
A311 (prop. MLA1)
A315 (prop. MLA1)
ML1577
ML1733
BRN Pit
BRN Ex-pit Dump
ML1409
ML1528
ML1360
ML1447
Roseville West & Ext Pits
Roseville Pit
Structurally complex area
Stratford Main Pit
Co-disposal Area
ROM CHPP
Bowens Road West Pit
Stratford Main Pit Ex-pit Dump & Rehabilitation Area
Stratford East Dam
Eastern Emplacement Dam
ML1538
ML1521
A315 (proposed MLA2 area)
EL6904
LEGEND
Lease boundary
Creek
Road
Railway line
132kV Transmission line
35kV Transmission line
Proposed Biodiversity area
Non-core hole
Non-core hole intersecting AV Seam
Core hole intersecting AV Seam *
Overburden
Seam subcrop
Reverse fault
Normal fault
Syncline
Dyke
Mined out as at June 2014
Resource status
Measured
Indicated
Inferred
*BR6 Ply Indicated
*Quality data on each ply is not always available from each quality hole.
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Stratford Mine
Stratford West coal resources
Bowens Road Seam
Figure 35 December 2017
GLOJORC17_10.cdr

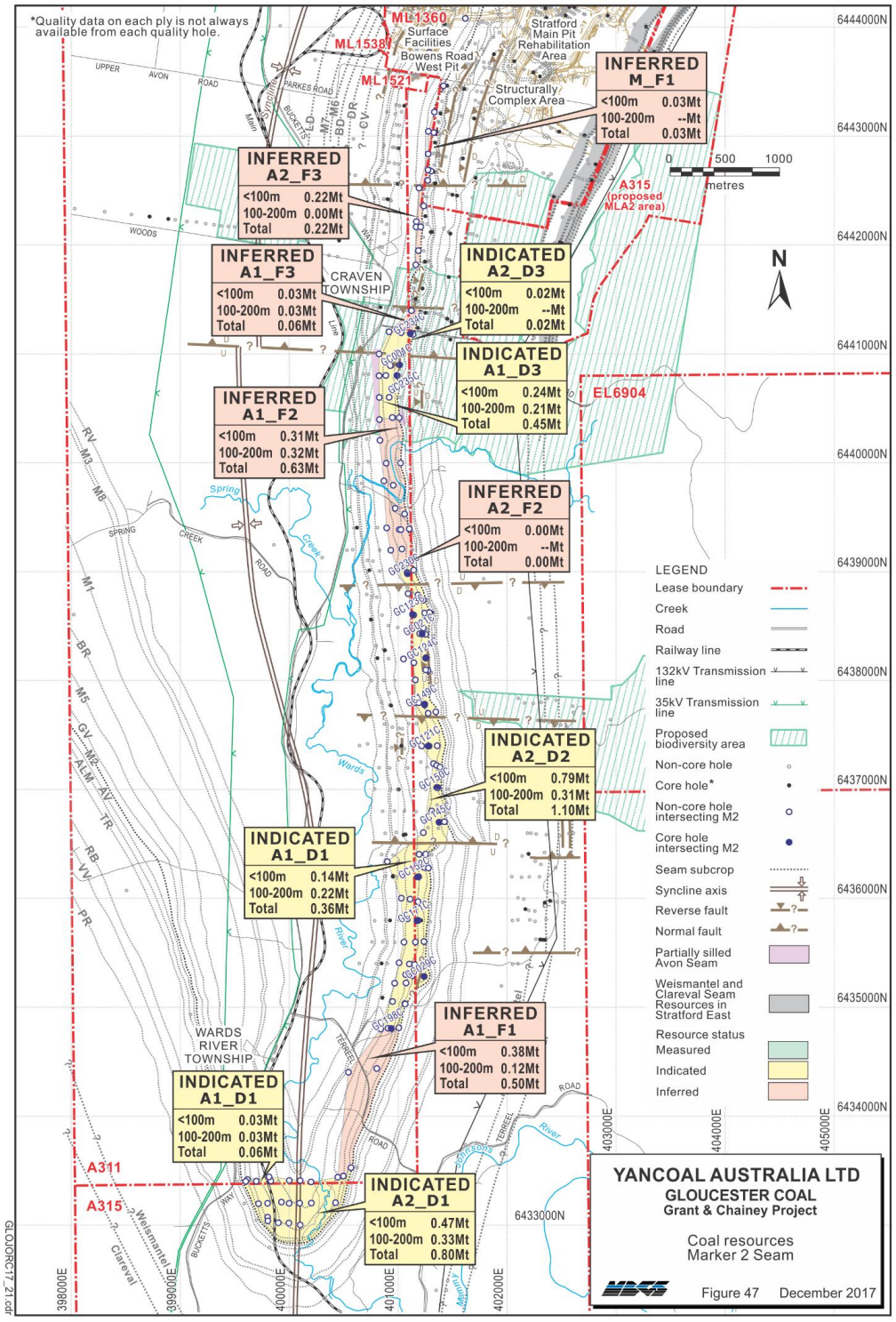

Avon INDICATED
<100m 4.45Mt
100-200m 6.04Mt
TOTAL 10.46Mt
Glen View INFERRED
<100m 0.29Mt
100-200m -
TOTAL 0.29Mt
Marker 2 INFERRED
<100m 2.16Mt
100-200m 0.58Mt
TOTAL 2.74Mt
Triple INFERRED
<100m 0.20Mt
100-200m 0.59Mt
TOTAL 0.79Mt
Stratford West
Avon North
Stratford East
Grant and Chainey
BRN Pit
BRN Ex-pit Dump
Roseville West & Ext Pits
Roseville Pit
Stratford Main Pit
Stratford Main Pit Ex-pit Dump & Rehabilitation Area
Bowens Road West Pit
Co-disposal Area
ROM
CHPP
Stratford East Dam
Eastern Emplacement Dam
Structurally complex area
A315
A311
A315 (prop. MLA1)
A311 (prop. MLA1)
A315 (proposed MLA2 area)
ML1577
ML1733
ML1528
ML1360
ML1409
ML1447
ML1538
ML1521
EL6904
STRATFORD
BOWENS ROAD
PARKERS RD
WOODS ROAD
CRAVEN
WENHAMS COX ROAD
BUCKETTS WAY
0 500 1000
metres
N
LEGEND
Lease boundary
Creek
Road
Railway line
132kV Transmission line
35kV Transmission line
Proposed Biodiversity area
Non-core hole
Non-core hole intersecting AV Seam
Core hole intersecting AV Seam *
Seam subcrop
Reverse fault
Normal fault
Syncline
Dyke
Mined out as at June 2014
Resource status
Measured
Indicated
Inferred
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Stratford Mine
Avon North coal resources
Glen View, Marker 2, Avon and Triple Seams
Figure 36 December 2017
*Quality data on each ply is not always available from each quality hole.
GLOJORC17_11.cdr

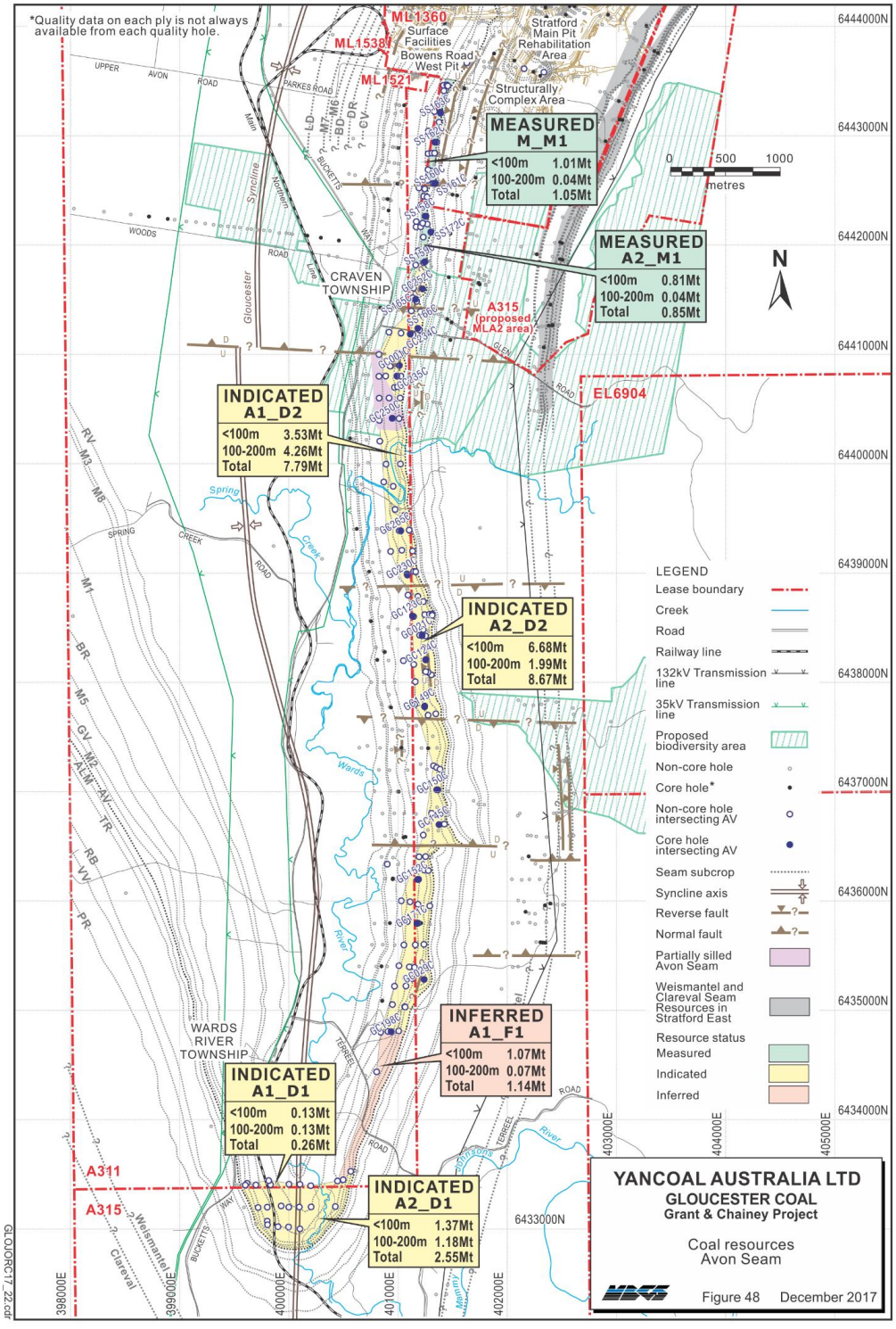

INDICATED
<100m 3.49Mt
100-200m 3.37Mt
TOTAL 6.86Mt
INFERRED
<100m 1.28Mt
100-200m 0.16Mt
TOTAL 1.44Mt
0 500 1000
metres
N
Stratford West
Avon North
Stratford East
Grant and Chainey
BRN Pit
BRN Ex-pit Dump
Roseville West & Ext Pits
Roseville Pit
Stratford Main Pit
Stratford Main Pit Ex-pit Dump & Rehabilitation Area
Co-disposal Area
ROM CHPP
Bowens Road West Pit
Structurally complex area
Stratford East Dam
Eastern Emplacement Dam
A315 (proposed MLA2 area)
EL6904
ML1577
ML1733
ML1409
ML1528
ML1360
ML1447
ML1538
ML152
LEGEND
Lease boundary
Creek
Road
Railway line
132kV Transmission line
35kV Transmission line
Proposed Biodiversity area
Non-core hole
Non-core hole intersecting AV Seam
Core hole intersecting AV Seam *
Overburden
Seam subcrop
Reverse fault
Normal fault
Syncline
Dyke
Mined out as at June 2014
Resource status
Measured
Indicated
Inferred
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Stratford Mine
Stratford East coal resources
Clareval Main Seam
Figure 38 December 2017
*Quality data on each ply is not always available from each quality hole.
GLOJORC17_13.cdr

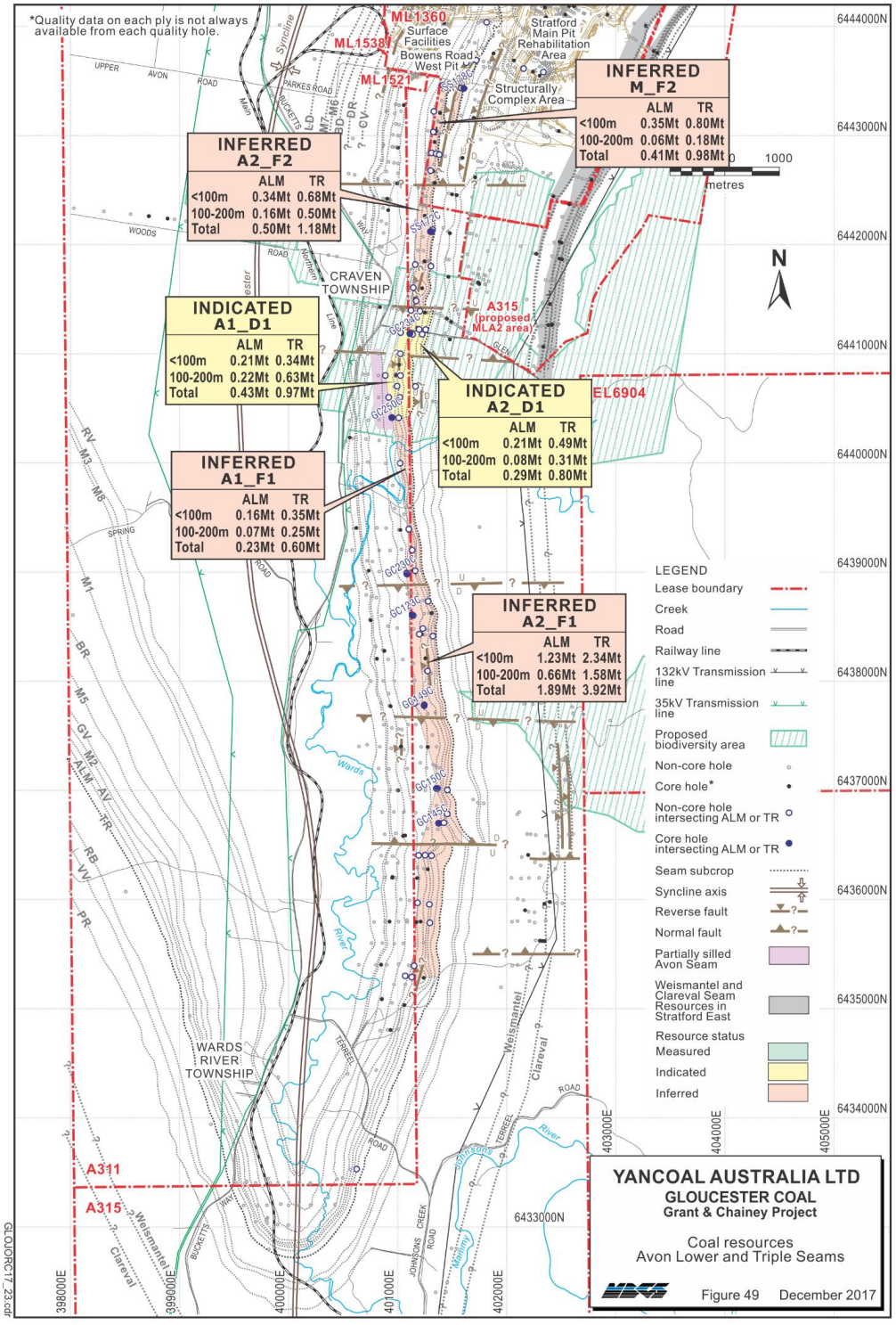

INFERRED
<100m 0.85Mt
100-200m 0.97Mt
TOTAL 1.83Mt
0 500 1000
metres
N
Stratford West
Avon North
Stratford East
Roseville West & Ext Pits
Roseville Pit
BRN Pit
BRN Ex-pit Dump
Stratford Main Pit
Stratford Main Pit/Ex-pit Dump & Rehabilitation Area
Co-disposal Area
Structurally complex area
Bowens Road West Pit
Eastern Emplacement Dam
Stratford East Dam
ROM
CHPP
Grant and Chainey
A315 (proposed MLA2 area)
A311
A315
A311 (prop. MLA1)
A315 (prop. MLA1)
ML1577
ML1733
ML1528
ML1409
ML1360
ML1447
ML1538
ML1521
EL6904
STRATFORD
CRAVEN
WENHAMS COX ROAD
BOWENS ROAD
WOODS ROAD
PARKERS RD
BUCKETTS WAY
6449000N
6448000N
6447000N
6446000N
6445000N
6444000N
6443000N
6442000N
6441000N
400000E
401000E
402000E
403000E
404000E
405000E
LEGEND
Lease boundary
Creek
Road
Railway line
132kV Transmission line
35kV Transmission line
Proposed Biodiversity area
Non-core hole
Non-core hole intersecting AV Seam
Core hole intersecting AV Seam *
Overburden
Seam subcrop
Reverse fault
Normal fault
Syncline
Dyke
Mined out as at June 2014
Resource status
Measured
Indicated
Inferred
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Stratford Mine
Stratford East coal resources
Clareval Lower (5-6) Seam
Figure 40 December 2017
*Quality data on each ply is not always available from each quality hole.
GLOJORC17_15.cdr


400750E
401000E
401250E
401500E
401750E
A311
N
ML1409
6445250N
CELLS 1-3
INDICATED
0.9Mt
*Surfaces and cell areas from 2012 estimate
*Resources updated by depletion of mined tonnes
Roseville Pit (completed)
6445000N
Cell 3
6444750N
Return Water Dam
ML1360
Cell 2
6444500N
ML1447
Cell 1
Access Road
6444250N
Rail Loop
To Stratford Main Pit
Haul Road
Surface Facilities
ROM
6444000N
LEGEND
Lease boundary
Creek
Road
Railway
Waste wall
High ash area
Co-disposal and some waste
Mostly mined to natural floor surface. Tonnes from this area added to Cell 2.
Resource Status
Indicated
Note: mapping of cells 1-3 as at 2012
CCHP
ML 1538
6443750N
Bowens Road West Pit
Parkers Road
0 125 250
metres
ML1521
A315
6443500N
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Stratford Mine
Coal resources co-disposal area cells 1-3
Figure 41 December 2017
GLOJORC17_51.cdr


*Quality data on each ply is not always available from each quality hole.
INDICATED A1_D3
<100m 0.12Mt
100-200m --Mt
Total 0.12Mt
MEASURED A1_M1
<100m 1.54Mt
100-200m 0.50Mt
Total 2.04Mt
INDICATED A2_D3
<100m 0.02Mt
100-200m -- Mt
Total 0.02Mt
INFERRED A1_F2
<100m 3.03Mt
100-200m 1.57Mt
Total 4.60Mt
INDICATED A2_D2
<100m 0.05Mt
100-200m --Mt
Total 0.05Mt
INDICATED A1_D2
<100m 5.31Mt
100-200m 5.45Mt
Total 13.76Mt
INFERRED A1_F1
<100m 2.29Mt
100-200m 0.06Mt
Total 2.35Mt
INDICATED A1_D1
<100m 0.14Mt
100-200m 0.02Mt
Total 0.16Mt
INFERRED A2_F1
<100m 0.26Mt
100-200m 0.00Mt
Total 0.26Mt
INDICATED A2_D1
<100m 0.96Mt
100-200m 0.05Mt
Total 1.01Mt
ML1360
ML1538
ML1521
EL6904
A315 (proposed MLA2 area)
A311
A315
Surface Facilities
Bowens Road West Pit
Stratford Main Pit Rehabilitation Area
Structurally Complex Area
CRAVEN TOWNSHIP
WARDS RIVER TOWNSHIP
0 500 1000
metres
N
LEGEND
Lease boundary
Creek
Road
Railway line
132kV Transmission line
35kV Transmission line
Proposed biodiversity area
Non-core hole
Core hole*
Non-core hole intersecting BR
Core hole intersecting BR
Seam subcrop
Syncline axis
Reverse fault
Normal fault
Partially silled Avon Seam
Weismantel and Clareval Seam Resources in Stratford East
Resource status
Measured
Indicated
Inferred
6444000N
6443000N
6442000N
6441000N
6440000N
6439000N
6438000N
6437000N
6436000N
6435000N
6434000N
6433000N
398000E
399000E
400000E
401000E
402000E
403000E
404000E
405000E
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Grant & Chainey Project
Coal resources
Bowens Road Seam
Figure 44 December 2017
GLOJORC17_18.cdr


*Quality data on each ply is not always available from each quality hole.
ML1360
Surface Facilities
ML1538
Bowens Road West Pit
ML1521
Stratford Main Pit Rehabilitation Area
Structurally Complex Area
INFERRED M_F1
<100m 0.03Mt
100-200m --Mt
Total 0.03Mt
INFERRED A2_F3
<100m 0.22Mt
100-200m 0.00Mt
Total 0.22Mt
INFERRED A1_F3
<100m 0.03Mt
100-200m 0.03Mt
Total 0.06Mt
CRAVEN TOWNSHIP
INDICATED A2_D3
<100m 0.02Mt
100-200m --Mt
Total 0.02Mt
INDICATED A1_D3
<100m 0.24Mt
100-200m 0.21Mt
Total 0.45Mt
EL6904
INFERRED A1_F2
<100m 0.31Mt
100-200m 0.32Mt
Total 0.63Mt
INFERRED A2_F2
<100m 0.00Mt
100-200m --Mt
Total 0.00Mt
INDICATED A2_D2
<100m 0.79Mt
100-200m 0.31Mt
Total 1.10Mt
INDICATED A1_D1
<100m 0.14Mt
100-200m 0.22Mt
Total 0.36Mt
INFERRED A1_F1
<100m 0.38Mt
100-200m 0.12Mt
Total 0.50Mt
WARDS RIVER TOWNSHIP
INDICATED A1_D1
<100m 0.03Mt
100-200m 0.03Mt
Total 0.06Mt
INDICATED A2_D1
<100m 0.47Mt
100-200m 0.33Mt
Total 0.80Mt
A315 (proposed MLA2 area)
A311
A315
0 500 1000 metres
N
LEGEND
Lease boundary
Creek
Road
Railway line
132kV Transmission line
35kV Transmission line
Proposed biodiversity area
Non-core hole
Core hole*
Non-core hole intersecting M2
Core hole intersecting M2
Seam subcrop
Syncline axis
Reverse fault
Normal fault
Partially silled Avon Seam
Weismantel and Clareval Seam Resources in Stratford East
Resource status
Measured
Indicated
Inferred
6444000N
6443000N
6442000N
6441000N
6440000N
6439000N
6438000N
6437000N
6436000N
6435000N
6434000N
6433000N
398000E
399000E
400000E
401000E
402000E
403000E
404000E
405000E
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Grant & Chainey Project
Coal resources
Marker 2 Seam
Figure 47 December 2017
GLOJORC17_21.cdr

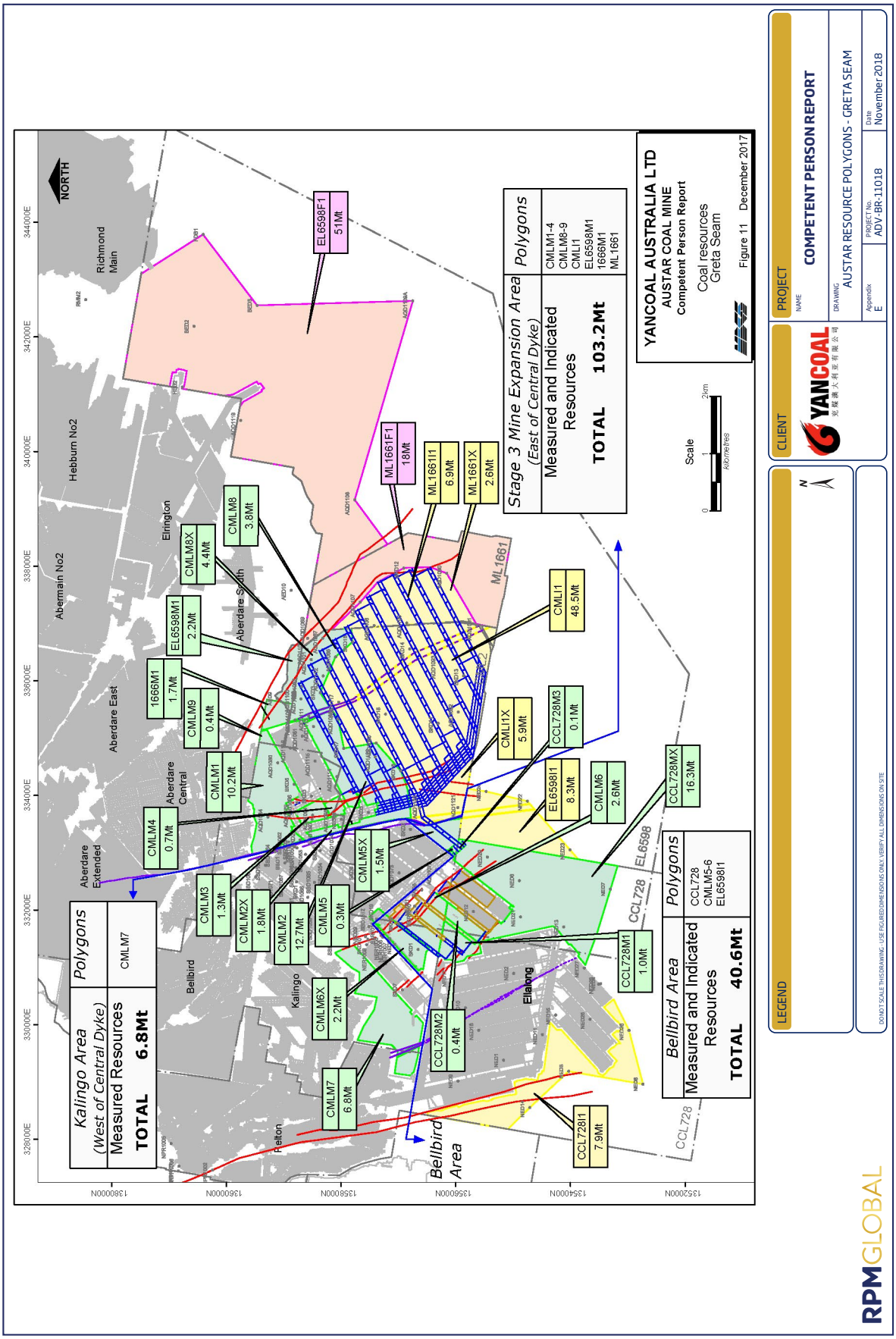

*Quality data on each ply is not always available from each quality hole.
ML1360
Surface Facilities
Bowens Road West Pit
Stratford Main Pit Rehabilitation Area
ML1538
ML1521
Structurally Complex Area
MEASURED M_M1
<100m 1.01Mt
100-200m 0.04Mt
Total 1.05Mt
MEASURED A2_M1
<100m 0.81Mt
100-200m 0.04Mt
Total 0.85Mt
INDICATED A1_D2
<100m 3.53Mt
100-200m 4.26Mt
Total 7.79Mt
INDICATED A2_D2
<100m 6.68Mt
100-200m 1.99Mt
Total 8.67Mt
INFERRED A1_F1
<100m 1.07Mt
100-200m 0.07Mt
Total 1.14Mt
INDICATED A1_D1
<100m 0.13Mt
100-200m 0.13Mt
Total 0.26Mt
INDICATED A2_D1
<100m 1.37Mt
100-200m 1.18Mt
Total 2.55Mt
CRAVEN TOWNSHIP
WARDS RIVER TOWNSHIP
A315 (proposed MLA2 area)
EL6904
A311
A315
0 500 1000 metres
N
LEGEND
Lease boundary
Creek
Road
Railway line
132kV Transmission line
35kV Transmission line
Proposed biodiversity area
Non-core hole
Core hole*
Non-core hole intersecting AV
Core hole intersecting AV
Seam subcrop
Syncline axis
Reverse fault
Normal fault
Partially silled Avon Seam
Weismantel and Clareval Seam Resources in Stratford East
Resource status
Measured
Indicated
Inferred
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Grant & Chainey Project
Coal resources
Avon Seam
Figure 48 December 2017
GLOUORC17_22.cdr


*Quality data on each ply is not always available from each quality hole.
ML1360
Surface Facilities
ML1538
Bowens Road West Pit
ML1521
Stratford Main Pit Rehabilitation Area
Structurally Complex Area
INFERRED M_F2
ALM TR
<100m 0.35Mt 0.80Mt
100-200m 0.06Mt 0.18Mt
Total 0.41Mt 0.98Mt
INFERRED A2_F2
ALM TR
<100m 0.34Mt 0.68Mt
100-200m 0.16Mt 0.50Mt
Total 0.50Mt 1.18Mt
INDICATED A1_D1
ALM TR
<100m 0.21Mt 0.34Mt
100-200m 0.22Mt 0.63Mt
Total 0.43Mt 0.97Mt
INDICATED A2_D1
ALM TR
<100m 0.21Mt 0.49Mt
100-200m 0.08Mt 0.31Mt
Total 0.29Mt 0.80Mt
INFERRED A1_F1
ALM TR
<100m 0.16Mt 0.35Mt
100-200m 0.07Mt 0.25Mt
Total 0.23Mt 0.60Mt
INFERRED A2_F1
ALM TR
<100m 1.23Mt 2.34Mt
100-200m 0.66Mt 1.58Mt
Total 1.89Mt 3.92Mt
EL6904
A315 (proposed MLA2 area)
CRAVEN TOWNSHIP
WARDS RIVER TOWNSHIP
A311
A315
0 1000 metres
N
LEGEND
Lease boundary
Creek
Road
Railway line
132kV Transmission line
35kV Transmission line
Proposed biodiversity area
Non-core hole
Core hole*
Non-core hole intersecting ALM or TR
Core hole intersecting ALM or TR
Seam subcrop
Syncline axis
Reverse fault
Normal fault
Partially silled Avon Seam
Weismantel and Clareval Seam Resources in Stratford East
Resource status
Measured
Indicated
Inferred
6444000N
6443000N
6442000N
6441000N
6440000N
6439000N
6438000N
6437000N
6436000N
6435000N
6434000N
6433000N
398000E
399000E
400000E
401000E
402000E
403000E
404000E
405000E
YANCOAL AUSTRALIA LTD
GLOUCESTER COAL
Grant & Chainey Project
Coal resources
Avon Lower and Triple Seams
Figure 49 December 2017
GLOUORC17_23.cdr

RPMGLOBAL

Resource Polygons

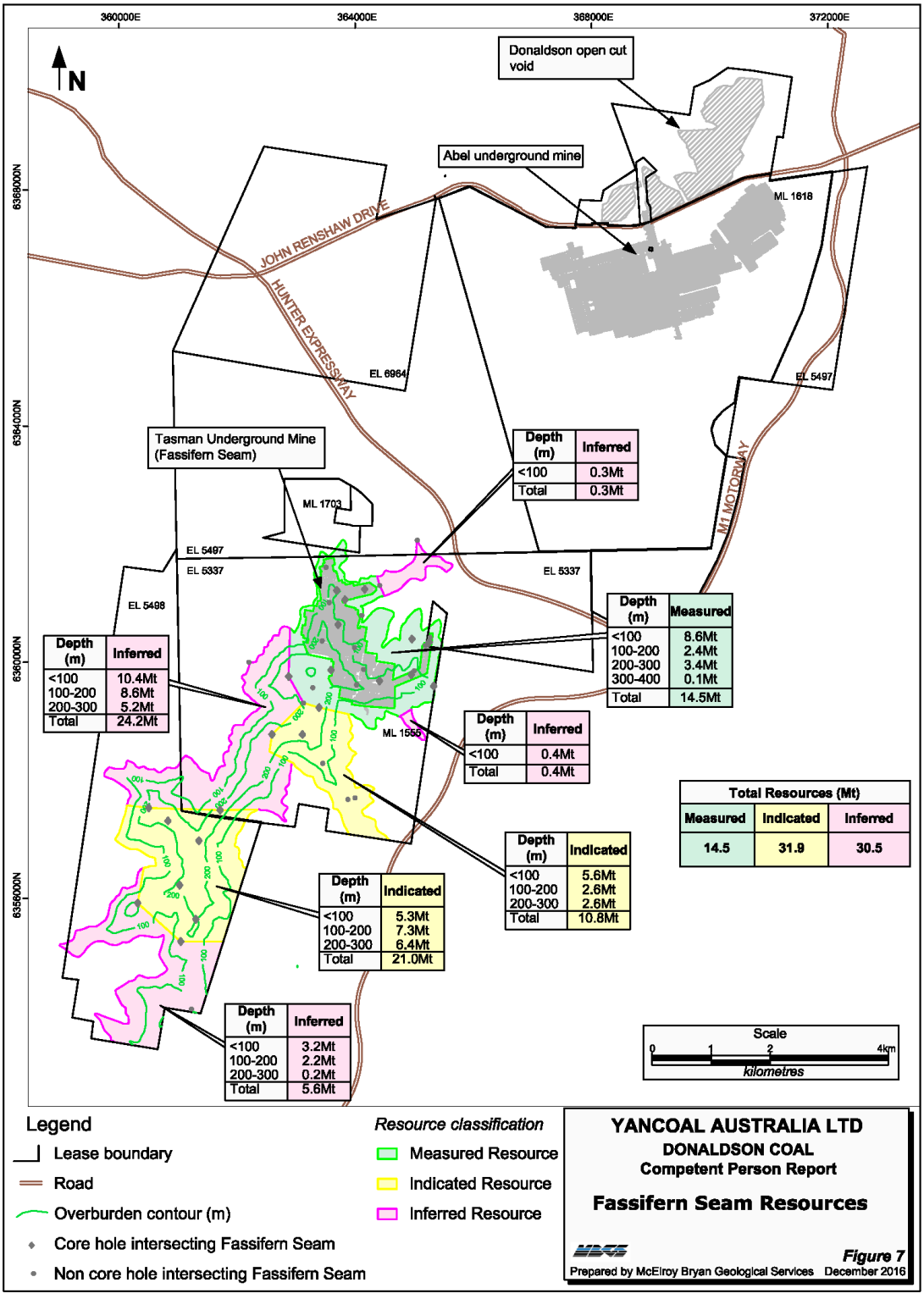
Austar

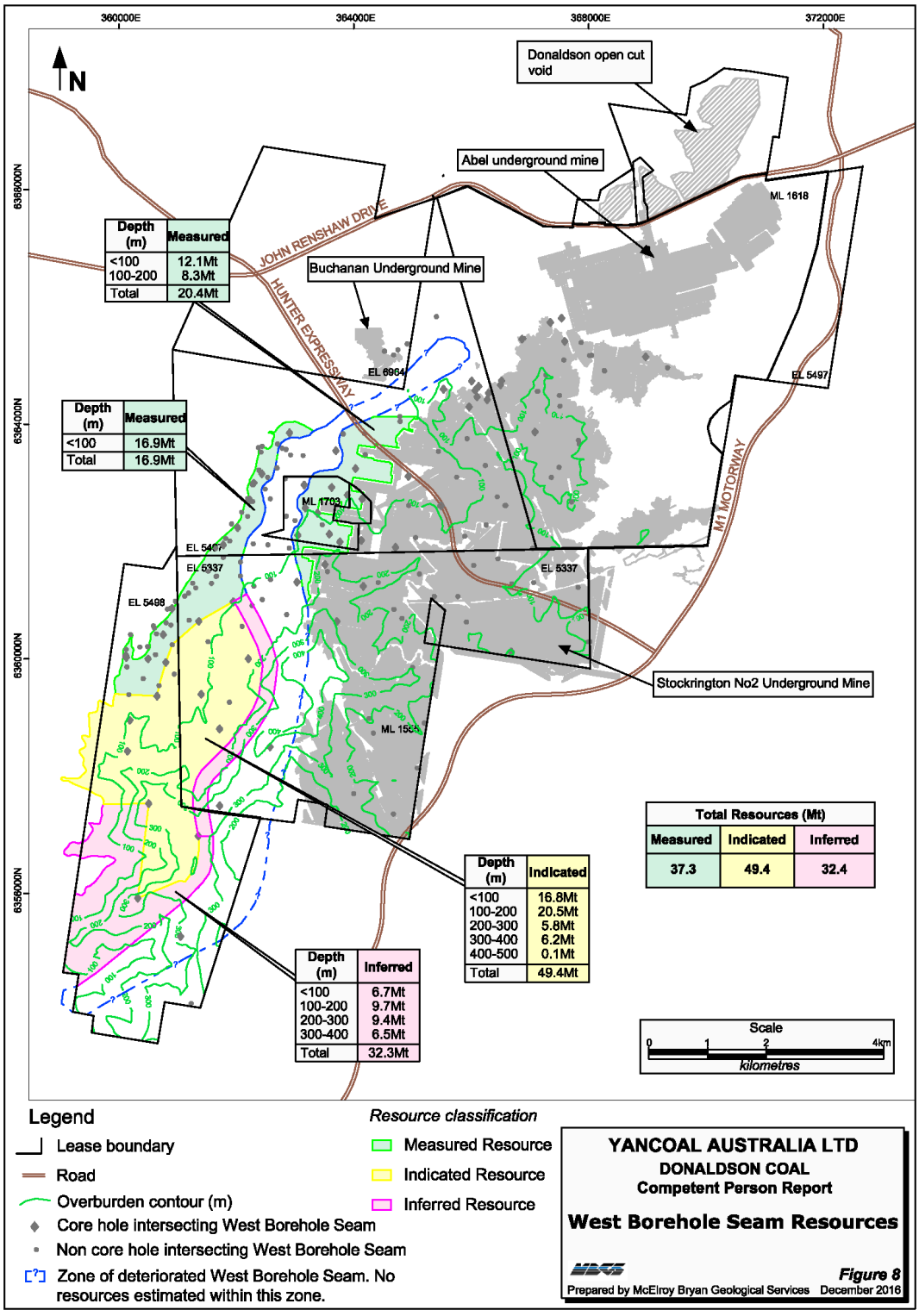

NORTH
Richmond Main
Hebburn No2
Abermain No2
Elrington
Aberdare South
Aberdare East
Aberdare Central
Aberdare Extended
Bellbird
Kalingo
Elrington
Ellalong
Pelton
Bellbird Area
ML1661
EL6598
CCL728
Kalingo Area (West of Central Dyke)
Measured Resources
TOTAL 6.8Mt
Polygons
CMLM7
Bellbird Area
Measured and Indicated Resources
TOTAL 40.6Mt
Polygons
CCL728
CMLM5-6
EL6598I1
Stage 3 Mine Expansion Area (East of Central Dyke)
Measured and Indicated Resources
TOTAL 103.2Mt
Polygons
CMLM1-4
CMLM8-9
CMLI1
EL6598M1
1666M1
ML1661
CMLM4 0.7Mt
1666M1 1.7Mt
CMLM1 10.2Mt
CMLM9 0.4Mt
EL6598M1 2.2Mt
CMLM8X 4.4Mt
CMLM8 3.8Mt
EL6598F1 51Mt
ML1661F1 18Mt
ML1661I1 6.9Mt
ML1661X 2.6Mt
CMLI1 48.5Mt
CMLI1X 5.9Mt
CCL728M3 0.1Mt
EL6598I1 8.3Mt
CMLM6 2.6Mt
CCL728MX 16.3Mt
CMLM3 1.3Mt
CMLM2X 1.8Mt
CMLM2 12.7Mt
CMLM5 0.3Mt
CMLM5X 1.5Mt
CMLM6X 2.2Mt
CCL728M2 0.4Mt
CCL728M1 1.0Mt
CMLM7 6.8Mt
CCL728I1 7.9Mt
Scale 0 1 2km Kilometres
YANCOAL AUSTRALIA LTD
AUSTAR COAL MINE
Competent Person Report
Coal resources
Greta Seam
Figure 11 December 2017
LEGEND
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
AUSTAR RESOURCE POLYGONS - GRETA SEAM
Appendix E
PROJECT No. ADV-BR-11018
Date November 2018
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE
RPMGLOBAL

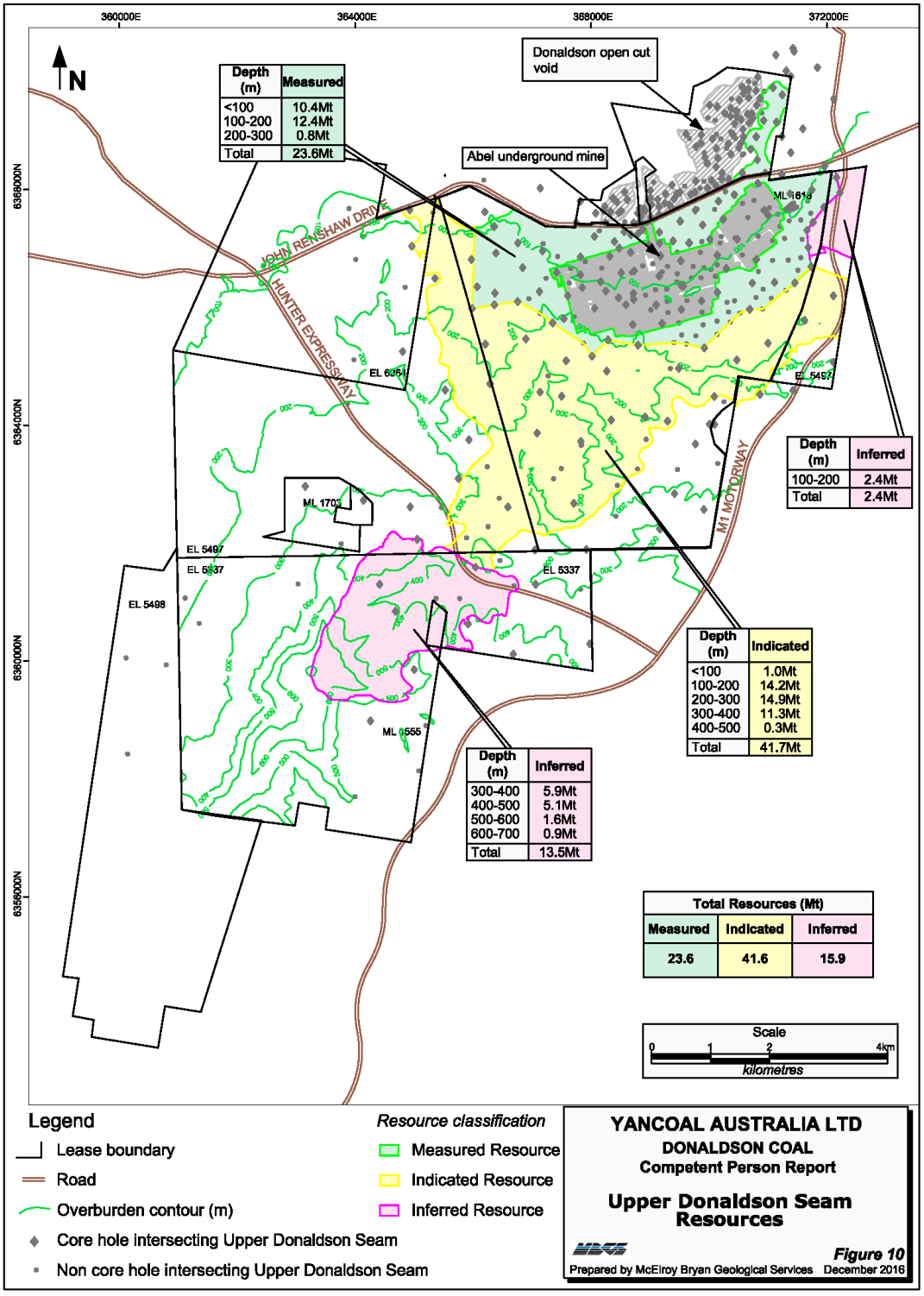
RPMGLOBAL

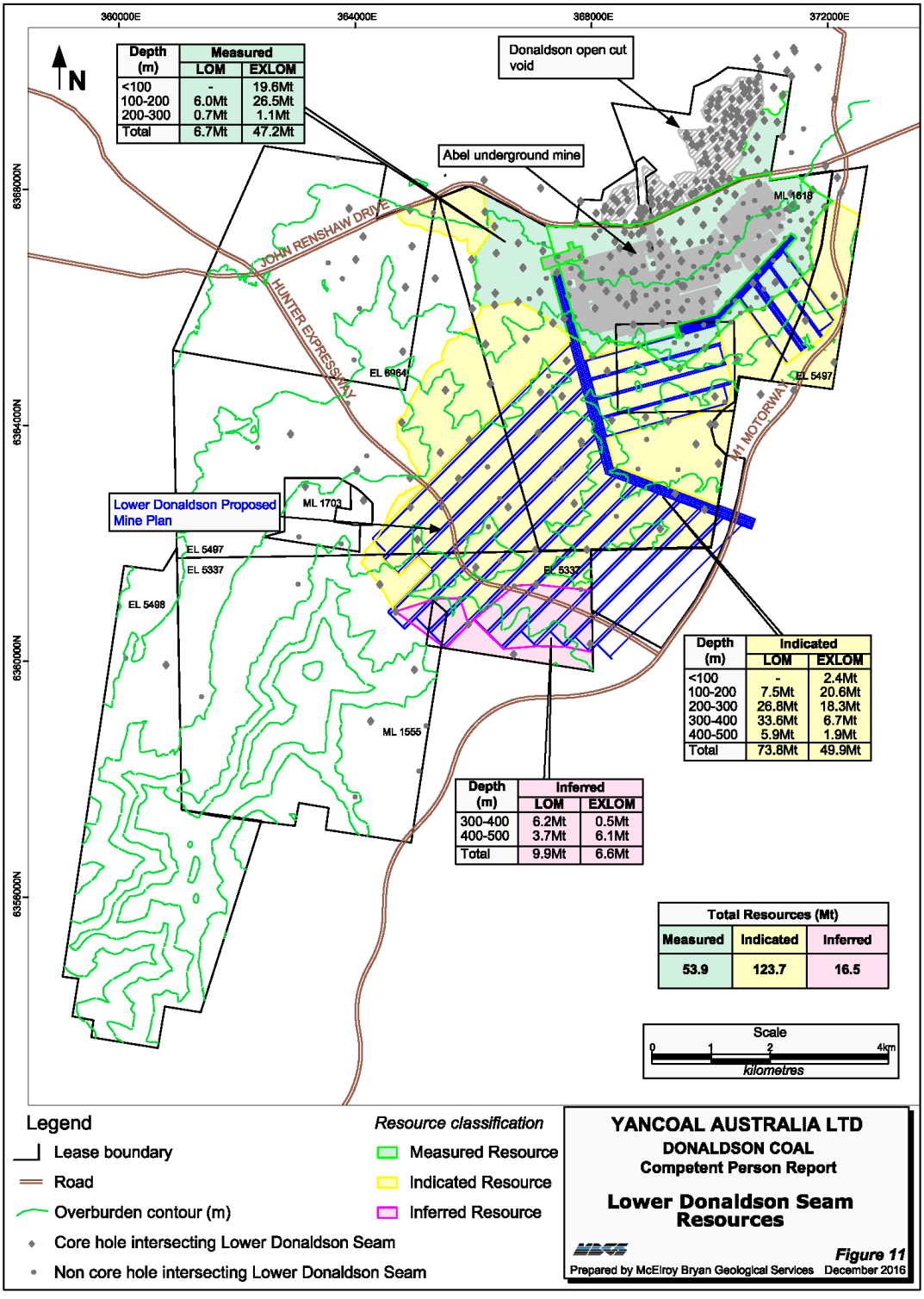
Resource Polygons

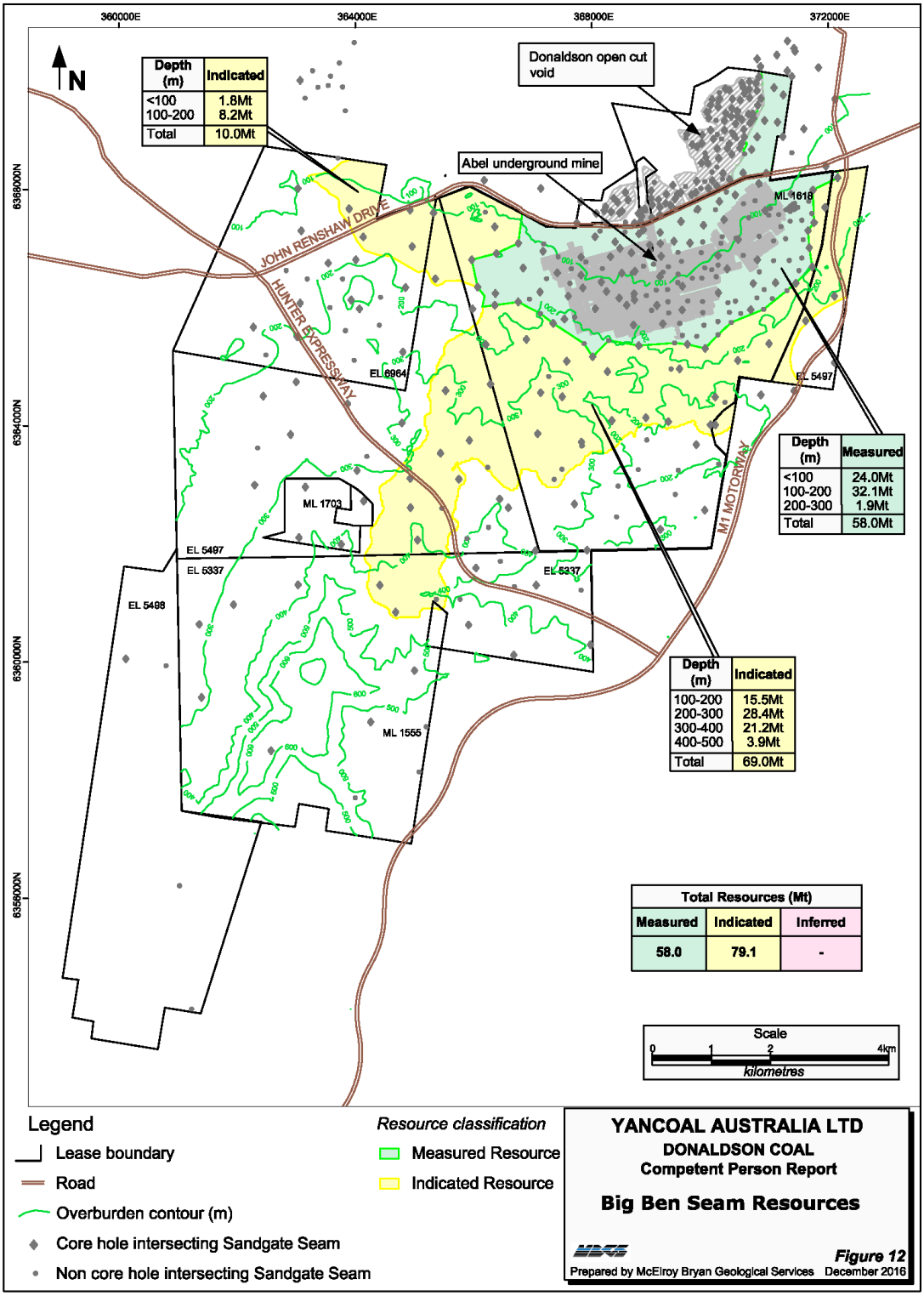
Donaldson


360000E
364000E
368000E
372000E
N
6368000N
6364000N
6360000N
6356000N
Donaldson open cut void
Abel underground mine
ML 1618
JOHN RENSHAW DRIVE
HUNTER EXPRESSWAY
EL 6964
EL 5497
M1 MOTORWAY
Tasman Underground Mine (Fassifern Seam)
ML 1703
EL 5497
EL 5337
EL 5498
EL 5337
ML 1555
Depth (m) Inferred
<100 0.3Mt
Total 0.3Mt
Depth (m) Measured
<100 8.6Mt
100-200 2.4Mt
200-300 3.4Mt
300-400 0.1Mt
Total 14.5Mt
Depth (m) Inferred
<100 10.4Mt
100-200 8.6Mt
200-300 5.2Mt
Total 24.2Mt
Depth (m) Inferred
<100 0.4Mt
Total 0.4Mt
Total Resources (Mt)
Measured Indicated Inferred
14.5 31.9 30.5
Depth (m) Indicated
<100 5.6Mt
100-200 2.6Mt
200-300 2.6Mt
Total 10.8Mt
Depth (m) Indicated
<100 5.3Mt
100-200 7.3Mt
200-300 6.4Mt
Total 21.0Mt
Depth (m) Inferred
<100 3.2Mt
100-200 2.2Mt
200-300 0.2Mt
Total 5.6Mt
Scale
0 1 2 4km
kilometres
Legend
Lease boundary
Road
Overburden contour (m)
Core hole intersecting Fassifern Seam
Non core hole intersecting Fassifern Seam
Resource classification
Measured Resource
Indicated Resource
Inferred Resource
YANCOAL AUSTRALIA LTD
DONALDSON COAL
Competent Person Report
Fassifern Seam Resources
Figure 7
Prepared by McElroy Bryan Geological Services December 2016

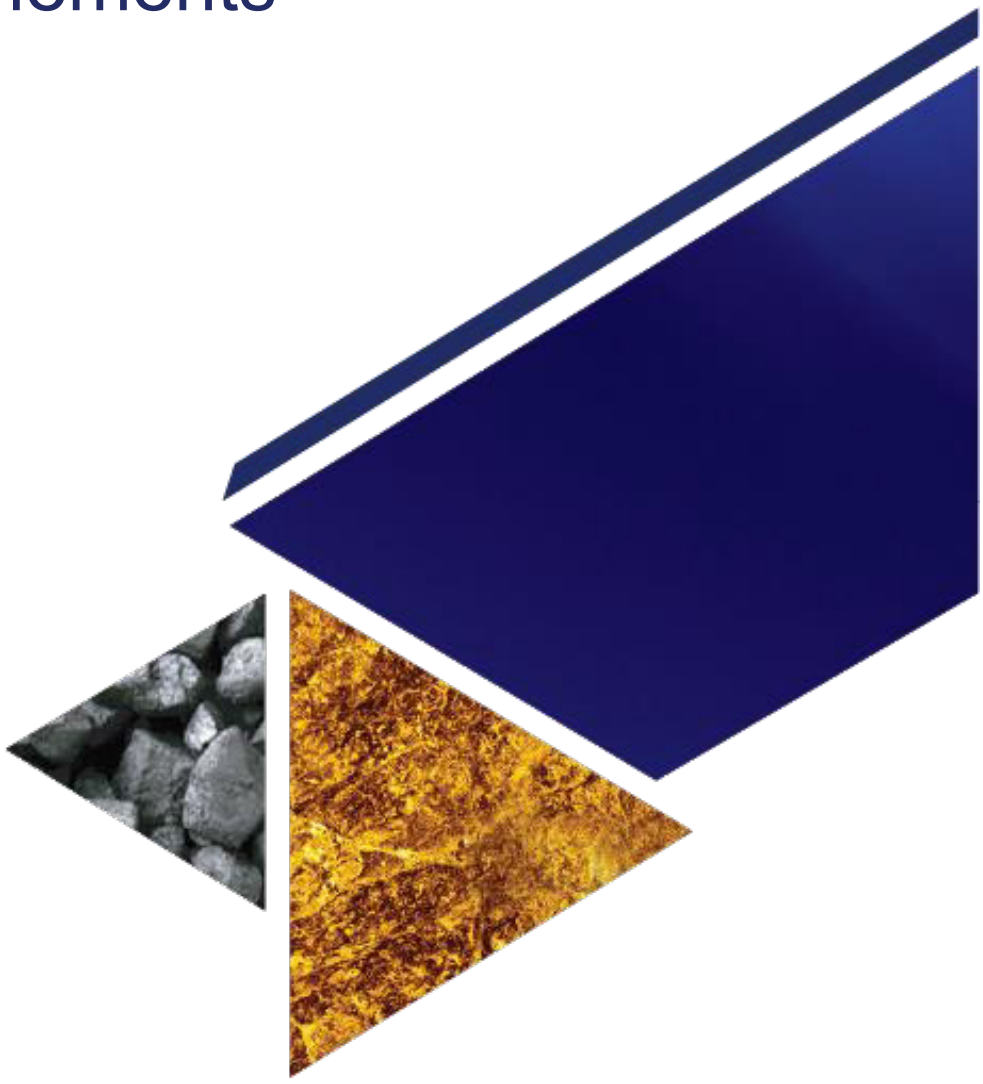

360000E
364000E
368000E
372000E
6368000N
6364000N
6360000N
6356000N
N
Donaldson open cut void
Abel underground mine
ML 1618
JOHN RENSHAW DRIVE
HUNTER EXPRESSWAY
Buchanan Underground Mine
EL 6964
EL 5497
M1 MOTORWAY
ML 1703
EL 5407
EL 6337
EL 5337
EL 5498
Stockrington No2 Underground Mine
ML 1525
Depth (m) | Measured
<100 | 12.1Mt
100-200 | 8.3Mt
Total | 20.4Mt
Depth (m) | Measured
<100 | 16.9Mt
Total | 16.9Mt
Depth (m) | Indicated
<100 | 16.8Mt
100-200 | 20.5Mt
200-300 | 5.8Mt
300-400 | 6.2Mt
400-500 | 0.1Mt
Total | 49.4Mt
Depth (m) | Inferred
<100 | 6.7Mt
100-200 | 9.7Mt
200-300 | 9.4Mt
300-400 | 6.5Mt
Total | 32.3Mt
Total Resources (Mt)
Measured | Indicated | Inferred
37.3 | 49.4 | 32.4
Scale
0 1 2 4km
kilometres
Legend
Lease boundary
Road
Overburden contour (m)
Core hole intersecting West Borehole Seam
Non core hole intersecting West Borehole Seam
Zone of deteriorated West Borehole Seam. No resources estimated within this zone.
Resource classification
Measured Resource
Indicated Resource
Inferred Resource
YANCOAL AUSTRALIA LTD
DONALDSON COAL
Competent Person Report
West Borehole Seam Resources
Figure 8
Prepared by McElroy Bryan Geological Services December 2016


360000E
364000E
368000E
372000E
N
6368000N
6364000N
6360000N
6356000N
Depth (m) | Measured
<100 | 10.4Mt
100-200 | 12.4Mt
200-300 | 0.8Mt
Total | 23.6Mt
Donaldson open cut void
Abel underground mine
ML 1619
JOHN RENSHAW DRIVE
HUNTER EXPRESSWAY
M1 MOTORWAY
EL 6054
EL 5492
ML 1703
EL 5497
EL 5337
EL 5498
ML 0555
Depth (m) | Inferred
100-200 | 2.4Mt
Total | 2.4Mt
Depth (m) | Indicated
<100 | 1.0Mt
100-200 | 14.2Mt
200-300 | 14.9Mt
300-400 | 11.3Mt
400-500 | 0.3Mt
Total | 41.7Mt
Depth (m) | Inferred
300-400 | 5.9Mt
400-500 | 5.1Mt
500-600 | 1.6Mt
600-700 | 0.9Mt
Total | 13.5Mt
Total Resources (Mt)
Measured | Indicated | Inferred
23.6 | 41.6 | 15.9
Scale
0 1 2 4km
kilometres
Legend
Lease boundary
Road
Overburden contour (m)
Core hole intersecting Upper Donaldson Seam
Non core hole intersecting Upper Donaldson Seam
Resource classification
Measured Resource
Indicated Resource
Inferred Resource
YANCOAL AUSTRALIA LTD
DONALDSON COAL
Competent Person Report
Upper Donaldson Seam Resources
Figure 10
Prepared by McElroy Bryan Geological Services December 2016


360000E
364000E
368000E
372000E
N
6368000N
6364000N
6360000N
6356000N
Depth (m) | Measured LOM | Measured EXLOM
<100 | - | 19.6Mt
100-200 | 6.0Mt | 26.5Mt
200-300 | 0.7Mt | 1.1Mt
Total | 6.7Mt | 47.2Mt
Donaldson open cut void
Abel underground mine
ML 1618
JOHN RENSHAW DRIVE
HUNTER EXPRESSWAY
M1 MOTORWAY
EL 6964
EL 5497
Lower Donaldson Proposed Mine Plan
ML 1703
EL 5497
EL 5337
EL 5498
EL 5337
ML 1555
Depth (m) | Indicated LOM | Indicated EXLOM
<100 | - | 2.4Mt
100-200 | 7.5Mt | 20.6Mt
200-300 | 26.8Mt | 18.3Mt
300-400 | 33.6Mt | 6.7Mt
400-500 | 5.9Mt | 1.9Mt
Total | 73.8Mt | 49.9Mt
Depth (m) | Inferred LOM | Inferred EXLOM
300-400 | 6.2Mt | 0.5Mt
400-500 | 3.7Mt | 6.1Mt
Total | 9.9Mt | 6.6Mt
Total Resources (Mt)
Measured | Indicated | Inferred
53.9 | 123.7 | 16.5
Scale
0 1 2 4km
kilometres
Legend
Lease boundary
Road
Overburden contour (m)
Core hole intersecting Lower Donaldson Seam
Non core hole intersecting Lower Donaldson Seam
Resource classification
Measured Resource
Indicated Resource
Inferred Resource
YANCOAL AUSTRALIA LTD
DONALDSON COAL
Competent Person Report
Lower Donaldson Seam Resources
Figure 11
Prepared by McElroy Bryan Geological Services December 2016


360000E
364000E
368000E
372000E
6368000N
6364000N
6360000N
6356000N
N
Depth (m) | Indicated
<100 | 1.8Mt
100-200 | 8.2Mt
Total | 10.0Mt
Donaldson open cut void
Abel underground mine
ML 1618
JOHN RENSHAW DRIVE
HUNTER EXPRESSWAY
M1 MOTORWAY
EL 6964
EL 5497
ML 1703
EL 5497
EL 5337
EL 5337
EL 5498
ML 1555
Depth (m) | Measured
<100 | 24.0Mt
100-200 | 32.1Mt
200-300 | 1.9Mt
Total | 58.0Mt
Depth (m) | Indicated
100-200 | 15.5Mt
200-300 | 28.4Mt
300-400 | 21.2Mt
400-500 | 3.9Mt
Total | 69.0Mt
Total Resources (Mt)
Measured | Indicated | Inferred
58.0 | 79.1 | -
Scale
0 1 2 4km
kilometres
Legend
Lease boundary
Road
Overburden contour (m)
Core hole intersecting Sandgate Seam
Non core hole intersecting Sandgate Seam
Resource classification
Measured Resource
Indicated Resource
YANCOAL AUSTRALIA LTD
DONALDSON COAL
Competent Person Report
Big Ben Seam Resources
Figure 12
Prepared by McElroy Bryan Geological Services December 2016

Appendix F. Tenements



Yancoal Australia Group

Title Tenement	Title Type	Grant or Application Date	Renewal Date	Expiry Date	Mine Site or Project	Company	Comment
EL 4918	EL	18/12/1995	Pending	17/12/2015	ASHTON	White Mining (NSW) Pty Limited	Renewal Lodged Dec 2015
EL 5860	EL	22/05/2001		21/05/2020	ASHTON	White Mining (NSW) Pty Limited	
ML 1529	ML	10/09/2003	11/11/2012	11/11/2021	ASHTON	White Mining (NSW) Pty Limited	
ML 1533	ML	26/02/2003		25/02/2024	ASHTON	White Mining (NSW) Pty Limited	
ML 1623	ML	30/10/2008		30/10/2029	ASHTON	White Mining (NSW) Pty Limited	
ML 1696	ML	16/05/2014		16/05/2035	ASHTON	White Mining (NSW) Pty Limited	ex MLA 396 - SEOC dump
MLA 351	MLA	28/05/2010			ASHTON	White Mining (NSW) Pty Limited (main) ICRA Ashton Pty Ltd Ashton (other)	SEOC w'out Bowman
MLA 394	MLA	21/12/2010			ASHTON	White Mining (NSW) Pty Limited (main) ICRA Ashton Pty Ltd Ashton (other)	SEOC w'out Bowman, Crown Land
MLA 500	MLA	2/07/2015			ASHTON	White Mining (NSW) Pty Limited	Ashton - Tailings
EL 6598	EL	13/07/2006		13/07/2021	AUSTAR	Austar Coal Mine Pty Limited	
ML 1283	ML	13/07/1961	14/05/2003	13/07/2022	AUSTAR	Austar Coal Mine Pty Limited	
CCL 728	ML	10/10/1989	20/11/2009	30/12/2023	AUSTAR	Austar Coal Mine Pty Limited	
CCL 752	ML	23/05/1990	17/11/2003	31/12/2023	AUSTAR	Austar Coal Mine Pty Limited	
CML 2	ML	24/03/1993	4/12/2008	6/07/2025	AUSTAR	Austar Coal Mine Pty Limited	
DSL 89	DSL	4/04/1908	20/03/2009	4/04/2030	AUSTAR	Austar Coal Mine Pty Limited	
ML 1157	ML	8/07/1949	31/08/2006	8/07/2028	AUSTAR	Austar Coal Mine Pty Limited	
ML 1345	ML	23/03/1995	2/11/2009	30/12/2023	AUSTAR	Austar Coal Mine Pty Limited	
ML 1388	ML	2/04/1996		2/04/2038	AUSTAR	Austar Coal Mine Pty Limited	
ML 1550	ML	24/06/2004		23/06/2025	AUSTAR	Austar Coal Mine Pty Limited	
ML 1661	ML	22/11/2011		22/11/2032	AUSTAR	Austar Coal Mine Pty Limited	
ML 1666	ML	25/01/2012		25/01/2033	AUSTAR	Austar Coal Mine Pty Limited	
ML 1677	ML	23/08/2012		22/08/2032	AUSTAR	Austar Coal Mine Pty Limited	
MPL 1364	MPL	28/10/1968	20/03/2009	28/10/2029	AUSTAR	Austar Coal Mine Pty Limited	
MPL 204	MPL	3/02/1916	3/02/2018	3/02/2039	AUSTAR	Austar Coal Mine Pty Limited	
MPL 217	MPL	12/04/1916	16/09/2003	3/02/2039	AUSTAR	Austar Coal Mine Pty Limited	
MPL 23	MPL	17/05/1909	20/03/2009	17/05/2030	AUSTAR	Austar Coal Mine Pty Limited	
MPL 233	MPL	1/08/1916	15/09/2015	1/08/2036	AUSTAR	Austar Coal Mine Pty Limited	
MPL 269	MPL	7/12/1917	16/09/2003	7/12/2018	AUSTAR	Austar Coal Mine Pty Limited	
MLA 521	MLA	24/02/2016			AUSTAR	Austar Coal Mine Pty Limited	
EL 5337	EL	8/08/1997		8/08/2019	DONALDSON	Newcastle Coal Company Pty Ltd	Renewal submitted
EL 5497	EL	22/07/1998	20/11/2017	21/07/2019	DONALDSON	Donaldson Coal Pty Ltd	
EL 5498	EL	24/07/1998		23/07/2019	DONALDSON	Newcastle Coal Company Pty Ltd	
EL 6964	EL	10/12/2007	Pending	10/12/2015	DONALDSON	Donaldson Coal Pty Ltd	Renewal Lodged Dec 2015
ML 1461	ML	21/12/1999		20/12/2020	DONALDSON	Donaldson Coal Pty Ltd	
ML 1555	ML	7/09/2004		6/09/2025	DONALDSON	Newcastle Coal Company Pty Ltd	
ML 1618	ML	15/05/2008		15/05/2029	DONALDSON	Donaldson Coal Pty Ltd	
ML 1653	ML	21/01/2011		21/01/2032	DONALDSON	Donaldson Coal Pty Ltd	
ML 1703	ML	9/12/2014		9/12/2035	DONALDSON	Donaldson Coal Pty Ltd	ex MLA 426
ML1756	ML	30/06/2017		30/06/2038	DONALDSON	Donaldson Coal Pty Ltd	ex MLA 416
MDL 282	MDL	10/04/2002		30/04/2020	MIDDLEMOUNT	Middlemount Coal Pty Ltd Ribfield Pty Ltd	
ML 700014	ML	6/01/2017		30/09/2031	MIDDLEMOUNT	Middlemount Coal Pty Ltd Ribfield Pty Ltd	
ML 70379	ML	10/09/2009		30/09/2031	MIDDLEMOUNT	Middlemount Coal Pty Ltd Ribfield Pty Ltd	
ML 70417	ML	8/12/2011		30/09/2031	MIDDLEMOUNT	Middlemount Coal Pty Ltd Ribfield Pty Ltd	
ML700027	MLA	10/01/2018	Pending		MIDDLEMOUNT	Middlemount Coal Pty Ltd Ribfield Pty Ltd	
EL 6123	EL	8/09/2003		3/09/2019	MONASH	Monash Coal Pty Ltd	Renewal Lodged Aug 2016
EL 7579	EL	22/07/2010		22/07/2019	MONASH	Monash Coal Pty Ltd	

EL 6288	EL	23/08/2004	31/08/2015	22/08/2017	MOOLARBEN	Moolarben Coal Mines Pty Limited (main)Kores Australia Moolarben Coal Pty Limited Sojitz Moolarben Resources Pty Ltd	Renewal submitted
EL 7073	EL	12/02/2008	1/09/2015	12/02/2020	MOOLARBEN	Moolarben Coal Mines Pty Limited Kores Australia Moolarben Coal Pty Limited Sojitz Moolarben Resources Pty Ltd	
EL 7074	EL	12/02/2008	7/10/2015	12/02/2020	MOOLARBEN	Moolarben Coal Mines Pty Limited Kores Australia Moolarben Coal Pty Limited Sojitz Moolarben Resources Pty Ltd	
ML 1605	ML	20/12/2007		20/12/2028	MOOLARBEN	Moolarben Coal Mines Pty Limited Kores Australia Moolarben Coal Pty Limited Sojitz Moolarben Resources Pty Ltd	
ML 1606	ML	20/12/2007		20/12/2028	MOOLARBEN	Moolarben Coal Mines Pty Limited Kores Australia Moolarben Coal Pty Limited Sojitz Moolarben Resources Pty Ltd	
ML 1628	ML	24/02/2009		24/02/2030	MOOLARBEN	Moolarben Coal Mines Pty Limited	
ML 1691	ML	23/09/2013		23/09/2034	MOOLARBEN	Moolarben Coal Mines Pty Limited	ex MLA 316, 317
ML 1715	ML	31/08/2015		31/08/2036	MOOLARBEN	Moolarben Coal Mines Pty Limited Sojitz Moolarben Resources Pty Ltd Kores Australia Moolarben Coal Pty Limited	ex MLA 319, 327, 331, 458
A 311	EL	17/09/1982	Pending	28/11/2017	STRATFORD / DURALIE	Gloucester Coal Ltd CIM Stratford Pty Ltd Agent: Stratford Coal Pty Ltd	Renewal submitted
A 315	EL	27/12/1982	Pending	28/11/2017	STRATFORD / DURALIE	Gloucester Coal Ltd CIM Stratford Pty Ltd Agent: Stratford Coal Pty Ltd	Renewal submitted
EL 6904	EL	9/10/2007	Pending	9/10/2017	STRATFORD / DURALIE	Gloucester Coal Ltd	Renewal submitted
ML 1360	ML	21/12/1994		21/12/2036	STRATFORD / DURALIE	Gloucester Coal Ltd CIM Stratford Pty Ltd	
ML 1409	ML	7/01/1997	Pending	6/01/2018	STRATFORD / DURALIE	Gloucester Coal Ltd CIM Stratford Pty Ltd	Renewal submitted
ML 1427	ML	6/04/1998		5/04/2019	STRATFORD / DURALIE	CIM Duralie Pty Ltd CIM Services Pty Ltd	
ML 1447	ML	1/04/1999		31/03/2020	STRATFORD / DURALIE	Gloucester Coal Ltd CIM Stratford Pty Ltd	
ML 1521	ML	24/09/2002		23/09/2023	STRATFORD / DURALIE	Gloucester Coal Ltd CIM Stratford Pty Ltd	
ML 1528	ML	20/01/2003		19/01/2024	STRATFORD / DURALIE	Gloucester Coal Ltd CIM Stratford Pty Ltd	
ML 1538	ML	25/06/2003		24/06/2024	STRATFORD / DURALIE	Gloucester Coal Ltd CIM Stratford Pty Ltd	
ML 1577	ML	1/03/2006		28/02/2027	STRATFORD / DURALIE	Gloucester Coal Ltd CIM Stratford Pty Ltd	
ML 1646	ML	4/01/2011		4/01/2032	STRATFORD / DURALIE	CIM Duralie Pty Ltd CIM Services Pty Ltd	
ML 1733	ML	8/04/2016		8/04/2037	STRATFORD / DURALIE	Gloucester Coal Ltd CIM Stratford Pty Ltd	ex MLA 466 and 446
MLA552	MLA	5/12/17	Pending		Not associated with colliery holding	CIM Stratford Pty Ltd (main) Gloucester Coal Ltd (other)	
EPC 621	EPC	29/10/1996	19/08/2014	28/10/2019	YARRABEE / WILPEENA	Yarrabee Coal Company Pty Ltd (this tenement is held beneficially for Yanzhou)	Shared - Wilpeena & Yarrabee
EPC 1429	EPC	15/06/2010	7/04/2015	14/06/2020	YARRABEE / WILPEENA	Yarrabee Coal Company Pty Ltd	Shared - Wilpeena & Yarrabee
EPC1668	EPC	26/11/2010		25/11/2020	YARRABEE / WILPEENA	Yarrabee Coal Company Pty Ltd (this tenement is held beneficially for Yanzhou)	

EPC1177	EPC	14/11/2008		13/11/2018	YARRABEE / WILPEENA	Yarrabee Coal Company Pty Ltd (this tenement is held beneficially for Yanzhou)	
EPC 1684	EPC	12/03/2010		11/03/2022	YARRABEE	Yarrabee Coal Company Pty Ltd	
EPC 717	EPC	28/08/2000		27/08/2022	YARRABEE	Yarrabee Coal Company Pty Ltd	
MDL 160	MDL	27/03/1996		31/03/2022	YARRABEE	Yarrabee Coal Company Pty Ltd	
ML 1770	ML	25/03/1976	1/04/2007	31/03/2022	YARRABEE	Yarrabee Coal Company Pty Ltd	
ML 80049	ML	24/06/1999		30/06/2019	YARRABEE	Yarrabee Coal Company Pty Ltd	
ML 80050	ML	1/10/1998		31/10/2018	YARRABEE	Yarrabee Coal Company Pty Ltd	
ML 80096	ML	20/06/2002		30/06/2020	YARRABEE	Yarrabee Coal Company Pty Ltd	
ML 80104	ML	4/09/2003		30/09/2023	YARRABEE	Yarrabee Coal Company Pty Ltd	
ML 80172	ML	4/10/2012		31/10/2042	YARRABEE	Yarrabee Coal Company Pty Ltd	
ML 80195	ML	1/04/2014		30/04/2044	YARRABEE	Yarrabee Coal Company Pty Ltd	
ML 80196	ML	1/04/2014		30/04/2044	YARRABEE	Yarrabee Coal Company Pty Ltd	
ML 80197	ML	7/05/2014		31/05/2044	YARRABEE	Yarrabee Coal Company Pty Ltd	
ML 80198	ML	1/04/2014		30/04/2044	YARRABEE	Yarrabee Coal Company Pty Ltd	

Coal and Allied Group

Tenement	Grant Date	Expiry Date	Site	Company	Minerals	Area (HA)	Method	Notes	Notes
ML1324	19-Aug-93	19-Aug-14	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum	192.6	OC Only	Surface to 5m below Floor of Vaux Seam	Under review by department
ML1337	1-Feb-94	9-Sep-14	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum	1.052	Unspecified	Surface to depth of 15.24m	Under review by department
ML1359	1-Nov-94	1-Nov-15	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Nil Minerals	23.44	Unspecified	Surface to depth of 15.24m	Under review by department
ML1406	27-Feb-97	10-Feb-27	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum	73.9	Unspecified	Surface to depth of 15.24m	
ML1412	11-Jan-97	10-Jan-18	WARKWORTH	WARKWORTH MINING LTD	Coal, Petroleum	5.95	OC Only	Surface to depth of 20m	Under review by department
ML1428	15-Apr-98	14-Apr-19	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum	1001	OC Only	Majority is Surface to Unlimited, remainder is 15.24m to Unlimited	Company changed from Novacoal
ML1465	21-Feb-00	21-Feb-21	HVO	COAL & ALLIED	Coal, Petroleum	67.55	OC Only	Surface to depth of 20m	

Tenement	Grant Date	Expiry Date	Site	Company	Minerals	Area (HA)	Method	Notes	Notes
				OPERATIONS PTY LTD ANOTERO PTY LIMITED					
ML1474	24-Nov-00	23-Nov-21	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum	373.3	Unspecified	From 5m below Vaux Seam to Unlimited (120.2ha), Surface to unlimited for remainder (253.1ha)	Area limited to Vaux seam is along the eastern side of the tenement
ML1482	19-Mar-01	14-Apr-19	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum	8481 M2	DAM	Nil	Covers 3 isolated Dam sites of 30m radii, not for mining of coal
ML1500	21-Dec-01	20-Dec-22	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum	7.333	OC Only	Partially Surface to Depth of 15.24m, remainder Surface to Depth of 5m	
ML1526	3-Dec-02	2-Dec-23	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal	11.43	OC Only	Surface to depth of 15.24m	This was a partial transfer of ML1526 to C&A, remainder of ML is now ML1669 held by Cumnock Coal
ML1560	28-Jan-05	27-Jan-26	HVO	COAL & ALLIED OPERATIONS PTY LTD	Coal, Petroleum - Coal Seam	317.7	OC Only	Majority is Surface to Unlimited, 2 zones are Surface to 15.24m	One of the zones of Surface to 15.24m is

Tenement	Grant Date	Expiry Date	Site	Company	Minerals	Area (HA)	Method	Notes	Notes
				ANOTERO PTY LIMITED	Methane Only				also granted under ML1428, which is 15.24m to Unlimited. Company changed from Novacoal
ML1589	2-Nov-06	1-Nov-27	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum - Coal Seam Methane Only	277.9	OC/UG	Majority is from 5m below Surface to 5m below floor of Vaux Seam, 2 small zones in southwest of Surface to Unlimited and 1 very small zone that excludes zone 5m below Surface to 5m below floor of Vaux Seam	
ML1590	27-Feb-07	26-Feb-28	WARKWORTH	WARKWORTH MINING LTD	Coal, Petroleum - Coal Seam Methane Only	1.4	OC/UG	Surface to depth of 20m	Allows Underground mining method, however is limited to 20m depth. Lease appears to be road easement
ML1622	22-Oct-10	10-Mar-27	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal	6.732	OC/UG	Surface to depth of 15.24m	Company changed from Novacoal
ML1634	31-Jul-09	31-Jul-30	HVO	COAL & ALLIED	Coal, Petroleum - Coal	4514	OC/UG	Surface to depth of 900m below AHD	

Tenement	Grant Date	Expiry Date	Site	Company	Minerals	Area (HA)	Method	Notes	Notes
				OPERATIONS PTY LTD ANOTERO PTY LIMITED	Seam Methane Only			(Australian Height Datum)	
ML1682	16-Dec-12	16-Dec-33	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Nil Minerals	67.12	DAM	Surface to depth of 20m	
ML1704	5-Dec-14	5-Dec-35	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Nil Minerals	23.44	MINING PURPOSES	Surface to depth of 15.24m	
ML1705	17-Dec-14	17-Dec-35	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal	149.2	OC/UG	Surface to depth of 900m below AHD (Australian Height Datum)	
ML1706	9-Dec-14	9-Dec-35	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Nil Minerals	27.91	MINING PURPOSES	Surface to depth of 50m	
ML1707	9-Dec-14	9-Dec-35	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal	51.38	Mining	Majority is Surface to depth of 900m below AHD (Australian Height Datum), southern portion excludes zone 5m below Surface to 5m below floor of Vaux Seam	

Tenement	Grant Date	Expiry Date	Site	Company	Minerals	Area (HA)	Method	Notes	Notes
ML1732	6-Apr-16	6-Apr-37	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Nil Minerals	1.365	MINING PURPOSES	Surface to depth of 15.24m	Application was granted on 6th April 2016, in dataroom as MLA490.
ML1734	6-Apr-16	6-Apr-37	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal	21.55		Surface to depth of 20m	Application MLA468 in Dataroom
ML1748	5-Dec-16	5-Dec-37	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Nil Minerals	124.1		Surface to depth of 20m	Application MLA488 in Dataroom
ML1751	17-Mar-17	17-Mar-38	WARKWORTH	WARKWORTH MINING LTD	Coal	1018		Surface to depth of 20m	Application MLA352 in Dataroom
ML1752	17-Mar-17	17-Mar-38	MT THORLEY	MOUNT THORLEY OPERATIONS PTY LIMITED	Coal	34.44		Surface to depth of 20m	Application MLA353 in Dataroom
ML1753	19-Apr-17	19-Apr-38	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal	5477M2		Surface to depth of 20m	Application MLA501 in Dataroom
EL5291	28-Apr-97	28-Apr-18	HVO	COAL & ALLIED OPERATIONS PTY LTD	Coal	3695	EXPLORING		

Tenement	Grant Date	Expiry Date	Site	Company	Minerals	Area (HA)	Method	Notes	Notes
				ANOTERO PTY LIMITED					
EL5292	28-Apr-97	27-Apr-20	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal	550	EXPLORING		
EL5417	23-Dec-97	8-May-18	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal	160	EXPLORING		
EL5418	23-Dec-97	8-May-17	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal	2039M2	EXPLORING		
EL5606	11-Aug-99	10-Aug-19	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal	1278	EXPLORING		
EL7712	23-Feb-11	23-Feb-20	MT THORLEY	MOUNT THORLEY OPERATIONS PTY LIMITED	Coal	1988	EXPLORING	Surface to depth of 100m below AHD or 30m below the roof of the Bayswater Seam	
EL8175	23-Sep-13	23-Sep-18	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal	67.2	EXPLORING		

Tenement	Grant Date	Expiry Date	Site	Company	Minerals	Area (HA)	Method	Notes	Notes
CL219	23-Sep-81	23-Sep-23	MT THORLEY	MOUNT THORLEY OPERATIONS PTY LIMITED	Coal, Petroleum	1992	MINING	Surface to depth of 100m below AHD or 30m below the roof of the Bayswater Seam	
CL327	6-Mar-89	6-Mar-31	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum	6.48	MINING		
CL359	21-May-90	21-May-32	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum	7.211	MINING		
CL360	29-May-90	29-May-32	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum	132	MINING		
CL398	4-Jun-92	4-Jun-34	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum	4455 M2	MINING		
CL584	1-Jan-82	31-Dec-23	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum - Coal Seam Methane Only	101	MINING		
CCL714	23-May-90	30-Aug-30	HVO	COAL & ALLIED	Coal, Petroleum	629.3	MINING	Majority is surface to unlimited depth, western quarter and	

Tenement	Grant Date	Expiry Date	Site	Company	Minerals	Area (HA)	Method	Notes	Notes
				OPERATIONS PTY LTD ANOTERO PTY LIMITED				other small sections limited to 20m depth.	
CCL755	24-Jan-90	5-Mar-30	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	Coal, Petroleum	1114	MINING		
CCL753	23-May-90	17-Feb-23	WARKWORTH	WARKWORTH MINING LTD	Coal, Petroleum	4192	MINING		
CCL774	31-Mar-92	20-Jul-23	RHONDDA	MOUNT THORLEY OPERATIONS PTY LIMITED	Coal, Petroleum, Petroleum - Coal Seam Methane Only	317.5	MINING		
AUTH72	8-Mar-77	24-Mar-18	HVO	COAL & ALLIED OPERATIONS PTY LTD ANOTERO PTY LIMITED	COAL	454	EXPLORING		

Tenement	Grant Date	Expiry Date	Site	Company	Minerals	Area (HA)	Method		
							Exploring		
AL18	25-Jun-09	25-Jun-18		OAKLANDS COAL PTY LIMITED	Coal	111.1 KM2			
CML4	2-Mar-93	3-Jun-33	HVO	COAL & ALLIED OPERATIONS PTY LTD	Coal, Petroleum	2162	MINING		
				ANOTERO PTY LIMITED					
ML1710	22-Dec-16	10-Mar-27	HVO	COAL & ALLIED OPERATIONS PTY LTD	Coal	11.43 HA			
				ANOTERO PTY LIMITED					
CCL708	17-May-90	30-Dec-23	HVO	CCL708 is not held by a Yancoal entity, however Yancoal has an interest in this tenement by way of a sub-lease from Liddell Tenements Pty Limited.	Coal	2187 HA			
ML1547	5-Apr-04	4-Apr-25	MTW	ML1547 is not held by a Yancoal entity, however Yancoal has an interest in this tenement by way of a sub-lease from Bulga Coal Management Pty Limited.	Coal	5805 HA			

Application date	Site	Applicant	Minerals	Operation
10-Sep-12	HVO	Coal & Allied Operations Pty Ltd (main)	Coal	ASSESSMENT
		Anotero Pty Limited (other)		
1-Dec-16	HVO	Coal & Allied Operations Pty Ltd (main)		ASSESSMENT
		Anotero Pty Limited (other)		

1-Dec-16	HVO	Coal & Allied Operations Pty Ltd (main)		ASSESSMENT
		Anotero Pty Limited (other)		
10-Mar-15	HVO	Coal & Allied Operations Pty Ltd (main)	Coal	MINING
		Anotero Pty Limited (other)		
12-May-15	HVO	Coal & Allied Operations Pty Ltd (main)	Nil Minerals	MINING
		Anotero Pty Limited (other)		
12-May-15	HVO	Coal & Allied Operations Pty Ltd (main)	Nil Minerals	MINING
		Anotero Pty Limited (other)		
23-Dec-15	HVO	Coal & Allied Operations Pty Ltd (main)	Nil Minerals	MINING
		Anotero Pty Limited (other)		
28-Oct-16	HVO	Coal & Allied Operations Pty Ltd (main)		MINING
		Anotero Pty Limited (other)		
28-Oct-16	HVO	Coal & Allied Operations Pty Ltd (main)		MINING
		Anotero Pty Limited (other)		
13-Nov-17	MT THORLEY	Mount Thorley Coal Loading Ltd	Coal	MINING
28-Jul-17	HVO	Coal & Allied Operations Pty Ltd (main)	Nil Minerals	MINING
		Anotero Pty Limited (other)		
28-Jul-17	HVO	Coal & Allied Operations Pty Ltd (main)	Nil Minerals	MINING
		Anotero Pty Limited (other)		
3-Jul-17	HVO	Coal & Allied Operations Pty Ltd (main)		
		Anotero Pty Limited (other)		
3-Jul-17	HVO	Coal & Allied Operations Pty Ltd (main)		
		Anotero Pty Limited (other)		
3-Jul-17	HVO	Coal & Allied Operations Pty Ltd (main)		
		Anotero Pty Limited (other)		
4-May-18	MTW	Mount Thorley Operations Pty Limited		

Appendix G.
Detailed OPEX and CAPEX

HVO/MTW

Operation	Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2060	Total LOM
HVO	**Onsite Costs**																			
	Open Cut	**Million AUD**	268.0	471.6	387.4	426.7	446.7	412.1	466.9	484.7	449.2	429.1	424.9	437.8	388.4	383.7	356.3	426.8	321.6	**16,667**
	Site Admin	**Million AUD**	58.2	113.9	105.8	109.0	109.0	109.9	110.4	110.2	109.1	109.4	108.6	106.7	107.3	107.1	105.2	104.8	83.3	**4,310**
	CHPP	**Million AUD**	40.1	117.6	117.0	117.0	117.1	116.9	116.5	116.9	117.8	117.4	118.1	119.2	119.3	119.9	117.9	112.5	88.7	**4,651**
	Total Free on Rail	**Million AUD**	**366.3**	**703.1**	**610.1**	**652.7**	**672.9**	**638.9**	**692.8**	**711.8**	**676.0**	**656.0**	**651.6**	**663.7**	**614.9**	**610.7**	**579.4**	**643.0**	**493.6**	**25,628**
		AUD/ROM t	**35.9**	**34.1**	**29.6**	**31.7**	**32.7**	**31.0**	**33.6**	**34.6**	**32.8**	**31.8**	**31.6**	**32.2**	**29.9**	**29.6**	**28.1**	**32.5**	**32.1**	**31.4**
		AUD/Prod t	**50.4**	**48.8**	**42.1**	**44.9**	**46.2**	**43.4**	**46.8**	**48.2**	**46.4**	**44.8**	**45.0**	**46.9**	**43.1**	**42.9**	**41.7**	**46.5**	**46.2**	**45.2**
	Off site costs																			
	Rail	**Million AUD**	39.3	77.4	77.7	77.9	77.9	78.9	79.2	78.9	76.7	77.0	76.3	74.5	75.1	74.9	73.2	72.8	56.3	**2,998**
	Port	**Million AUD**	30.0	54.1	55.8	54.6	54.5	54.5	55.8	54.8	53.8	48.2	47.7	46.5	46.8	46.6	45.8	45.6	40.4	**1,978**
	Other	**Million AUD**	18.1	36.1	36.2	36.1	36.3	36.5	36.8	36.7	36.6	36.9	36.5	36.5	36.4	38.5	41.8	36.6	25.1	**1,473**
	Total Free on Board	**Million AUD**	**453.8**	**870.7**	**779.8**	**821.3**	**841.5**	**808.7**	**864.6**	**882.2**	**843.1**	**818.1**	**812.1**	**821.2**	**773.2**	**770.6**	**740.1**	**797.9**	**615.4**	**32,077**
	Total Free on Board	**Million AUD**	**529.0**	**1017.5**	**923.1**	**967.0**	**986.5**	**957.3**	**1015.8**	**1036.8**	**998.1**	**971.8**	**964.3**	**972.0**	**927.6**	**924.3**	**889.5**	**947.5**	**730.3**	**38,114**
	(inc Royalty)	**AUD/prod t**	**72.7**	**70.6**	**63.7**	**66.5**	**67.8**	**65.1**	**68.6**	**70.2**	**68.5**	**66.4**	**66.6**	**68.7**	**65.1**	**65.0**	**64.0**	**68.6**	**68.3**	**67.2**
MTW	**Onsite Costs**																			
	Open Cut	**Million AUD**	231.9	408.1	397.0	355.7	364.4	358.6	348.6	354.6	364.9	363.2	357.9	362.0	350.4	372.4	330.5			**8,132.2**
	Site Admin	**Million AUD**	52.5	103.1	105.4	100.0	99.9	100.1	99.8	99.6	99.2	98.4	98.5	97.4	98.1	98.6	90.7			**2,198.7**
	CHPP	**Million AUD**	36.8	84.1	84.1	84.1	84.2	84.0	84.0	84.2	84.8	84.1	83.7	83.4	83.9	85.3	80.2			**1,872.7**
	Total Free on Rail	**Million AUD**	**321.3**	**595.3**	**586.5**	**539.8**	**548.4**	**542.7**	**532.4**	**538.3**	**548.9**	**545.7**	**540.0**	**542.9**	**532.4**	**556.4**	**501.4**			**12,203.7**
		AUD/ROM t	**37.6**	**35.1**	**34.5**	**31.8**	**32.3**	**32.0**	**31.4**	**31.8**	**32.6**	**32.6**	**32.3**	**32.8**	**32.0**	**33.4**	**33.9**			**33.2**
		AUD/Prod t	**54.2**	**51.7**	**49.7**	**45.6**	**46.3**	**45.7**	**45.0**	**45.7**	**46.8**	**47.0**	**46.5**	**47.4**	**46.1**	**47.8**	**48.2**			**47.6**
	Off site costs																			
	Rail	**Million AUD**	25.8	50.2	51.7	51.7	51.6	51.8	51.5	51.4	51.1	50.0	50.0	49.3	49.8	50.1	44.8			**1,110.7**
	Port	**Million AUD**	14.0	27.3	28.0	28.1	28.0	28.1	28.0	27.9	27.8	27.5	27.5	27.1	27.4	27.6	24.7			**607.9**
	Other	**Million AUD**	14.5	28.8	28.8	29.0	28.8	28.6	28.4	28.4	28.4	28.1	28.5	28.3	28.4	26.4	22.5			**601.3**
	Total Free on Board (ex Royalty)		**375.6**	**701.7**	**695.0**	**648.6**	**656.9**	**651.3**	**640.4**	**646.1**	**656.2**	**651.2**	**646.0**	**647.6**	**638.0**	**660.4**	**593.4**			**14,524**
	Total Free on Board	**Million AUD**	**435.0**	**814.9**	**809.6**	**763.4**	**772.4**	**769.6**	**758.9**	**766.8**	**779.4**	**772.2**	**768.1**	**769.5**	**762.3**	**786.8**	**706.4**			**17,208**
	(inc Royalty)	**AUD/prod t**	**73.4**	**70.8**	**68.6**	**64.4**	**65.3**	**64.8**	**64.2**	**65.1**	**66.5**	**66.6**	**66.2**	**67.2**	**66.0**	**67.6**	**67.9**			**67.1**

Operation	Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2060	Total LOM
HVO	Growth	Million AUD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.4	0.0	**494.0**
	Sustaining	Million AUD	79.1	80.1	125.5	79.6	88.2	114.8	102.8	116.8	116.2	106.2	106.1	84.1	91.6	102.9	148.1	131.0	54.2	**4,398.1**
	Closure	Million AUD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	**Million AUD**	**79.1**	**80.1**	**125.5**	**79.6**	**88.2**	**114.8**	**102.8**	**116.8**	**116.2**	**106.2**	**106.1**	**84.1**	**91.6**	**102.9**	**148.1**	**180.4**	**54.2**	**4,892.1**
MTW	Growth	Million AUD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
	Sustaining	Million AUD	59.7	113.0	119.7	74.7	80.6	68.2	86.7	45.9	120.3	103.2	111.5	104.7	108.1	83.4	33.4	0.0	0.0	**1,780.1**
	Closure	Million AUD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	**Million AUD**	**59.7**	**113.0**	**119.7**	**74.7**	**80.6**	**68.2**	**86.7**	**45.9**	**120.3**	**103.2**	**111.5**	**104.7**	**108.1**	**83.4**	**33.4**	**0.0**	**0.0**	**1,780.1**

Moolarben

Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	2036	Total LOM
Onsite Costs																	
Open Cut	**Million AUD**	88.0	183.5	184.2	189.0	182.2	156.3	174.9	175.9	167.0	173.6	185.9	179.8	184.8	193.9	17.8	**3,212.6**
UG	**Million AUD**	83.5	153.3	138.8	146.3	131.7	139.7	48.9	52.3	59.6	36.0						**990.0**
Site Admin	**Million AUD**	13.6	25.5	25.6	25.5	25.4	25.4	25.4	25.4	25.3	23.0	12.7	12.7	12.7	12.7	1.5	**343.5**
CHPP	**Million AUD**	41.4	91.2	92.2	81.0	75.0	68.8	70.2	70.0	67.1	66.5	58.4	58.4	59.3	59.9	7.1	**1,205.9**
Total Free on Rail	**Million AUD**	**226.5**	**453.5**	**440.7**	**441.8**	**414.4**	**390.3**	**319.5**	**323.6**	**318.9**	**299.1**	**257.0**	**250.9**	**256.9**	**266.5**	**26.5**	**5,751.9**
	AUD/ROM t	**25.3**	**24.0**	**22.0**	**22.1**	**20.8**	**20.8**	**17.1**	**17.4**	**18.1**	**19.2**	**21.4**	**21.1**	**22.8**	**23.3**	**21.1**	**21.3**
	AUD/Prod t	**27.9**	**28.6**	**26.4**	**26.8**	**24.7**	**25.0**	**20.1**	**20.3**	**21.2**	**23.1**	**27.3**	**27.0**	**29.1**	**29.9**	**30.0**	**25.9**
Off site costs																	
Rail	**Million AUD**	51.0	123.6	128.7	129.8	123.8	121.3	123.5	123.1	117.4	102.8	80.9	80.3	78.0	74.6	6.6	**1,763.6**
Port	**Million AUD**	37.1	78.9	82.9	83.0	77.7	75.6	77.5	77.2	72.3	61.4	57.6	57.6	57.5	57.3	6.6	**1,189.3**
Other	**Million AUD**	20.9	44.5	47.7	47.7	49.2	45.5	46.2	45.1	43.9	38.0	27.0	27.0	25.8	26.0	3.2	**641.7**
Total Free on Board (ex Royalty)	**Million AUD**	**335.4**	**700.5**	**700.0**	**702.3**	**665.1**	**632.7**	**566.6**	**569.0**	**552.5**	**501.4**	**422.5**	**415.8**	**418.2**	**424.3**	**42.8**	**9,346.6**
Total Free on Board (inc Royalty) (Inc royalties)	**Million AUD**	**393.0**	**825.2**	**833.8**	**837.1**	**804.8**	**762.1**	**697.3**	**695.2**	**677.1**	**610.6**	**503.3**	**496.7**	**495.9**	**502.6**	**50.6**	**11,195.5**
	AUD/prod t	**48.4**	**52.0**	**49.9**	**50.9**	**48.0**	**48.9**	**43.9**	**43.7**	**45.0**	**47.1**	**53.5**	**53.4**	**56.1**	**56.5**	**48.5**	**50.4**

Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	2036	Total LOM
OC	**Million AUD**																
Growth	**Million AUD**	0.0	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			16.1
Sustaining	**Million AUD**	16.9	39.9	27.0	30.6	59.1	58.3	57.0	35.9	68.7	65.7	53.7	40.3	72.0	32.5	2.5	790.0
Closure	**Million AUD**															15.1	15.1
UG	**Million AUD**																0.0
Growth	**Million AUD**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Sustaining	**Million AUD**	17.3	41.4	19.7	16.1	42.3	18.4	13.1	14.1	12.0	3.6	0.0	0.0	0.0	0.0		198.0
Total																	
Growth	**Million AUD**	0.0	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1
Sustaining	**Million AUD**	34.2	81.3	46.7	46.8	101.4	76.7	70.2	50.0	80.6	69.3	53.7	40.3	72.0	32.5	2.5	987.9
Closure																15.1	15.1
Total	**Million AUD**	**34.2**	**97.4**	**46.7**	**46.8**	**101.4**	**76.7**	**70.2**	**50.0**	**80.6**	**69.3**	**53.7**	**40.3**	**72.0**	**32.5**	**17.6**	**1,019.2**

Yarrabee

Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2053	Total LOM
Onsite Costs																			
Open Cut	**Million AUD**	91.6	172.9	211.8	214.7	219.2	234.5	229.5	226.0	222.0	217.3	201.5	220.0	220.4	208.3	209.5	205.1	131.7	**7,216.2**
Site Admin	**Million AUD**	8.5	14.4	15.1	14.0	14.6	14.1	15.2	15.5	15.2	15.2	15.2	15.5	15.4	15.3	15.4	15.2	14.6	**536.8**
CHPP	**Million AUD**	30.4	61.7	69.1	71.9	67.4	73.3	76.3	75.5	80.1	66.2	65.4	65.3	62.9	65.3	61.7	60.5	51.5	**2,260.2**
	Million AUD	**130.5**	**249.0**	**295.9**	**300.6**	**301.3**	**322.0**	**321.1**	**316.9**	**317.3**	**298.7**	**282.0**	**300.9**	**298.6**	**288.9**	**286.6**	**280.8**	**197.7**	**10,013.2**
Total Free on Rail	**AUD/ROM t**	**63.4**	**62.3**	**68.8**	**62.6**	**65.5**	**61.9**	**63.0**	**64.7**	**61.0**	**71.1**	**67.1**	**71.6**	**74.7**	**68.8**	**72.4**	**71.1**	**56.5**	**67.9**
	AUD/Prod t	**71.8**	**68.0**	**83.9**	**74.7**	**79.0**	**73.4**	**79.5**	**82.2**	**72.3**	**89.0**	**84.0**	**91.6**	**95.8**	**88.3**	**93.8**	**91.8**	**68.9**	**85.2**
Off site costs																			
Rail	**Million AUD**	27.0	50.6	46.6	53.2	50.4	58.0	53.3	50.8	57.8	44.2	44.2	43.3	41.0	43.1	40.2	40.3	37.8	**1,553.5**
Port	**Million AUD**	26.6	49.9	43.3	45.5	44.8	47.3	45.8	45.0	47.3	42.7	42.7	42.4	41.6	42.3	41.4	41.4	31.3	**1,491.4**
Other	**Million AUD**	2.0	3.5	3.4	3.8	3.6	4.1	3.8	3.7	4.1	3.3	3.3	3.2	3.1	3.2	3.0	3.0	2.8	**114.3**
Total Free on Board (ex Royalty)	**Million AUD**	**186.1**	**353.0**	**389.2**	**403.1**	**400.1**	**431.4**	**424.0**	**416.3**	**426.6**	**388.8**	**372.2**	**389.8**	**384.4**	**377.5**	**371.2**	**365.5**	**269.7**	**13,172.4**
Total Free on Board (inc Royalty)	**Million AUD**	**203.0**	**393.8**	**431.5**	**449.7**	**446.2**	**483.7**	**473.3**	**463.6**	**481.7**	**431.5**	**415.3**	**432.3**	**424.4**	**420.1**	**410.3**	**405.6**	**307.6**	**14,660.6**
(inc royalties)	**AUD/prod t**	**111.7**	**107.6**	**122.4**	**111.8**	**117.0**	**110.3**	**117.1**	**120.2**	**109.7**	**128.6**	**123.8**	**131.6**	**136.2**	**128.4**	**134.3**	**132.6**	**107.2**	**124.8**

Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	2036	Avg. 2041-2050	Avg. 2051-2053	Total LOM
Growth	Million AUD	1.5	0.0	134.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	135.7
Sustaining	Million AUD	2.0	2.0	2.0	2.0	5.0	4.0	20.4	18.4	2.0	57.5	76.4	31.7	23.7	28.5	26.0	25.9	35.3	884.5
Total	**Million AUD**	**3.5**	**2.0**	**136.2**	**2.0**	**5.0**	**4.0**	**20.4**	**18.4**	**2.0**	**57.5**	**76.4**	**31.7**	**23.7**	**28.5**	**26.0**	**25.9**	**35.3**	**1,020.2**

Ashton

Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total LOM
Onsite Costs															
Open Cut	Million AUD							65.4	74.4	99.5	111.0	110.8	88.2	16.5	**565.8**
UG	Million AUD	40.6	80.0	79.0	82.5	79.2	76.3	79.2	74.1	74.0	72.4	61.9	65.2	0.0	**864.5**
Site Admin	Million AUD	4.2	7.9	8.1	8.1	7.9	8.0	11.9	12.6	15.6	16.5	16.5	18.1	1.3	**136.8**
CHPP	Million AUD	7.4	14.6	14.1	13.0	12.0	12.2	18.6	22.6	27.7	28.6	29.5	29.1	3.4	**232.7**
Total Free on Rail	**Million AUD**	**52.1**	**102.4**	**101.3**	**103.6**	**99.2**	**96.6**	**175.1**	**183.7**	**216.9**	**228.5**	**218.6**	**200.5**	**21.2**	**1,799.8**
	AUD/ROM t	**34.8**	**30.4**	**34.8**	**40.6**	**41.8**	**34.0**	**56.1**	**32.0**	**35.2**	**40.2**	**37.3**	**41.4**	**34.9**	**37.8**
	AUD/Prod t	**70.8**	**57.8**	**63.4**	**75.9**	**79.3**	**56.8**	**95.4**	**58.7**	**60.7**	**68.7**	**62.9**	**69.0**	**74.1**	**66.8**
Off site costs															
Rail	Million AUD	4.4	9.3	8.1	10.8	12.6	18.1	18.9	18.2	17.6	16.4	17.1	14.3	1.5	**167.3**
Port	Million AUD	2.2	4.7	4.1	5.4	6.3	9.1	9.5	9.2	8.9	8.2	8.6	7.2	0.8	**84.1**
Other	Million AUD	3.0	7.2	6.7	5.9	5.6	7.4	8.9	13.6	15.0	14.2	14.8	12.7	1.7	**116.8**
Free on Board (ex Roya	**Million AUD**	**61.7**	**123.7**	**120.2**	**125.8**	**123.6**	**131.1**	**212.4**	**224.6**	**258.4**	**267.3**	**259.2**	**234.7**	**25.2**	**2,168.1**
Free on Board (inc Roya	**Million AUD**	**68.7**	**140.9**	**136.0**	**139.4**	**136.2**	**148.2**	**232.0**	**257.6**	**297.0**	**304.0**	**297.7**	**267.7**	**28.6**	**2,454.0**
(inc royalties)	**AUD/prod t**	**93.3**	**79.6**	**85.1**	**102.2**	**108.9**	**87.2**	**126.4**	**82.4**	**83.1**	**91.4**	**85.6**	**92.0**	**99.8**	**91.0**

Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total LOM
OC Mining															
Growth	Million AUD	0.0	0.0	0.0	0.0	0.0	109.3	66.1	0.0	0.0	0.0	0.0	0.0		175.4
Sustaining	Million AUD	0.0	0.0	0.0	0.0	23.0	3.9	6.4	6.9	7.3	6.8	1.5	0.0		55.9
Land	Million AUD	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
UG Mining															
Growth	Million AUD	0.0	1.0	14.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		16.6
Sustaining	Million AUD	16.4	30.6	25.0	21.7	22.8	28.0	22.6	18.6	20.9	29.2	21.3	16.6		273.7
Total															
Growth	Million AUD	0.0	1.0	14.0	1.6	0.0	109.3	66.1	0.0	0.0	0.0	0.0	0.0		192.0
Sustaining	Million AUD	16.4	30.6	25.0	21.7	45.8	32.0	29.0	25.5	28.2	36.0	22.8	16.6		329.6
Total	**Million AUD**	**16.4**	**31.6**	**39.0**	**23.3**	**45.8**	**141.3**	**95.0**	**25.5**	**28.2**	**36.0**	**22.8**	**16.6**		**521.6**

Stratford and Duralie

Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2053	Total LOM
Onsite Costs																			
Open Cut	**Million AUD**	21.8	53.0	58.1	85.4	67.8	45.4	71.9	82.6	79.7	66.6	69.9	66.4	84.7	67.7	62.0	60.7	30.9	**2,201.2**
UG	**Million AUD**																		**0.0**
Site Admin	**Million AUD**	3.7	7.9	13.0	14.3	13.5	10.6	14.0	16.8	15.6	15.7	15.7	15.9	18.2	15.8	14.3	14.1	9.4	**494.9**
CHPP	**Million AUD**	3.8	5.8	9.2	10.4	9.7	7.1	8.7	10.9	10.9	10.9	10.9	10.9	12.5	10.9	10.9	10.9	10.9	**371.7**
Total Free on Rail	**Million AUD**	**29.3**	**66.7**	**80.3**	**110.1**	**91.1**	**63.0**	**94.6**	**110.4**	**106.1**	**93.1**	**96.5**	**93.2**	**115.4**	**94.4**	**87.2**	**85.6**	**51.2**	**3,067.8**
	AUD/ROM t	**63.3**	**62.2**	**47.4**	**57.6**	**50.8**	**48.2**	**59.0**	**55.0**	**53.1**	**46.6**	**48.2**	**46.6**	**50.2**	**47.2**	**43.6**	**42.8**	**25.6**	**45.0**
	AUD/Prod t	**126.8**	**109.2**	**79.9**	**99.6**	**87.2**	**77.2**	**87.3**	**84.9**	**88.3**	**77.0**	**79.4**	**75.9**	**82.0**	**77.2**	**78.8**	**78.7**	**70.6**	**80.4**
Off site costs																			
Rail	**Million AUD**	6.2	11.5	16.5	18.6	18.5	14.4	9.8	11.8	10.9	10.9	11.0	11.1	12.7	11.1	10.0	9.8	6.6	**387.3**
Port	**Million AUD**	2.9	4.7	6.4	7.3	7.4	5.7	2.9	3.5	3.2	3.2	3.2	3.3	3.8	3.3	3.0	2.9	1.9	**123.5**
Other	**Million AUD**	0.7	1.9	3.1	3.4	3.3	2.5	3.4	4.1	3.7	3.8	3.8	3.8	4.4	3.8	3.4	3.4	2.3	**118.9**
Free on Board (ex Royalty)	**Million AUD**	**39.0**	**84.9**	**106.3**	**139.5**	**120.2**	**85.7**	**110.7**	**129.6**	**123.9**	**111.1**	**114.5**	**111.4**	**136.3**	**112.6**	**103.6**	**101.8**	**61.9**	**3,697.5**
Free on Board (inc Royalty)	**Million AUD**	**41.7**	**91.6**	**116.4**	**150.2**	**130.1**	**93.6**	**121.3**	**142.5**	**136.1**	**123.6**	**127.1**	**124.2**	**150.4**	**125.3**	**115.0**	**113.0**	**69.2**	**4,087.6**
(inc royalties)	**AUD/prod t**	**180.7**	**149.9**	**115.8**	**135.8**	**124.5**	**114.6**	**111.9**	**109.6**	**113.2**	**102.2**	**104.5**	**101.1**	**106.9**	**102.4**	**104.0**	**103.8**	**95.5**	**107.1**

Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2040	Avg. 2041-2050	Avg. 2051-2053	Total LOM
Growth	Million AUD	5.7	5.0																10.7
Sustaining	Million AUD	7.2	2.9	2.6	2.5	2.5	2.5	2.5	3.3	3.2	2.7	2.8	2.7	3.4	2.7	2.5	2.4	1.2	94.6
Total	**Million AUD**	**12.9**	**7.9**	**2.6**	**2.5**	**2.5**	**2.5**	**2.5**	**3.3**	**3.2**	**2.7**	**2.8**	**2.7**	**3.4**	**2.7**	**2.5**	**2.4**	**1.2**	**105.3**

Austar

Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2034	Total LOM
Onsite Costs																
UG	Million AUD	5.0	97.4	120.6	118.2	124.2	120.7	115.0	125.2	108.0	102.7	101.8	97.5	102.2	84.2	1,675.3
Site Admin	Million AUD	5.0	7.6	11.0	12.4	11.3	11.2	11.6	11.5	11.8	11.2	11.4	11.8	11.2	11.5	185.0
CHPP	Million AUD	0.0	14.3	18.2	21.5	20.7	20.8	22.5	21.5	23.1	20.0	21.4	22.4	19.9	20.6	328.9
Total Free on Rail	**Million AUD**	**10.0**	**119.3**	**149.9**	**152.1**	**156.3**	**152.7**	**149.1**	**158.2**	**142.8**	**133.9**	**134.6**	**131.7**	**133.4**	**116.3**	**2,189.2**
	AUD/ROM t	**0.0**	**72.0**	**68.4**	**53.1**	**58.2**	**56.4**	**48.0**	**55.5**	**44.3**	**53.4**	**48.0**	**43.0**	**54.0**	**44.5**	**51.4**
	AUD/Prod t	**0.0**	**81.4**	**79.4**	**63.2**	**69.2**	**66.9**	**57.0**	**66.1**	**52.7**	**63.6**	**57.1**	**51.2**	**64.3**	**52.9**	**61.0**
Off site costs																
Rail	Million AUD	9.6	17.6	17.9	20.4	19.6	19.7	19.8	18.9	20.2	17.8	18.8	19.6	17.6	18.1	310.0
Port	Million AUD	3.4	5.7	5.5	7.3	6.6	6.7	6.7	6.2	7.0	5.4	6.1	6.6	5.3	5.8	101.9
Other	Million AUD	2.5	5.1	6.5	8.4	7.9	8.1	9.2	8.4	9.4	7.4	8.4	9.3	7.6	8.0	130.4
Total Free on Board (ex Royal	**Million AUD**	**25.5**	**147.7**	**179.7**	**188.2**	**190.5**	**187.1**	**184.9**	**191.7**	**179.4**	**164.5**	**167.9**	**167.2**	**163.9**	**148.3**	**2,731.6**
Total Free on Board (inc Roya	**Million AUD**	**25.5**	**161.5**	**198.7**	**212.7**	**213.7**	**210.5**	**211.8**	**215.9**	**207.4**	**186.5**	**192.8**	**194.7**	**186.1**	**171.9**	**3,105.2**
(inc royalties)	**AUD/prod t**	**0.0**	**110.3**	**105.3**	**88.4**	**94.6**	**92.3**	**81.0**	**90.2**	**76.5**	**88.5**	**81.8**	**75.7**	**89.7**	**78.2**	**86.5**

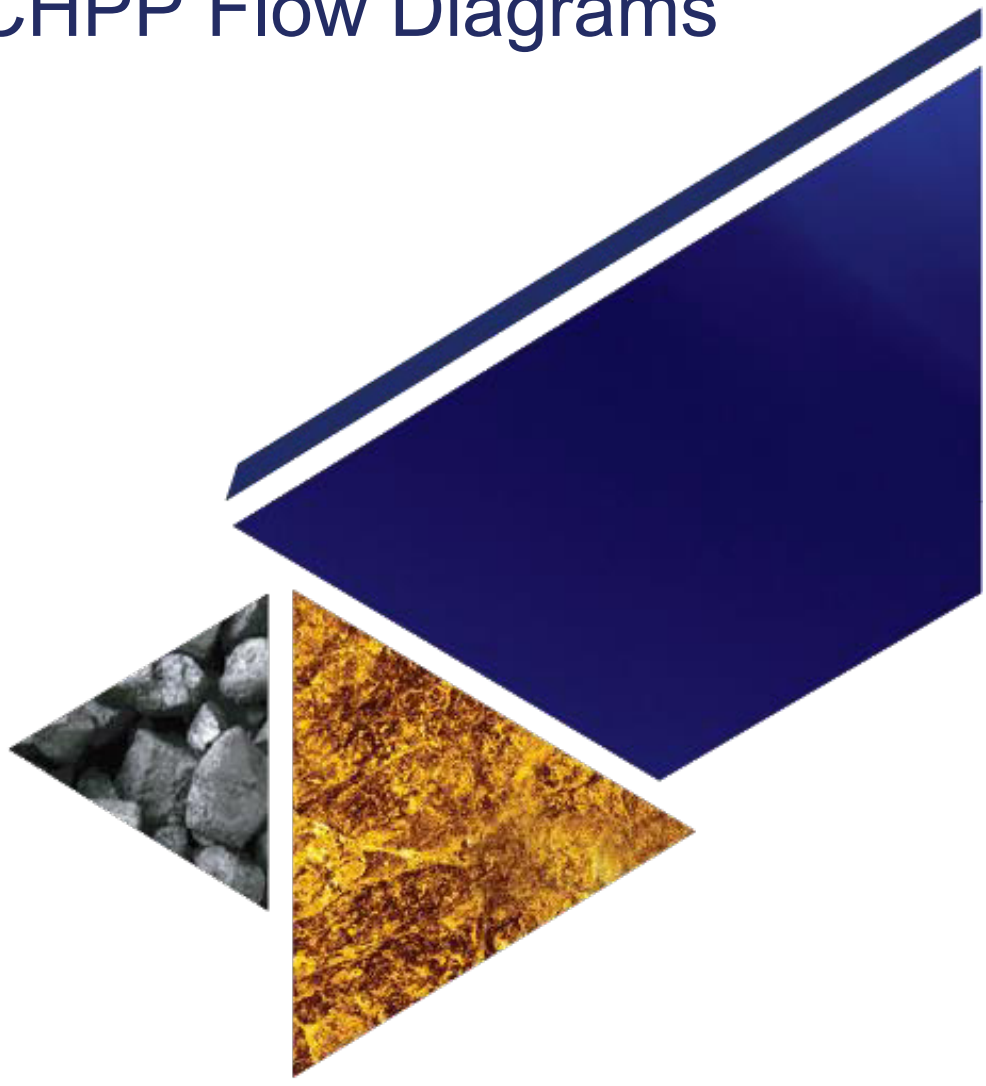
Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2034	Total LOM
Growth	Million AUD	0.0	1.3	10.4	0.3	0.0	0.1	0.1	0.3	0.1	0.0	0.0	0.0	0.0		12.4
Sustaining	Million AUD	0.0	51.9	47.1	23.9	21.7	26.9	17.9	7.0	33.4	29.3	15.6	25.0	19.9	16.7	352.9
Total	**Million AUD**	**0.0**	**53.1**	**57.5**	**24.2**	**21.7**	**27.0**	**18.0**	**7.3**	**33.4**	**29.3**	**15.6**	**25.0**	**19.9**	**16.7**	**365.3**

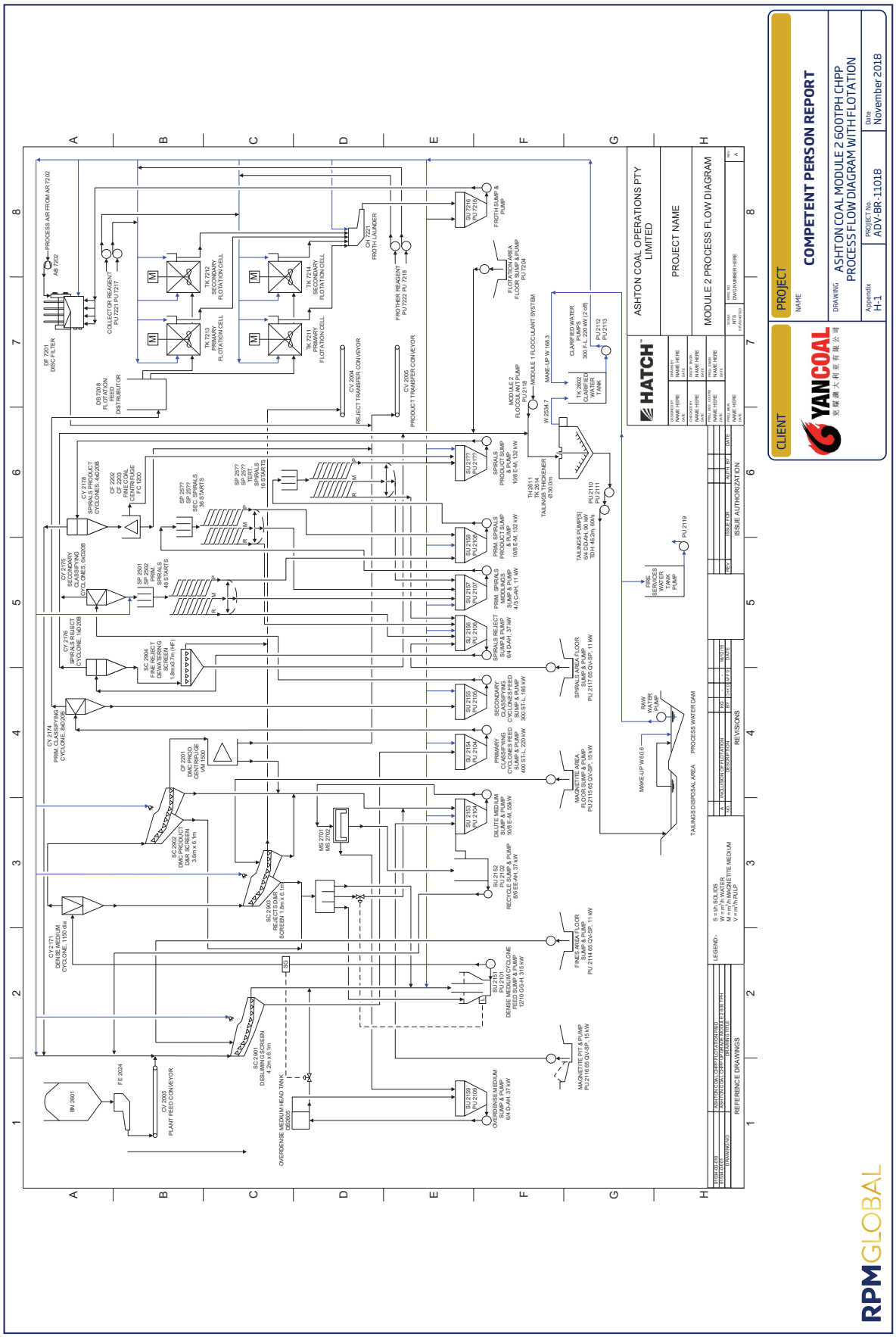
Middlemount

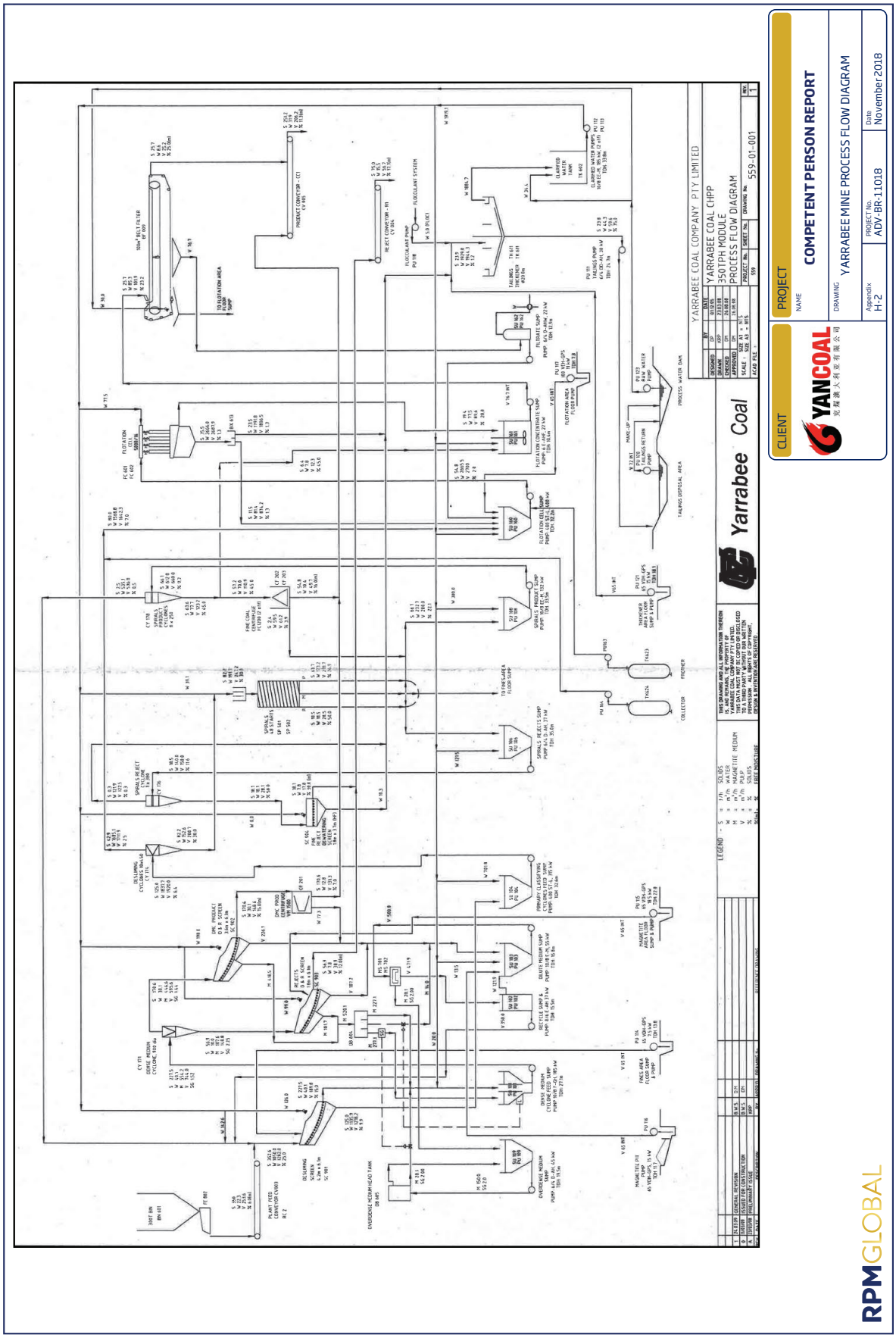
Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	Avg. 2036-2037	Total LOM
Onsite Costs																	
Open Cut	**Million AUD**	131.5	265.0	253.5	251.0	251.5	266.3	270.4	278.5	282.5	287.8	296.9	330.1	347.1	365.2	182.4	**5,702.7**
Site Admin	**Million AUD**	11.3	22.1	22.1	22.1	18.2	21.7	21.8	21.7	21.7	21.7	21.8	21.7	21.7	21.7	13.4	**405.1**
CHPP	**Million AUD**	14.3	28.5	28.8	28.5	29.2	28.8	28.8	28.7	28.7	28.7	28.8	28.7	28.7	28.8	16.5	**536.1**
Total Free on Rail	**Million AUD**	**157.1**	**315.6**	**304.4**	**301.6**	**298.9**	**316.8**	**320.9**	**329.0**	**333.0**	**338.3**	**347.5**	**380.6**	**397.5**	**415.6**	**212.3**	**6,643.8**
	AUD/ROM t	**53.9**	**59.1**	**56.1**	**55.9**	**55.3**	**58.7**	**59.3**	**60.9**	**61.7**	**62.6**	**64.2**	**70.5**	**73.6**	**76.9**	**75.0**	**66.2**
	AUD/Prod t	**73.2**	**76.8**	**71.9**	**72.5**	**71.9**	**76.1**	**78.4**	**81.7**	**83.2**	**84.5**	**90.7**	**94.5**	**97.0**	**101.1**	**97.4**	**87.5**
Off site costs																	
Rail	**Million AUD**	38.4	83.2	85.0	84.2	84.4	69.6	66.1	66.6	49.7	34.6	33.1	34.8	35.4	35.5	19.8	**982.2**
Port	**Million AUD**	15.3	28.7	29.5	29.1	29.1	28.4	27.6	27.3	24.9	22.8	21.8	22.9	23.3	23.4	13.0	**473.8**
Other	**Million AUD**	19.8	31.8	32.5	32.6	33.0	33.2	32.5	31.9	31.7	31.6	30.6	31.9	32.5	32.6	18.3	**605.4**
Total Free on Board (ex Ro	**Million AUD**	**230.7**	**459.3**	**451.4**	**447.5**	**445.4**	**448.0**	**447.2**	**454.8**	**439.2**	**427.2**	**433.0**	**470.1**	**488.7**	**507.2**	**263.4**	**8,705.3**
Total Free on Board (inc R	**Million AUD**	**280.2**	**532.6**	**524.5**	**521.1**	**518.7**	**522.5**	**522.2**	**528.4**	**513.5**	**500.6**	**504.4**	**544.5**	**565.0**	**583.7**	**305.9**	**10,108.2**
(Inc royalties)	**AUD/prod t**	**130.5**	**129.7**	**124.0**	**125.3**	**124.9**	**125.5**	**127.5**	**131.3**	**128.3**	**125.0**	**131.7**	**135.2**	**137.9**	**141.9**	**140.3**	**133.1**

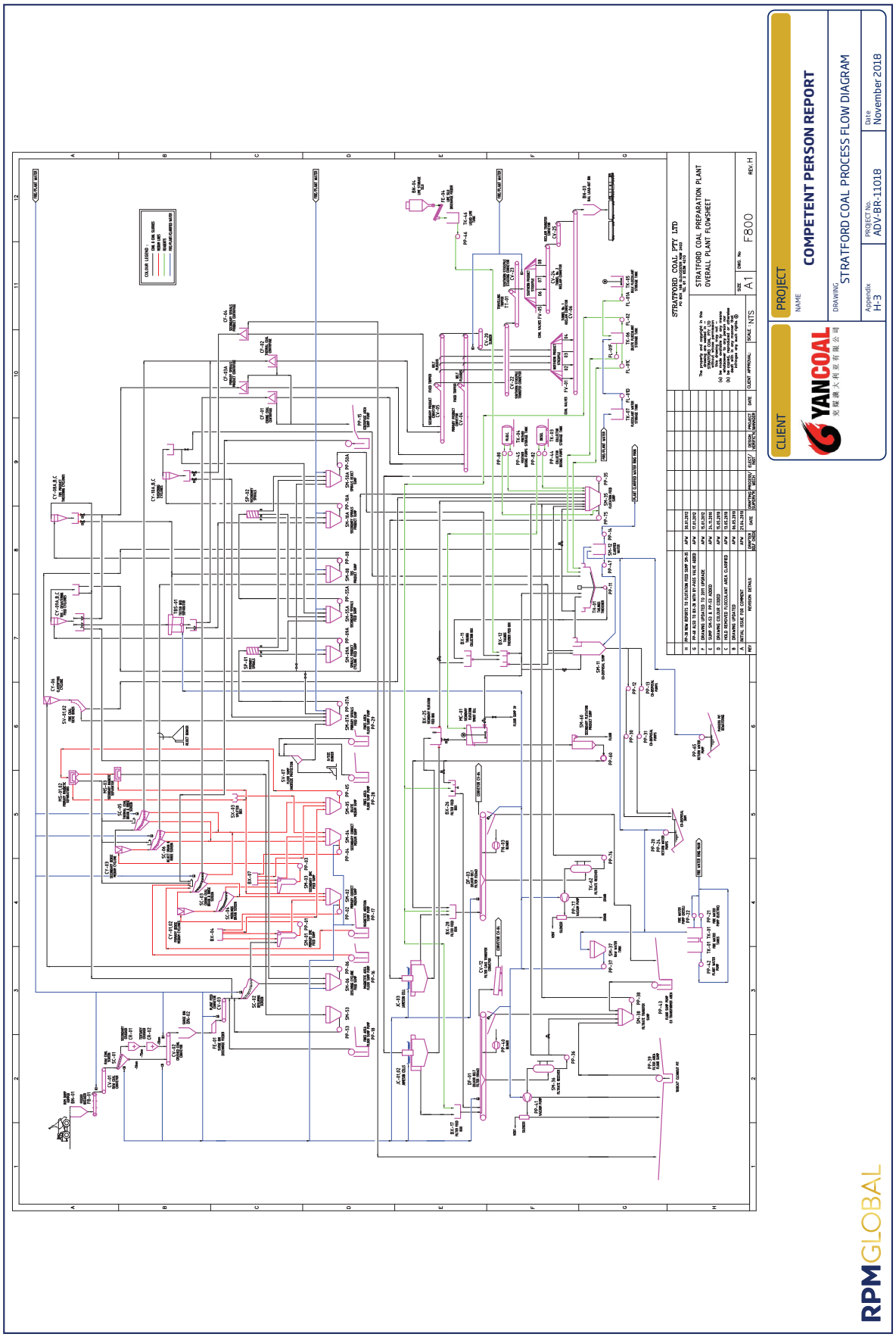
Cost Centre	Unit	H2 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Avg. 2031-2035	2036	Total LOM
Growth	Million AUD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustaining	Million AUD	10.5	27.7	8.1	5.3	3.1	5.9	4.7	4.4	3.3	3.0	5.3	3.7	3.6	4.3	3.9	125.7
Total	**Million AUD**	**10.5**	**27.7**	**8.1**	**5.3**	**3.1**	**5.9**	**4.7**	**4.4**	**3.3**	**3.0**	**5.3**	**3.7**	**3.6**	**4.3**	**3.9**	**125.7**

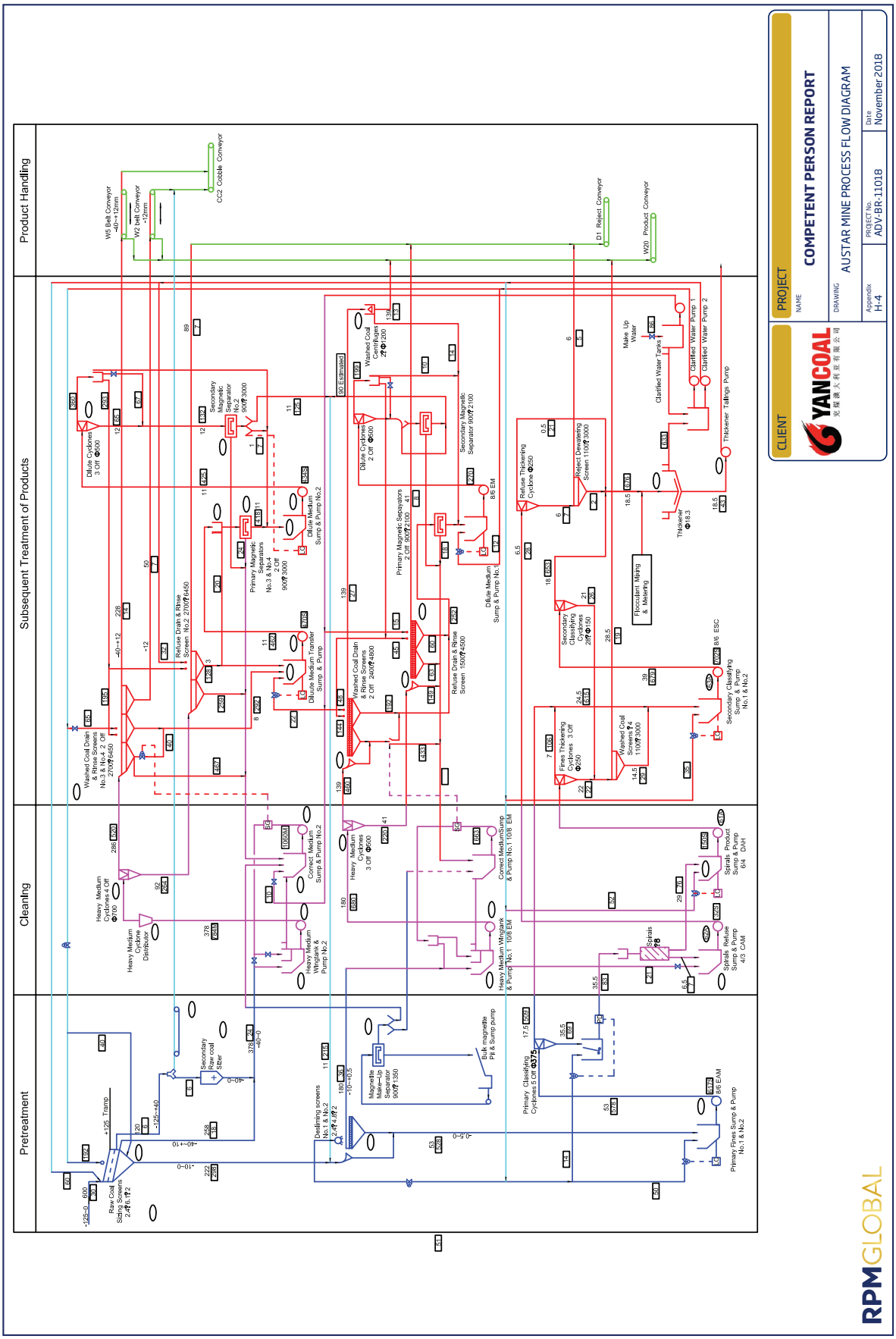
Appendix H.
CHPP Flow Diagrams

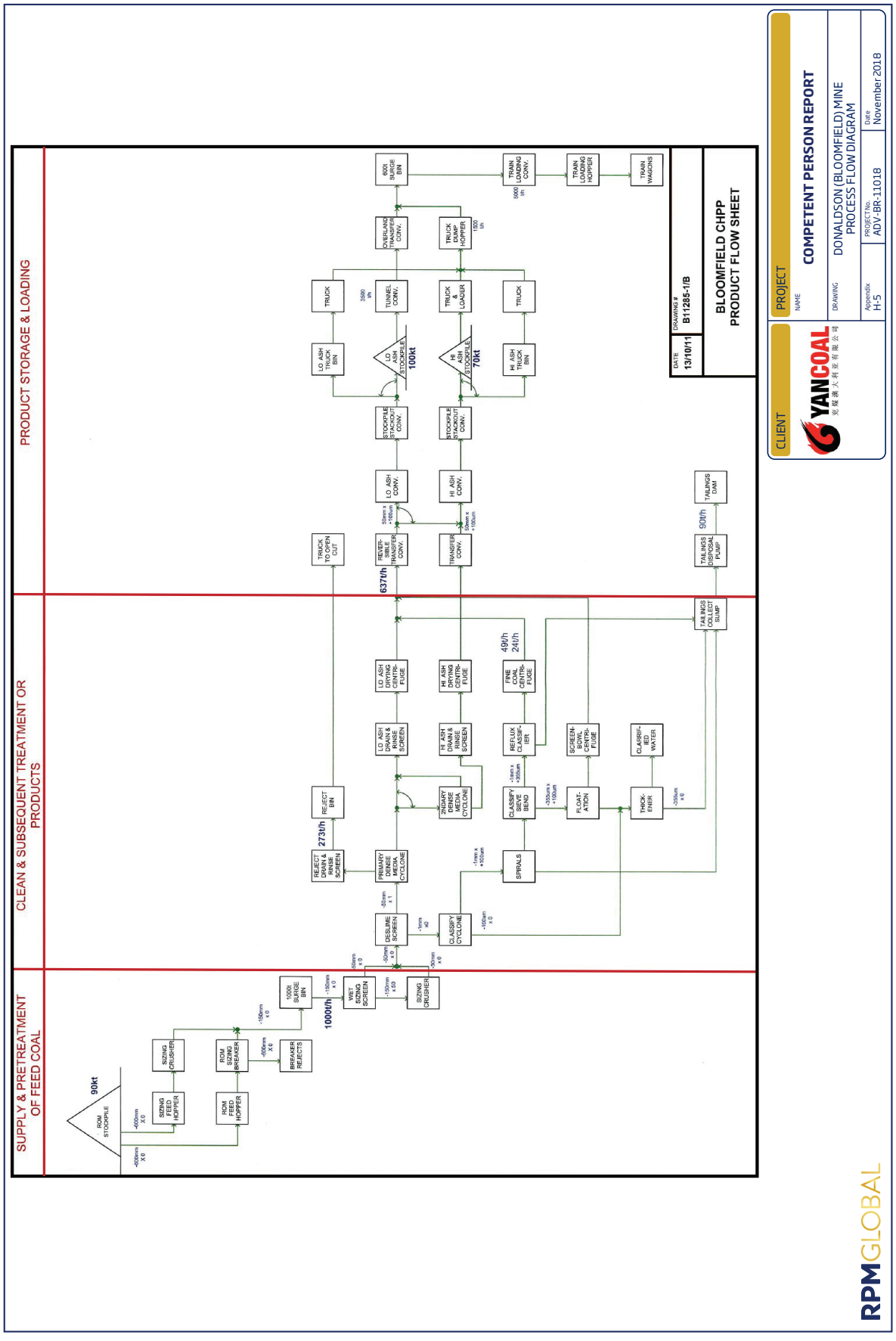


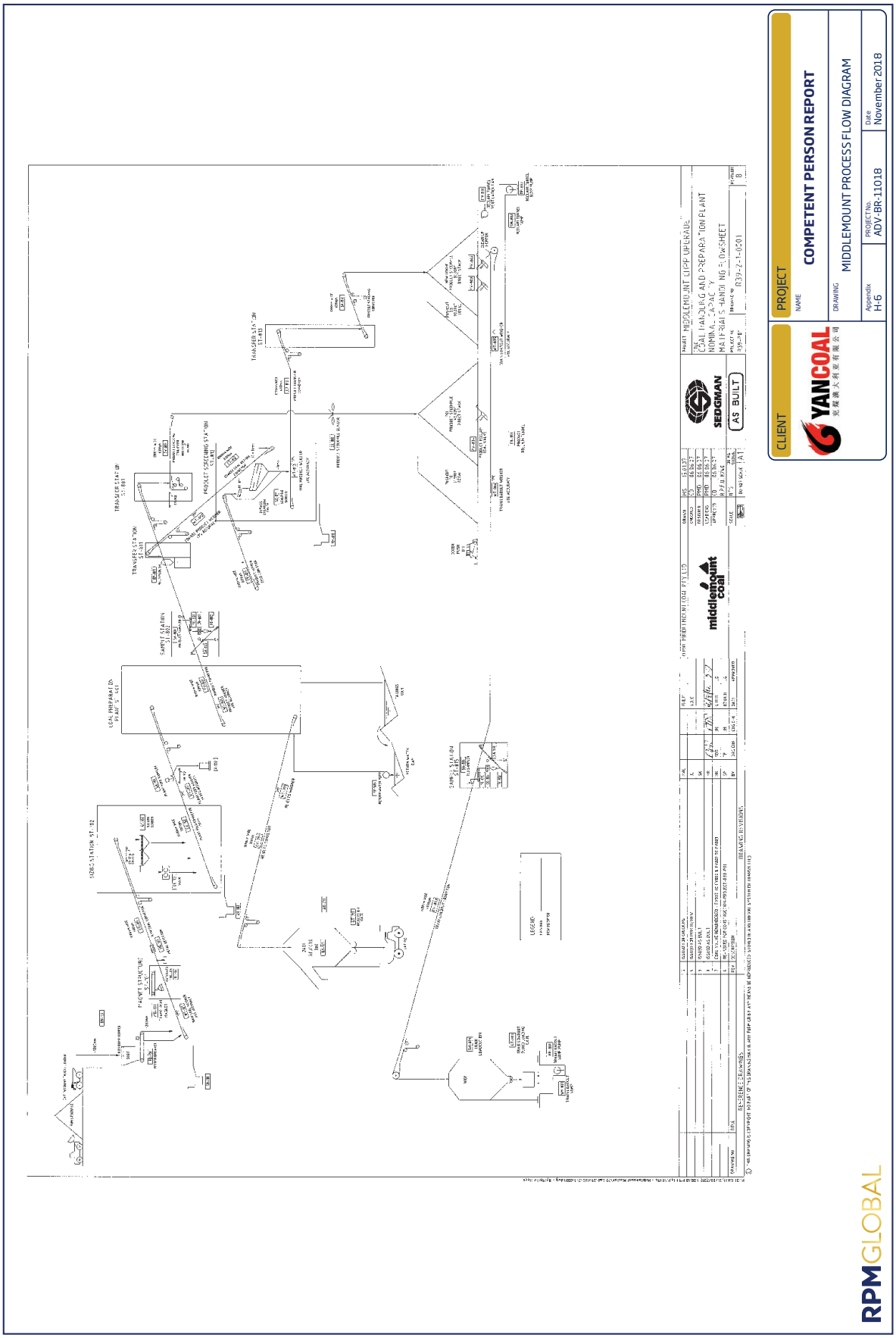

ASHTON COAL OPERATIONS PTY LIMITED
PROJECT NAME
MODULE 2 PROCESS FLOW DIAGRAM
HATCH
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
ASHTON COAL MODULE 2 600TPH CHPP
PROCESS FLOW DIAGRAM WITH FLOTATION
Appendix
H-1
PROJECT No.
ADV-BR-11018
Date
November 2018
REVISIONS
ISSUE AUTHORIZATION
REFERENCE DRAWINGS
LEGEND:
PROCESS WATER DAM
TAILINGS DISPOSAL AREA
RAW WATER PUMP
FIRE SERVICES WATER TANK PUMP
CLARIFIED WATER PUMPS 300 P-L, 220 kW (2 off)
TK 2802 CLARIFIED WATER TANK
MAKE-UP W 2534.7
MAKE-UP W 168.3
MODULE 1 FLOCCULANT SYSTEM
MODULE 2 FLOCCULANT PUMP PU 2118
TK 2811 TK 2814 TAILINGS THICKENER Ø 30.0m
TAILINGS PUMP(S) 6X DO-AH, 90 kW TOH 462m, 1.0 MPa
PU 2110 PU 2111
PU 2119
SPIRALS PRODUCT SUMP & PUMP 108 E-M, 132 kW
PRIM. SPIRALS PRODUCT SUMP & PUMP 108 E-M, 132 kW
PRIM. SPIRALS MIDDLINGS SUMP & PUMP 4X D-AH, 11 kW
SPIRALS REJECT SUMP & PUMP 6X D-AH, 37 kW
SPIRALS AREA FLOOR SUMP & PUMP PU 2116 GV-SP, 11 kW
SECONDARY CLASSIFYING CYCLONES FEED SUMP & PUMP 300 ST-L, 185 kW
PRIMARY CLASSIFYING CYCLONES FEED SUMP & PUMP 400 ST-L, 220 kW
MAGNETITE AREA FLOOR SUMP & PUMP PU 2115 GV-SP, 15 kW
DILUTE MEDIUM SUMP & PUMP 10/8 E-M, 55kW
RECOVERY SCREEN FEED SUMP & PUMP 6X EE-AH, 37 kW
DENSE MEDIUM CYCLONE FEED SUMP & PUMP 12/10 GG-H, 315 kW
FINES AREA FLOOR SUMP & PUMP PU 2114 GV-SP, 11 kW
MAGNETITE PIT & PUMP PU 2116 GV-SP, 15 kW
OVERSIZE MEDIUM SUMP & PUMP 6X D-AH, 37 kW
DENSE MEDIUM HEAD TANK
OVERSIZE MEDIUM HEAD TANK
DB 7208 FLOTATION FEED DISTRIBUTOR
DF 7201 DISC FILTER
COLLECTOR REAGENT PU 7221 PU 7217
FROTHER REAGENT PU 7222 PU 7218
TK 7211 SECONDARY FLOTATION CELL
TK 7212 SECONDARY FLOTATION CELL
TK 7213 PRIMARY FLOTATION CELL
TK 7214 SECONDARY FLOTATION CELL
CH 7221 FROTH LAUNDER
CV 2004 REJECT TRANSFER CONVEYOR
CV 2005 PRODUCT TRANSFER CONVEYOR
FLOTATION AREA FLOOR SUMP & PUMP PU 7204
FROTH SUMP & PUMP
CY 2178 SPIRALS PRODUCT CYCLONES, 4xD20B
CF 2202 PRODUCT CENTRIFUGE FC 1300
CY 2175 SECONDARY CLASSIFYING CYCLONES, 6xD20B
CY 2176 SPIRAL REJECT CYCLONE, 14xD20
SC 2904 FINE REJECT DEWATERING SCREEN 1.8m x3.7m (HF)
CY 2174 PRIM. CLASSIFYING CYCLONE, 6xD20B
CF 2201 DMC PRODUCT CENTRIFUGE VM 1500
SC 2902 DMC PRODUCT SCREEN 3.6m x 6.1m
SC 2903 RECOVERY SCREEN 1.8m x 6.1m
SC 2901 DENSE MEDIUM SCREEN 4.2m x 6.1m
CY 2171 DENSE MEDIUM CYCLONE, T150 dia
MS 2701 MEDIUM SAMPLER
SP 2977 SPIRALS TERT. SEC. SPIRALS 16 STARTS
SP 2977 SPIRALS SEC. SPIRALS 96 STARTS
SP 2501 SPIRALS PRIM. SPIRALS 48 STARTS
SU 2177 PU 2177
SU 2158 PU 2158
SU 2157 PU 2157
SU 2156 PU 2156
SU 2155 PU 2155
SU 2154 PU 2154
SU 2153 PU 2153
SU 2152 PU 2102
SU 2151 PU 2101
SU 2159 PU 2159
SU 7216 PU 7216
BN 2001
FE 2024
CV 2003 PLANT FEED CONVEYOR
PROCESS AIR FROM AR 7202
AB 7202
DESIGNED
DRAWN
CHECKED
APPROVED
ISSUED FOR
AUTHORISED
DATE
NAME HERE
DWG NO
DWG NUMBER HERE
REV
A
RPM GLOBAL


Yarrabee Coal
YARRABEE COAL COMPANY PTY LIMITED
YARRABEE COAL CHPP
350TPH MODULE
PROCESS FLOW DIAGRAM
559-01-001
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
YARRABEE MINE PROCESS FLOW DIAGRAM
Appendix
H-2
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL


CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
STRATFORD COAL PROCESS FLOW DIAGRAM
Appendix
H-3
PROJECT No.
ADV-BR-11018
Date
November 2018
STRATFORD COAL PTY LTD
STRATFORD COAL PREPARATION PLANT
OVERALL PLANT FLOWSHEET
SIZE
A1
DWG. No
F800
REV. H
SCALE
NTS
RPMGLOBAL


Pretreatment
Cleaning
Subsequent Treatment of Products
Product Handling
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
AUSTAR MINE PROCESS FLOW DIAGRAM
Appendix
H-4
PROJECT No.
ADV-BR-11018
Date
November 2018
RPMGLOBAL


SUPPLY & PRETREATMENT OF FEED COAL
CLEAN & SUBSEQUENT TREATMENT OR PRODUCTS
PRODUCT STORAGE & LOADING
BLOOMFIELD CHPP
PRODUCT FLOW SHEET
DRAWING # B11285-1/B
DATE 13/10/11
ROM STOCKPILE
90kt
ROM FEED HOPPER
SIZING FEED HOPPER
ROM SIZING BREAKER
SIZING CRUSHER
BREAKER REJECTS
1000t SURGE BIN
1000t/h
WET SIZING SCREEN
SIZING CRUSHER
DESLIME SCREEN
CLASSIFY CYCLONE
PRIMARY DENSE MEDIA CYCLONE
REJECT DRAIN & RINSE SCREEN
REJECT BIN
273t/h
SPIRALS
CLASSIFY SIEVE BEND
REFLUX CLASSIFIER
FINE COAL CENTRI-FUGE
49t/h 24t/h
LO ASH DRAIN & RINSE SCREEN
HI ASH DRAIN & RINSE SCREEN
LO ASH DRYING CENTRI-FUGE
HI ASH DRYING CENTRI-FUGE
SCREEN-BOWL CENTRI-FUGE
FLOAT-ATION
THICK-ENER
CLARIFI-ER WATER
TAILINGS COLLECT SUMP
TAILINGS DISPOSAL PUMP
90t/h
TAILINGS DAM
TRUCK TIPPER CUT
REVER-SIBLE TRANSFER CONV.
637t/h
TRANSFER CONV.
LO ASH CONV.
HI ASH CONV.
STOCKPILE STACKOUT CONV.
LO ASH STOCKPILE
100kt
HI ASH STOCKPILE
70kt
LO ASH TRUCK BIN
HI ASH TRUCK BIN
TRUCK
TUNNEL CONV.
3890 t/h
OVERLAND TRANSFER CONV.
TRUCK DUMP HOPPER
1500 t/h
TRUCK & LOADER
600t SURGE BIN
TRAIN LOADING CONV.
5000 t/h
TRAIN LOADING HOPPER
TRAIN WAGONS
CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
DONALDSON (BLOOMFIELD) MINE
PROCESS FLOW DIAGRAM
Appendix H-5
PROJECT No. ADV-BR-11018
Date November 2018
RPMGLOBAL


CLIENT
YANCOAL
PROJECT
NAME
COMPETENT PERSON REPORT
DRAWING
MIDDLEMOUNT PROCESS FLOW DIAGRAM
Appendix
H-6
PROJECT No.
ADV-BR-11018
Date
November 2018
middlemount coal
SEDGMAN
AS BUILT
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– END OF REPORT –

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MONGOLIA | RUSSIA | SOUTH AFRICA | TURKEY | USA

A. TAXATION

The following summary of certain Hong Kong and Australian tax consequences of the purchase, ownership and disposition of the Shares is based upon the laws, regulations, rulings and decisions now in effect, all of which are subject to change (possibly with retroactive effect). The summary does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to purchase, own or dispose of the Shares and does not purport to apply to all categories of prospective investors, some of whom may be subject to special rules, and is not intended to be and should not be taken to constitute legal or tax advice. Prospective investors should consult their own tax advisers concerning the application of Hong Kong and Australian tax laws to their particular situation as well as any consequences of the purchase, ownership and disposition of the Shares arising under the laws of any other taxing jurisdiction. Neither the Company nor any of the Relevant Persons assumes any responsibility for any tax consequences or liabilities that may arise from the subscription for, holding or disposal of the Shares.

The taxation of the Company and that of the Shareholders is described below. Where Hong Kong and Australian tax laws are discussed, these are merely an outline of the implications of such laws. Such laws and regulations may be interpreted differently. It should not be assumed that the relevant tax authorities or the Hong Kong or Australian courts will accept or agree with the explanations or conclusions that are set out below.

Investors should note that the following statements are based on advice received by the Company regarding taxation laws, regulations and practice in force as at the date of this prospectus, which may be subject to change.

1. OVERVIEW OF TAX IMPLICATIONS OF HONG KONG

(a) Hong Kong Taxation of the Company

Profits Tax

The Company will be subject to Hong Kong profits tax in respect of profits arising in or derived from Hong Kong at the current rate of 16.5%, unless such profits are chargeable under the half-rate of 8.25% that may apply for the first HK$2 million of assessable profits for years of assessment beginning on or after 1 April 2018. Dividend income derived by the Company from its subsidiaries will be excluded from Hong Kong profits tax.

(b) Hong Kong Taxation of Shareholders

Tax on Dividends

No tax is payable in Hong Kong in respect of dividends paid by the Company.

Profits Tax

Hong Kong profits tax will not be payable by any Shareholders (other than Shareholders carrying on a trade, profession or business in Hong Kong and holding the Shares for trading purposes) on any capital gains made on the sale or other disposal of the Shares. Trading gains from the sale of Shares by persons carrying on a trade, profession or business in Hong Kong where such gains are derived from

or arise in Hong Kong from such trade, profession or business will be chargeable to Hong Kong income tax rates of 16.5% on corporations and 15.0% on individuals, unless such gains are chargeable under the respective half-rates of 8.25% and 7.5% that may apply for the first HK$2 million of assessable profits for years of assessment beginning on or after 1 April 2018. Gains from sales of Shares effected on the Stock Exchange will be considered by the Hong Kong Inland Revenue Department to be derived from or arise in Hong Kong. Shareholders should take advice from their own professional advisers as to their particular tax position.

Stamp Duty

Hong Kong stamp duty will be charged on the sale and purchase of Shares at the current rate of 0.2% of the consideration for, or (if greater) the value of, the Shares being sold or purchased, whether or not the sale or purchase is on or off the Stock Exchange. The Shareholder selling the Shares and the purchaser will each be liable for one-half of the amount of Hong Kong stamp duty payable upon such transfer. In addition, a fixed duty of HK$5 is currently payable on any instrument of transfer of Shares.

Estate Duty

Hong Kong estate duty was abolished effective from 11 February 2006. No Hong Kong estate duty is payable by Shareholders in relation to the Shares owned by them upon death.

2. OVERVIEW OF TAX IMPLICATIONS OF AUSTRALIA

The following section does not constitute financial product advice and is confined to Australian taxation issues only. Taxation is only one of the matters you need to consider when making a decision about your investments. You should consider taking advice from a licensed adviser, before making a decision about your investments.

The following taxation summary is based on the tax laws in Australia in force and the administrative practices of the Australian tax authorities as at the Latest Practicable Date. During the period of ownership of the Shares by investors' the taxation laws of Australia or their interpretation may change (possibly with retroactive effect). Australian tax laws are complex.

This taxation summary is necessarily general in nature and is based on the Australian tax legislation and administrative practice in force as at the date of this booklet. It does not take into account any financial objectives, tax positions or investment needs of investors.

The taxation implications of the Offer will vary depending upon your particular circumstances. It is strongly recommended that you seek your own independent professional tax advice applicable to your particular circumstances. Neither Yancoal nor any of its officers or employees, nor its taxation and other advisers, accepts any liability or responsibility in respect of any statement concerning taxation consequences, or in respect of the taxation consequences.

Overview of the Australian Taxation System

1. Overview of the Australian tax system

Corporate income tax

Companies incorporated in Australia are generally residents of Australia for income tax purposes. Companies not incorporated in Australia may nevertheless be a tax resident for Australian tax purposes if they are carrying on business in Australia with either their central management and control in Australia, or if their voting power is controlled by Australian residents.

An Australian tax resident company is subject to income tax on its worldwide income. A foreign tax resident company is subject to Australian tax only on Australian sourced income.

Resident companies are generally taxed at the Australian company tax rate, which is currently 30%. Small business taxpayers with no more than 80% passive income are taxed at 27.5% (if aggregated annual turnover is under AUD$25 million for the 2017-2018 income year or under A$50 million for the 2018-2019 income year).

Income of non-resident companies from Australian sources is similarly taxable at the current company tax rate if it is not subject to any withholding tax or treaty protection. However, a foreign tax resident company not operating in Australia through a permanent establishment is generally subject to tax only on Australian sourced passive income, such as rent, interest, royalties and dividends. Rent is subject to an assessment, while interest, royalties and dividends are subject to withholding tax. Please see the section below headed 'withholding taxes on dividends'.

Determination of taxable income

Broadly, a company is taxed based on its taxable income. Taxable income is defined as assessable income less deductions. Assessable income includes ordinary income (e.g. income derived from the operations of the business) and statutory income (defined in the tax law as assessable income including capital gains). Non-cash business benefits may be included as income in certain circumstances.

Expenses are allowable deductions to the extent they are incurred in gaining or producing assessable income or are necessarily incurred in carrying on a business for the purpose of gaining or producing assessable income. Expenditure of a capital nature are not immediately deductible, however, most business capital expenditure that is not immediately deductible may be deducted over no more than five years. Expenditure incurred in production of exempt income is not deductible. To the extent that expenditure has both a taxable and non-taxable purpose, it will be apportioned.

Capital gains tax

Australian tax law distinguishes income (revenue) gains and losses from capital gains and losses, in accordance with the legislative provisions, as supported by principles from case law. Broadly, items which are solely capital gains and

capital losses are not assessable or deductible under the ordinary income tax rules. However, the capital gains tax ("CGT" provisions) in the tax law may apply.

For companies, capital gains are taxed at the relevant company income tax rate. The CGT provisions apply to gains and losses from designated CGT events. The list of designated CGT events includes disposal of assets, grants of options and leases, and events arising from the tax consolidation rules.

Capital gains are calculated separately from income tax, by identifying the capital proceeds (money received or receivable, or the market value of property received or receivable) with respect to the CGT event and deducting the relevant cost base. Capital gains are reduced by amounts that are otherwise assessable under the ordinary income tax rules.

Capital losses are deductible only from taxable capital gains. Capital losses are not deductible from ordinary income. However, ordinary or trading losses are deductible from net taxable capital gains.

Depreciation

Australia's capital allowance rules allow a deduction for the decline in value of a "depreciating asset" held during the year.

A "depreciating asset" is defined as an asset with a limited effective life that may be expected to decline in value over the time it is used. Land and trading stock are excluded from the rules and are not considered to be depreciating assets. Certain intangible assets may be included under the rules.

The depreciation rate for a depreciating asset depends on the effective life of the asset. Taxpayers may choose to use either the default effective life determined by the tax authorities or their own reasonable estimate of the effective life. A taxpayer may choose to recalculate the effective life of a depreciating asset if the effective life that was originally selected is no longer accurate as a result of market, technological or other factors.

Taxpayers may choose the prime cost method (straight-line method) or the diminishing value method (200% of the straight-line rate) for calculating the tax-deductible depreciation for all depreciating assets, except intangible assets. For certain intangible assets, the prime cost method must be used. Once a method is chosen, it may not be changed.

For certain intangible assets, taxpayers are not able to re-estimate the effective life of the asset. However, for intangible assets which a taxpayer starts to hold on or after 1 July 2016, companies can choose to either use the effective lives prescribed by legislation or to self-assess the effective life of such assets.

Dividends

Dividends paid by Australian tax resident companies may be franked with an imputation credit to the extent that Australian corporate income tax has been paid by the Company on the income being distributed. Unfranked dividends are dividends paid out of profits which have not been subject to Australian corporate income tax. Anti-avoidance tax rules exist to discourage companies from streaming imputation credits to those shareholders that can make the most use of the credits at the expense of other shareholders.

A company may select its preferred level of franking with reference to its existing and expected franking account surplus and the rate at which it franked earlier distributions. However, under the "benchmark rule", all distributions made by a company within a franking period must generally be franked to the same extent and the maximum franking level cannot exceed 100% of the dividend.

The consequences of receiving a franked dividend vary depending on the nature of the recipient Shareholder. Please see the section below headed "A. Australian tax implications" for further details.

Withholding taxes on dividends

For dividends paid, the withholding tax rate of 30% applies only to the unfranked portion of the dividend. A reduced rate applies if dividends are paid to residents of treaty countries. An exemption from dividend withholding tax applies to the part of the unfranked dividends that is declared in the distribution statement to be conduit foreign income.

Dividends paid to non-residents are subject to Australian withholding tax.

Relief for losses

For companies, tax losses may be carried forward indefinitely, for use against assessable income derived during succeeding years, provided certain loss recoupment tests are satisfied.

To claim a deduction for past losses companies must satisfy either the Continuity of Ownership Test ("COT") or failing that, the Same Business Test ("SBT").

Broadly, the COT is satisfied if the majority of the underlying ownership (i.e. greater than 50% ownership) in the shares, measured by voting, dividend and capital rights of the company is maintained from the start of the income year in which the tax loss was incurred until the end of the income year in which the tax loss is sought to be recouped. For publicly listed companies and other widely held companies, concessional rules exist to ensure simpler compliance in satisfaction of the COT. If the COT is failed, the SBT can be used. To satisfy the SBT, the taxpayer must show that, at all times during the year in which the loss is to be recouped, it carried on the same business and did not derive any income from a business of a kind, and did not derive income from a transaction, that it had not carried on or entered into before the change in ownership.

The 'similar business test' may apply to losses made in the financial year ended 30 June 2016 and future income years (although the legislation introducing this measure is not yet enacted). If both the COT and SBT are failed, the tax loss may not be used in the future.

Thin capitalisation

Thin capitalisation measures apply to the total debt of Australian operations of multinational groups (including foreign and domestic related-party and third-party debt), and may result in a denial of certain debt related deductions after application of transfer pricing measures applicable to related party debt. The prescribed safe harbour debt to assets ratio is 60%.

The thin capitalisation measures apply to the following:

i. Foreign-controlled Australian entities and foreign entities that either invest directly into Australia or operate a business through an Australian branch (inward investing entities); and

ii. Australian entities that control foreign entities or operate a business through an overseas branch (outward investing entities).

Administration

The Australian tax year ends on 30 June although the Commissioner of Taxation has a discretion to allow companies to adopt a substituted accounting period to file tax returns on the basis of a year end other than 30 June where appropriate business circumstances exist.

The Commissioner of Taxation grants a concession to allow tax returns to be filed on the 15th day after the 7th month after which the income year ended. Similarly, this concession is extended to companies which adopt a substituted accounting period.

Under the Pay-As-You-go ("PAYG") instalment system, companies with turnover of AUD$20 million or less continue to make quarterly payments of income tax within 21 days after the end of each quarter of the tax year. The amount of each instalment is based on the income earned in the quarter.

The instalment obligations for larger companies with turnover in excess of AUD$20 million are changed to monthly payments.

GST

Goods and services, tax ("GST") is a broad-based tax of 10% on most goods, services and other items sold or consumed in Australia. Certain goods and services are not subject to GST, being either GST free or input taxed.

Generally, businesses and other organisations registered for GST will:

- Include GST in the price they charge for their goods and services; and

- Generally, claim credits for the GST included in the price of goods and services they acquire for their business, except to the extent that the acquisitions relate to the making of input taxed supplies.

Stamp duty

The main transactions that may be subject to Australian stamp duty are the transfer of property (such as real estate, mining and business assets) and acquisition of interests in entities (such as companies) that directly or indirectly hold interests in real estate (which can include freehold, leasehold, fixtures and mining assets) located in Australia.

The rate of stamp duty varies according to the type and value of the transaction involved.

Depending on the nature of the transaction certain concessions and exemptions may be available.

Key Tax Implications for the Shareholders

A. Australian tax implications

Set out below is a general summary of the Australian income tax implications for Australian tax resident individuals, companies (other than life insurance companies), complying superannuation entities and foreign resident investors that will hold the Shares on capital account.

These comments do not apply to investors that are not residents for Australian income tax purposes, hold the Shares on revenue account or as trading stock (which will generally be the case if you are a bank, insurance company or carry on a business of share trading), investors who are exempt from Australian income tax, or investors subject to the taxation of financial arrangements regime (the "Regime") in Division 230 of the Income Tax Assessment Act 1997 (Cth) and does not cover foreign tax implications of owning the Shares.

The below summary assumes that the Company continues to be an Australian tax resident.

1. Dividends paid on the Shares

Australian individuals and complying superannuation entities

Dividends paid by the Company on a Share should constitute assessable income of an Australian tax resident investor. Australia has an imputation system where the concept of franking broadly represents the net Australian corporate tax paid by the company. When a corporate tax entity makes a distribution to its members, it can impute tax credits to the distribution to alleviate double taxation at the corporate entity level and again when the member receives the distribution. This is called "franking" a distribution. Dividends can, be "franked" to a maximum percentage reflecting the Australian corporate tax rate of 30% for Australian tax purposes. The franking credits attached to a distribution represent the amount of tax already paid by the corporate entity and can be used by the recipients as tax offsets. Where the franking credits attached to the distributions received by individuals or complying superannuation funds exceed their tax liability, they are entitled to a refund of the franking credits.

Australian tax resident investors who are individuals or complying superannuation entities should include the dividend in their assessable income in the year the dividend is paid, together with any franking credit attached to that dividend. Subject to the 45 day rule as discussed further below, such investors should be entitled to a tax offset equal to the franking credit attached to the dividend. The tax offset can be applied to reduce the tax payable on the investor's taxable income. Where the tax offset exceeds the tax payable on the investor's taxable income, investors who are individuals or complying superannuation entities should be entitled to a tax refund equal to the excess.

To the extent that the dividend is unfranked, investors who are individuals will generally be taxed at the prevailing (marginal) rate on the dividend received (with no tax offset) and the complying superannuation entities will be taxed at a concessional rate of 15%.

Australian trusts and partnerships

Australian tax resident investors who are trustees (other than trustees of complying superannuation entities) or partnerships should include the dividend as well as the associated franking credits in the net income of the trust or partnership. The relevant beneficiary or partner may be entitled to a tax offset equal to the beneficiary's or partner's share of the net income of the trust or partnership.

Australian companies

Companies are also required to include both the dividend and the associated franking credits in their assessable income.

Companies are then entitled to a tax offset up to the amount of the franking credit attached to the dividend.

An Australian tax resident company should be entitled to a credit in its own franking account to the extent of the franking credits attached to the dividend received. This will allow the company to pass on the franking credits to its shareholders on the subsequent payment of franked dividends.

Excess franking credits received by Australian tax resident companies will not give rise to a refund entitlement but can be converted into carry forward tax losses instead.

Foreign resident investors

Fully franked dividends received by a foreign resident investor should not be subject to any Australian dividend withholding tax. However, refunds of imputation credits are not available for foreign investors.

Unfranked or partially franked dividends paid to a foreign resident investor should generally be subject to Australian dividend withholding tax to the extent of the unfranked component of the dividend. The rate of the dividend withholding tax (up to 30%) will depend on the country in which the relevant investor is resident. Such investors may be able to claim foreign tax credits for the Australian withholding tax in the jurisdiction in which they are a tax resident, depending on the tax law in the relevant jurisdiction. Investors should seek their own professional tax advice to confirm this.

2. Shares held at risk – availability of franking credits

The benefit of franking credits can be denied where, an investor is not a "qualified person" in which case the amount of the franking credits will not be included in their assessable income and they will not be entitled to a tax offset.

Broadly, to be a "qualified person" two tests must be satisfied, namely the holding period rule and the related payment rule.

Under the holding period rule, an investor is required to hold the Shares at risk for a continuous period of not less than 45 days during the primary qualification period in order to qualify for franking benefits, including franking credits. The primary qualification period is the period commencing the day after the Shares were acquired and ending on the 45th day after the Shares became ex-dividend. This holding period rule is subject to certain exceptions, including where the total franking offsets of an individual in a year of income do not exceed AUD$5,000.

Under the related payment rule, a different testing period applies where the investor has made, or is under an obligation to make, a related payment in relation to the dividend. The related payment rule is applied within the period commencing on the 45th day before, and ending on the 45th day after the day the Shares become ex-dividend.

Investors should seek professional advice to determine if these requirements, as they apply to them, have been satisfied.

There are specific integrity rules that prevent taxpayers from obtaining a tax benefit from additional franking credits where dividends are received as a result of "dividend washing" arrangements. Shareholders should consider the impact of these rules to their own personal circumstances.

3. Disposal of the Shares

Australian tax resident investors

Australian tax resident investors, who hold their Shares on capital amount will be subject to Australian CGT on the disposal of Shares.

An investor, who holds their Shares on capital account, will derive a capital gain on the disposal of the Shares where the capital proceeds received on disposal exceed the CGT cost base of the Shares. The CGT cost base of the Shares in an arm's length transaction is generally the value of the consideration paid to acquire the Shares plus any transaction or incidental costs (e.g. brokerage costs and legal costs).

A CGT discount may be available on the capital gain for Australian tax resident individual investors, trustee investors and investors that are complying superannuation entities, provided the particular Shares are held for at least 12 months prior to sale. Any current year or carried forward capital losses must be used to offset the capital gain first before the CGT discount can be applied. The CGT discount is not available for Australian tax resident companies.

The CGT discount for Australian tax resident individuals and trusts is 50% of the capital gain and for complying superannuation entities is 33⅓% of the capital gain. In relation to trusts, the CGT discount rules are complex, but the discount may flow through to Australian tax resident individuals and complying superannuation fund beneficiaries of the trust.

An Australian tax resident investor will incur a capital loss on the disposal of their Shares to the extent that the capital proceeds on disposal are less than the reduced cost base of the Shares for CGT purposes.

If an Australian tax resident investor derives a net capital gain in a year, this amount is, subject to the comments below, included in the investor's

assessable income. If an Australian tax resident investor incurs a net capital loss in a year, this amount is carried forward and is available to offset against capital gains derived in subsequent years, subject, in some cases, to the investor satisfying certain rules relating to the recoupment of carried forward losses.

Foreign resident investors

A tax liability should only arise in Australia for non-resident Shareholders on capital gains arising on disposal of their Shares if the Shares constitute taxable Australian real property. Broadly, this could be the case if a company is entitled, directly or indirectly (through a non-portfolio shareholding of 10% or more) to any real property situated in Australia (freehold, leasehold, fixtures or other items fixed to land) or mining, quarrying, or prospecting rights, and such landholdings or mining, quarrying or prospecting rights represent 50% or more of the market value of the assets of the company.

The tax rate will depend on the characteristics of the taxpayer.

4. Tax File Number (TFN) and Australian Business Number (ABN)

Australian tax resident investors may, if they choose, notify the Company of their TFN, ABN or a relevant exemption from withholding tax with respect to dividends.

The Company is required to deduct withholding tax from payments of dividends to the extent they are unfranked at the highest marginal rate (currently 47% for the 2017-2018 income year) including the Medicare levy (the progressive income tax levy which partly finances Medicare, Australia's national healthcare scheme), unless a TFN or an ABN has been quoted by the Shareholder, or a relevant exemption applies and has been notified to the Company. Australian tax resident investors may be able to claim a tax credit/rebate (as applicable) in respect of any tax withheld on dividends in their tax returns.

An investor who holds the Shares as part of an enterprise (i.e. carrying on a business of buying and selling shares) may quote its ABN instead of its TFN.

5. Goods and services tax (GST)

The acquisition, buy-back or disposal of the Shares by an Australian tax resident investor (registered for GST) will be an input taxed financial supply, and therefore is not subject to GST. No GST should be payable in respect of dividends paid to investors.

An Australian tax resident investor (registered for GST) may not be entitled to claim full input tax credits in respect of GST on expenses (e.g. lawyers' and accountants' fees) incurred relating to the acquisition, buy-back or disposal of the Shares which are otherwise input taxed supplies.

6. Stamp duty

Where the Company is listed on the ASX or the Stock Exchange and is a landholder in any State or Territory in Australia, no landholder duty should be payable by a Shareholder on the acquisition of the Shares under the Global Offering (i.e. the issuance of Shares by the Company under the Global Offering) if the investors:

- Acquire the Shares after all of the Shares are quoted on ASX or the Stock Exchange; and

- Each investor and any associated persons (or persons acquiring under one arrangement or in concert) do not acquire 90% or more of the interests in the Company or, as a result of the acquisition, hold 90% or more of the interests in the Company.

Further, under current stamp duty legislation, stamp duty should not ordinarily be payable on any subsequent acquisition of Shares by a Shareholder provided the above requirements are met.

Investors should seek their own tax advice as to the impact of stamp duty in their own particular circumstances.

B. REGULATORY OVERVIEW

The following is a brief summary of the laws and regulations in Australia that currently may materially affect the Group and its operations. The principal objective of this summary is to provide potential investors with an overview of the key laws and regulations applicable to the Group. This summary does not purport to be a comprehensive description of all the laws and regulations applicable to the business and operations of the Group and/or which may be important to potential investors. Investors should note that the following summary is based on the laws and regulations in force as at the date of this prospectus, which may be subject to change.

1. REGULATIONS IN RELATION TO THE GROUP'S COAL MINING OPERATIONS

Commonwealth

The following is a brief summary of the Commonwealth laws and regulations which apply to the Group's operations in New South Wales, Queensland and Western Australia (to the extent the Group manages the Premier Coal mine operations on behalf of Yanzhou).

Native Title

Native Title refers to the statutory recognition of the rights and interests of Aboriginal People who have held continuous interests in land under their traditional laws and customs since the colonial settlement of Australia in the 18th and 19th Centuries. Under the *Native Title Act 1993* (Cth) (**NTA**), relevantly:

- any potential invalidity of titles granted prior to 1 January 1994 (and in some cases before 23 December 1996) is remediated, although compensation may be payable in some cases; and

- holders of Native Title rights and Registered Claimants for such rights have procedural rights under the 'future acts' regime. If there is non-compliance with those procedural rights, the titles in question may be invalid to the inconsistency with Native Title rights and interests.

In addition to Commonwealth laws and regulations, each state in Australia also has its own regulatory framework which governs mining in that state. As the Group currently holds interests in New South Wales and Queensland, we have provided a brief summary of the laws and regulations which apply to the Group's operations in New South Wales and Queensland respectively.

Environment protection

Mining operations in Australia are highly regulated by environment protection laws. Environmental protection laws in respect of mining projects are primarily regulated at State and Territory levels, with limited environment protection legislation and involvement of regulators at a Federal level.

Federal environment protection laws

At a Federal level, the key piece of environment protection legislation is the *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)* (**EPBC Act**).

The primary objective of the EPBC Act is to regulate proposals that have the potential to impact matters of 'national environmental significance'. These include world heritage properties, national heritage places, wetlands of international importance, listed threatened species and ecological communities, migratory species, Commonwealth marine areas, nuclear actions (including mining of uranium), and water resources in respect of impacts from coal seams gas and large coal mining development. This is a separate and independent process to the range of approvals required under NSW, Queensland and Western Australian legislation.

The Commonwealth Department of the Environment and Energy (**DoEE**) is the key Federal department supervising environment protection in Australia under the EPBC Act. The DoEE also designs and implements Australian Government policy and programs to protect and conserve the environment, water and heritage.

State environment protection laws: NSW, Queensland and Western Australia

(i) Obtaining material planning and environmental approvals

Both NSW and Queensland Governments have introduced a suite of environment protection laws. Development such as mining activity that has the potential to significantly impact the environment will typically require planning approval and an environment protection license or authorisation.

The approval pathway for mining projects typically require the preparation of detailed environmental assessment, together with public exhibition and opportunities for any person to make submissions objecting or supporting the project.

The relevant consent authority has broad discretionary powers whether to approve or refuse to grant environmental approvals. If approved, the regulator will typically impose a suite of conditions to mitigate and manage the potential environmental impacts of the proposal. Stringent conditions can be imposed in relation to limits on emissions and discharges, and the requirement to provide financial assurances.

Obtaining material and environmental approvals in NSW

In NSW, mining projects (including the assessment, operations and post-closure stages of the mine life cycle) are regulated under the *Environmental Planning and Assessment Act 1979* (NSW) (**EP&A Act**) and the *Mining Act 1992* (NSW). Once a development consent is granted under the EP&A Act, an EPL must be granted in a manner that is consistent with that consent. The NSW Environmental Protection Authority issues EPLs to the occupiers of premises under the Protection of the Environment Operations Act 1997 (**POEO Act**).

Obtaining material and environmental approvals in Queensland

In Queensland, proponent of a mining project may require a Regional Interest Development Approval under the *Regional Planning Interests Act 2014* (Qld). A development permit for project infrastructure under the *Sustainable Planning Act 2009* or associated planning scheme.

In addition, the mining project may need to be declared a 'prescribed project' or a 'coordinated project' under the *State Development and Public Works Organisation Act 1971* (Qld) (**State Development Act**). A prescribed project is usually applied to projects of economic or social significance to Queensland or a regional area. A coordinated project is usually applied for major projects that require complex approval requirements, imposed by a local government, the state or the Commonwealth; or projects that have significant environmental effects; strategic significance to a locality, region or the state, or significant infrastructure requirements.

In Queensland, the *Environmental Protection Act 1994* (Qld) is the central piece of environmental legislation. It regulates activities that are likely to have impacts on the environment, categorised as 'environmentally relevant activities' (ERAs) including mining activities.

Obtaining material and environmental approvals in Western Australia

The *Mining Act 1978* (WA) and *Environmental Protection Act 1986* (WA) are the principle pieces of legislation which regulate the environmental impacts of mining in Western Australia.

The *Mining Act 1978* (WA) requires the proponent of a large scale mining operations to obtain a mining lease before it commences commercial mining production in Western Australia. The application for a mining lease must be accompanied by a Mining Proposal and Mine Closure Plan. The primary objective of the Mining Proposal is to enable the regulator to assess the environmental impact of the proposal. The objective of a Mine Closure Plan is to set out a process so that the mine can be closed, decommissioned and rehabilitated to meet the legal obligations for rehabilitation and closure.

If a Mining Proposal has the potential to have a significant effect on the environment it will be referred to the WA Environmental Protection Authority (WA EPA) and the Minister to decide whether formal environmental assessment is required under Part IV of the *Environmental Protection Act 1986* (WA) (also referred to as a Part IV Approval). Mining Proposals must also be referred to WA EPA if, among other matters, mining is proposed within 2 km of a town site. A large scale mining operation will typically trigger an assessment pathway known as 'Public Environmental Review' (on the basis that the proposal is of State wide significance, substantial assessment is required to determine environmental impacts, where there are a number of significant and complex environmental issues, or where the level of public interest warrants a public review).

The proponent of the mining project will also be required to obtain a Works Approval and an Operating Licence under the *Environmental Protection Act 1986* (WA) to construct and operate prescribed polluting activities on premises.

Obtaining ancillary environmental and planning approvals in NSW, Queensland and Western Australia

Mining operations in NSW, Queensland and Western Australia will also generally require approvals for the supply or storage of water resources. In NSW mining operations usually require water access licences under the *Water Act 1912* (NSW) or the *Water Management Act 2000* (NSW) to authorize the extraction of water. In Queensland, *Water Act 2000 (*Qld) provides a framework for the planning, allocation and use of surface water and groundwater for mining activities. In Western Australia, a groundwater licence is required under the *Rights in Water and Irrigation Act 1914* (WA) to take groundwater.

Other specific environmental approvals may also be needed to authorise actions that may impact on Indigenous and non-Indigenous heritage or protected species, clearing or native vegetation or require the supply or storage of waste, hazardous chemicals and dangerous goods.

Environmental licences and permits are subject to regular review and renewal, and additional conditions and/or operational requirements can be imposed.

(ii) Compliance with environment protection laws

Environment protection laws at a State and Federal level create various environmental offences. There is typically a general environmental duty not to cause environmental harm and a suite of specific pollution type offences.

NSW, Queensland and Western Australia Governments have introduced laws which make directors and persons involved in the management of a corporation deemed liable for offences by their corporations. Whether a regulator will prosecute a director or manager typically turns on the level of control and influence that they had in respect of the incident. There are also specific defenses available to defendants in respect of personal liability for the offence of a body corporate.

(iii) Liability for rehabilitation and financial assurance

Generally, the owner/operator of the mine in NSW, Queensland and Western Australia is legally obliged to rehabilitate the mine on an ongoing basis, and at the end of life of the mine.

This obligation is typically imposed as a condition of planning and environmental approvals and under the mining tenement. Financial security will be required by the State Government to ensure that there are funds available to the Government to carry out rehabilitation if required. State Government regulators have the power to determine the amount of financial security and to enforce that security.

This is an area of law and policy that is currently subject to review in both NSW and Queensland. In Queensland, the Government has introduced new provisions to enable environmental protection orders to be issued to 'related persons'. These provisions provide the Queensland Government with additional tools to ensure that companies and associated parties meet their environmental responsibilities.

In Western Australia, the Mining Act 1978 (WA) requires all tenement holders to contribute an annual levy to the Mining Rehabilitation Fund.

(iv) Key regulators in NSW, Queensland and Western Australia

NSW, Queensland and Western Australia Governments have their own suite of departments supervising environment protection in these jurisdictions.

In NSW, the primary environmental regulator is the Environment Protection Authority which is responsible for issuing, and enforcing compliance with, environment protection licences, investigation and management of pollution incidents (air, water, land and noise) and the clean-up of contamination. The NSW Department of Planning and the Environment is responsible for land use planning and strategic planning policies.

Other Departments which play a key environment protection in NSW include:

- NSW Office of Environment and Heritage – responsible for national parks and protected areas, Aboriginal and non-Aboriginal heritage; and

- NSW Office of Water – responsible for protecting surface water and groundwater resources.

In Queensland, the Department of Environment and Science is the Government's lead agency for the administration and enforcement of the *Environmental Protection Act 1994* (Qld) and the *Water Act 2000* (Qld). The assessment process for coordinated projects under the State Development Act is managed by the Coordinator-General, who sits in the Department of State Development, Manufacturing, Infrastructure and Planning, by way of an environmental impact statement for larger projects or an impact assessment report.

In Western Australia, the Department of Mines and Petroleum regulates the activities under the Mining Act 1978 (WA) including the approval of the Mining Proposal, Mine Closure Plan, and Mining Lease. The Department of Water and Environmental Regulation is the key regulator of prescribed environmental activities and compliance under the Environmental Protection Act 1986 (WA).

In NSW, Queensland and Western Australia, Local Government Councils also have broad powers to impose conditions in planning approvals to protect the environment, and to investigate and enforce compliance with planning approvals and environmental laws.

Mining activities in NSW, Queensland and Western Australia

New South Wales

The following is a brief summary of the laws and regulations in New South Wales which apply to the Group's operations in New South Wales only.

Mining

The *Mining Act 1992* (NSW) (**NSW Mining Act**) is the primary piece of legislation that regulates exploration and development of mineral resources in New South Wales.

Mining Lease/Coal Lease

Part 5 of the NSW Mining Act regulates the extraction of minerals within NSW. A granted mining lease (**NSW ML**) provides the holder with rights to mine particular public or privately owned minerals from land covered by the NSW ML for a specified period. A NSW ML also allows the holder to carry out primary treatment operations for the purpose of separating the mineral from surrounding material and ancillary mining activities. The Minister may grant a NSW ML subject to conditions, including the preparation and acceptance of a mining operations plan and the provision of a rehabilitation bond. The NSW ML process is initiated by the making of a mining lease application (**MLA**) that is assessed by the decision-maker (i.e. the Minister).

A coal lease (**CL**) refers to a mining lease granted under the *Coal Mining Act 1973* (NSW) preceding the NSW Mining Act. A CL operates in the same manner as a NSW ML and is subject to the same conditions and requirements prescribed under the NSW Mining Act.

A NSW ML is granted for a term not exceeding 21 years (except with the Premier's consent). A NSW ML may be renewed by lodging an application for renewal however there is no guarantee that a NSW ML will be renewed or that the area of the land which the NSW ML covers remains the same.

Consolidated Mining Lease

If two or more NSW MLs are held by the same person and relate to adjoining parcels of land, an application can be made to consolidate these interests into a consolidated mining lease (**CML**). The rights conferred by a CML are the same as those contained in the leases the subject of the consolidation. A CML expires at the end of the period determined by the Minister (such period not to extend beyond the first day by which all the existing leases that have been consolidated would, but for the consolidation, have expired). A consolidated coal lease (**CCL**) refers to an interest granted under legislation preceding the NSW Mining Act. CCLs granted under this earlier legislation are now governed by the NSW Mining Act in the same manner as a CML.

Exploration Licences/Authorisations

An exploration licence (**EL**) may be granted over specific land for particular minerals (whether publically or privately owned). The grant of an EL provides its holder with the right to explore for the specified mineral group(s) during the licence term. More extensive exploration and prospecting activities require additional approval prior to commencement. An EL is subject to specified conditions and any conditions the decision-maker may impose. This may include the requirement for security to be lodged in the form of cash, a bank guarantee or bond.

An EL is granted for a term not exceeding 6 years. The owner of privately owned minerals may apply for an exploration (mineral owner) licence. These ELs are granted for a shorter term of 2 years. The holder of an EL may apply for a renewal 2 months before the licence ceases to have effect, however there is no guarantee that an EL will be renewed or that the area of the land which the EL covers remains the same.

The EL process is initiated by the making of an exploration licence application (**ELA**). The decision-maker must then decide whether to grant the EL over all or part of the land over which the licence is sought or refuse the EL. An 'Authorisation' (**AUTH**) refers to an interest granted under the legislation preceding the NSW Mining Act. An AUTH operates in the same way as an EL.

Assessment Lease

Part 4 of the NSW Mining Act sets out the requirements for obtaining an assessment lease (**AL**). An AL is designed to allow retention of rights over an area in which a significant mineral deposit has been identified, if mining the deposit is not commercially viable in the short term but there is a reasonable prospect that it will be in the longer term. The holder is allowed to continue prospecting operations and to recover minerals in the course of assessing the viability of commercial mining. The holder of an assessment lease may apply for a renewal within 2 months before the lease ceases to have effect however there is no guarantee that a AL will be renewed or that the area of the land which the AL covers remains the same.

Land Access Arrangements

Under the NSW Mining Act, a landholder (which includes any party with a registered interest in the land, including mortgagees and lessees) is entitled to compensation for any compensable loss suffered, or likely to be suffered, by that landholder due to the exercise of the rights conferred by a NSW ML, EL or AL on that landholder's land. The holder of an EL or AL may not carry out any prospecting operations on any area of land except in accordance with an access arrangement agreed with the landholders of the land or determined by an arbitrator.

A NSW ML may not be granted over the surface of any land:

(a) within 200 metres of a dwelling house that is the principal place of residence of the person occupying it;

(b) within 50 metres of a garden; or

(c) on which significant improvements are situated,

except with the written consent of the owner of the house, garden or significant improvement.

The holder of an EL or AL may not exercise the rights conferred by that title over the surface of any land:

(a) within 200 metres of a dwelling house that is the principal place of residence of the person occupying it;

(b) within 50 metres of a garden; or

(c) on which significant improvements are situated,

except with the written consent of the owner of the house, garden or significant improvement.

Aboriginal Cultural Heritage

The *National Parks and Wildlife Act 1974* (NSW) provides for (amongst other things) the protection and management of Aboriginal objects and places. It is an offence to harm or desecrate an Aboriginal object or place without an Aboriginal heritage impact permit under the NPW Act.

Mining Royalties

Royalties payable to the State of New South Wales are prescribed under the *Mining Act 1992* (NSW) and the *Mining Regulations 2016* (NSW). The royalties payable in respect of coal are as follows:

(a) 8.2% of the value of coal recovered by open cut mining;

(b) 7.2% of the value of coal recovered by underground mining (underground mining refers to mining (other than deep underground mining) carried out at a mine in which coal is extracted other than by open cut methods); and

(c) 6.2% of the value of coal recovered by deep underground mining (deep underground mining refers to mining carried out at a mine in which coal situated at a depth of 400 metres or more is extracted other than by open cut methods).

Royalties may also be payable with respect to coal reject if the holder of a NSW ML uses the coal reject in producing energy or disposes of it for use in producing energy. The rate of royalty payable in respect of the coal in coal reject may be a zero rate or may be any other rate up to, but not exceeding, half the base rate of the royalties prescribed for coal.

Industrial Relations Legislation

The following industrial relations laws and regulations are applicable to the Group's operations in NSW:

(a) *Fair Work Act 2009* (Cth);

(b) *Fair Work Regulations 2009* (Cth); and

(c) *Coal Mining Industry (Long Service Leave Funding) Act 1992 (Cth).*

Work Health and Safety Legislation

The following work health and safety laws and regulations are applicable to the Group's operations in New South Wales:

(a) *Work Health and Safety Act 2011* (NSW);

(b) *Work Health and Safety Regulation 2017* (NSW);

(c) *Work Health and Safety (Mines and Petroleum Sites) Act 2013* (NSW);

(d) *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014* (NSW);

(e) *Explosives Act 2003* (NSW); and

(f) *Explosives Regulation 2013* (NSW).

In summary, duty-holders must ensure, so far as is practicable, that they are not exposing people to health and safety risks arising from the work at the mine or place of business. Employers must, so far as is practicable, provide and maintain a working environment in which the employees are not exposed to hazards.

Workers Compensation Legislation

The following workers compensation laws and regulations are applicable to the Group's operations in NSW:

(a) *Workers Compensation Act 1987* (NSW);

(b) *Workers Compensation Regulation 2003* (NSW);

(c) *Workplace Injury Management And Workers Compensation Act 1998* (NSW); and

(d) *Coal Industry Act 2001* (NSW).

Queensland

The following is a brief summary of the laws and regulations in Queensland which apply to the Group's operations in Queensland only.

Mining

The *Mineral Resources Act 1989* (QLD) (**MRA**) is the primary piece of legislation that regulates exploration and development of mineral resources in Queensland.

Exploration Permit for Coal/Exploration Permit for Minerals

An Exploration Permit for Coal (**EPC**) is an exploration permit specific to coal, authorising its holder to enter land within the permit area to undertake exploration activities. An Exploration Permit for Minerals (**EPM**) is an exploration permit for all minerals other than coal. An EPC can be granted for up to five years and is renewable (however there is no guarantee that an EPC will be renewed).

An EPC holder will be subject to various obligations throughout the term of the permit, including relinquishment and reporting requirements, and compliance with the MRA and the land access code made under the *Mineral and Energy Resources (Common Provisions) Act* (QLD) 2014 and *Mineral and Energy Resources (Common Provisions) Regulation 2016* (QLD) (**Land Access Code**). During the term of the permit, the holder or any person acting on their behalf will be entitled to carry out any of the activities authorised in the permit. The permit does not entitle its holder to conduct mining activities. A QLD ML will be required to extract and produce any minerals found on site.

Mineral Development Licence

In order to obtain an Mineral Development Licence (**MDL**), a proponent must hold a current EPC over the area. MDLs entitle the holder to carry out the same exploration activities permitted under the EPC from which the MDL is sought, however, the MDL entitles its holder to undertake more detailed exploratory efforts. Similar to an EPC, an MDL holder will be subject to various obligations under the MRA throughout the term of the licence. An MDL can be granted for up to five years and is renewable (however there is no guarantee that a MDL will be renewed).

While the licence does not authorise mining of the MDL area, it does entitle its holder to seek a QLD ML within the MDL area, at the exclusion of all others.

QLD Mining Lease

To extract and produce commercial volumes of coal, a proponent must obtain a Mining Lease (**QLD ML**), granted and administered under Chapters 6 and 7 of the MRA. A QLD ML entitles the holder to enter and remain on the land the subject of the lease for the purpose of mining for and extracting coal. A QLD ML will grant its holder authorisation to access the lease area, which may be land owned by another party. Accordingly, accessing the lease area is subject to further requirements. In particular, compensation must be addressed with the landowner, whether by agreement, or, if an agreement cannot be reached, by a determination of the Queensland Land Court. A QLD ML can be granted for any period, and can be subsequently renewed at the end of the term (however there is no guarantee that a QLD ML will be renewed).

Mining royalties

The holder of a QLD ML must pay to the State of Queensland in respect of all minerals mined under the authority of the QLD ML, the royalty prescribed under the MRA. The MRA and the *Mining Resources Regulation 2013* (Qld) provide that the royalty rate to be paid to the State of Queensland in respect of coal will be:

(a) if the average price per tonne of the coal sold, disposed of or used in the relevant period is A$100 or less, the rate is 7% of the value of coal;

(b) if the average price per tonne of the coal sold, disposed of or used in the relevant period is more than A$100 but not more than A$150, the rate for each tonne of coal worked out using the following formula:

RR = 7 + ((AP – 100)/AP x 5.5),

where RR is the royalty rate and AP is the average price per tonne of the coal sold, disposed or used in the quarterly period; or

(c) if the average price per tonne of the coal sold, disposed of or used in the relevant period is A$150 or more, the rate for each tonne of coal worked out using the following formula:

RR = 7 + ((AP – 100)/AP x 5.5) + ((AP – 150)/AP x 2.5),

where RR is the royalty rate and AP is the average price per tonne of the coal sold, disposed or used in the quarterly period.

The royalty rate must be worked out and applied separately for coal sold, disposed of or used inside the State of Queensland and coal sold, disposed of or used outside the State of Queensland.

Section 8(2)(b) of the MRA provides that property in coal on or below the surface of land vests in the landowner (instead of the Crown) if the land was alienated in fee simple before 1 March 1910 and the grant of that land did not contain a specific reservation to the Crown of the property in the coal.

Section 320(3) of the MRA provides that royalties are payable to the owner of the minerals (being either the Crown or the landowner).

Where royalties are payable to an entity other than the Crown, they must be paid at the above prescribed rate, unless another rate has been agreed under an agreement pre-dating the *Mining Act Amendment Act 1976*.

Aboriginal Cultural Heritage

The *Aboriginal Cultural Heritage Act 2003* (QLD) recognises, protects, and conserves Aboriginal cultural heritage. The act provides that any person who undertakes an activity has a 'Duty of Care' to take all reasonable and practicable measures to ensure that the activity does not harm Aboriginal cultural heritage.

Land Access

Under the *Mineral and Energy Resources (Common Provisions) Act 2014* (QLD) (**MERCP Act**), in order to access private land (i.e. freehold land or an interest in land less than fee simple held from the State of Queensland under another act) underlying an MDL or an EPC, the holder is required to provide a notice of intention to enter the land (**Entry Notice**) and, depending on the level of impact of the exploration activity, enter into a conduct and compensation agreement (**CCA**) with each owner and occupier of the land.

The requirement to enter into a CCA relates to any activities which are likely to have more than a minimal impact on the land or the owner or occupier's business operations.

If the activities will involve no or minimal impact to the land or the owner or occupier's business, the tenement holder is still required to provide an Entry Notice to the owner and occupier, unless the owner and occupier have otherwise agreed to waive that requirement.

If the holder is not able to access the land, there may be implications in terms of compliance with the work program condition. However, if a CCA cannot be reached with the owner and occupier, there is a statutory negotiation process set out in the MERCP Act, with ultimate recourse to the Land Court in the event that agreement cannot be reached.

With respect to public land underlying an MDL or EPC, the MERCP Act provides that a tenement holder cannot access that land to carry out authorised activities unless the activity is an activity that may be carried out by a member of the public without approval, the tenement holder has provided a periodic Entry Notice in accordance with the MERCP Act or the tenement holder has obtained a waiver with respect to providing a periodic Entry Notice.

Under the MRA, landowners are entitled to compensation for the grant or renewal of a QLD ML over their land. A QLD ML cannot be granted or renewed until compensation is determined between the holder of the QLD ML and any relevant landowners, either by agreement or by determination of the Land Court (if compensation can't be agreed between the parties). It is a condition of all QLD MLs that the holders comply with the terms of any agreement or determination.

Restricted land

Queensland's land access laws apply a consistent restricted land framework across all resource authorities. The restricted land framework provides protections to landholders where a tenement holder proposes to undertake authorised activities on or below the surface of restricted land.

Restricted land (with respect to EPCs, MDLs and QLD MLs) is defined in the MERCP Act in two categories, being:

Category A – land within 200 metres of:

(a) a permanent building used mainly as a residence, a childcare centre, hospital or library, for business purposes, for community, sporting or recreational purposes, or as a place of worship; or

(b) an area used for a school, aquaculture, intensive animal feedlotting, pig keeping or poultry farm; and

Category B – land within 50 metres of:

(a) a principal stockyard;

(b) a bore or artesian well;

(c) a dam;

(d) another water storage facility; or

(e) a cemetery or burial place.

In carrying out authorised activities under a tenement, the holder must not enter restricted land without the written consent of each owner and occupier of that land.

In order for a QLD ML to be granted over the surface of restricted land, the applicant for that lease must obtain the written consent of each owner and occupier of that land. There is no obligation for the owner or occupier to agree to the inclusion of restricted land in the QLD ML, giving landholders an effective right of veto to applications for surface rights.

Industrial Relations Legislation

The following industrial relations laws and regulations are applicable to the Group's operations in Queensland:

(a) *Fair Work Act 2009* (Cth);

(b) *Fair Work Regulations 2009* (Cth);

(c) *Industrial Relations Act 2016* (QLD);

(d) *Industrial Relations Regulation 2018* (QLD); and

(e) *Coal Mining Industry (Long Service Leave Funding) Act 1992* (Cth).

Work Health and Safety Legislation

The following work health and safety laws and regulations are applicable to the Group's operations in Queensland:

(a) *Mining and Quarrying Safety and Health Act* 1999 (QLD);

(b) *Mining and Quarrying Safety and Health Regulation* 2017 (QLD);

(c) *Coal Mining Safety and Health Act 1999* (QLD);

(d) *Coal Mining Safety and Health Regulation 2017* (QLD);

(e) *Work Health and Safety Act 2011* (QLD);

(f) *Work Health and Safety Regulation 2011* (QLD);

(g) *Explosives Act 1999* (QLD); and

(h) *Explosives Regulation 2017* (QLD).

Workers Compensation Legislation

The following workers compensation laws and regulations are applicable to the Group's operations in Queensland:

(a) *Workers' Compensation and Rehabilitation Act 2003* (QLD); and

(b) *Workers' Compensation and Rehabilitation Regulation 2014* (QLD).

Western Australia

The following is a brief summary of the laws and regulations in Western Australia which apply to Yanzhou's Premier Coal mine operation in Western Australia, which the Company manages on Yanzhou's behalf.

Mining

The *Mining Act 1978* (WA) (**WA Mining Act**) is the primary piece of legislation that regulates exploration and development of mineral resources in Western Australia. We also understand that the *Collie Coal (Western Collieries) Agreement Act 1979* (WA) applies to the Premier coal mine.

Prospecting Licence

The holder of a prospecting licence (**P**) may excavate, extract, or remove (subject to any conditions imposed under the Mining Act) earth, soil, rock, stone fluid or mineral bearing substances not exceeding 500 tonnes (or larger tonnage approved by the Minister) during the term of the licence. The holder of a P also has a priority entitlement to the grant of a mining lease or a general purpose lease over the land covered by the licence (subject to the WA Mining Act, any conditions to which the P is subject and to the term of the P being in force at the time of the application).

The term of a P is a period of 4 years. In respect of a P which was applied for on or after 10 February 2006, the Minister has discretion to extend the term of the licence for an additional 4 year period if satisfied that a prescribed ground for extension exists, and, in certain circumstances, by a further 4 year period or periods. Once an application for renewal is made and the term of the licence would otherwise expire, the licence shall continue in force until the application is determined. A P which was in force or applied for before 10 February 2006 cannot be extended.

Exploration Licence

An exploration licence (**E**) grants the holder of the licence a right to explore for minerals specified in the grant within the area of the licence. The holder may excavate, extract or remove earth, soil, rock, stone, fluid or mineral bearing substances up to a maximum volume of 1,000 tonnes (or another amount approved by the Minister) during the term of the licence.

Once granted, an E will remain in force for a period of 5 years and may, in prescribed circumstances, at the discretion of the Minister, be extended over whole or part of the E for a further period of 5 years, followed by 2 year periods. An E which was in force or applied for before 10 February 2006 remains in force for a period of 5 years and may, in prescribed circumstances, at the discretion of the Minister, be extended over the whole or part of the E by a further period or periods of one or two years.

At the end of the third and fourth years of the term of an E which was granted or applied for before 10 February 2006, the holder must relinquish an area which constitutes not less than half of the area of the licence as at each relinquishment date. A holder may apply for an exemption from the requirement to relinquish an area of the E. In respect of an E applied for on or after 10 February 2006, the holder must relinquish an area which constitutes not less than 40% of the area of the licence at the end of 5 years and the earlier relinquishments are not required. A holder may apply to the Minister for a deferral of the requirement to relinquish an area of the E for a period of 12 months.

The WA Mining Act confers on the holder of an E which is in force, the right to apply for and, subject to the Mining Act, have granted one or more mining leases over any part of the land the subject of that licence. Once an application for renewal is made and the term of the licence would otherwise expire, the licence shall continue in force until the application is determined.

Mining Lease

A Mining Lease (**M**) authorises the holder of the lease to mine for and dispose of any minerals from the land in respect of which the lease was granted. The holder has exclusive rights to use, occupy and enjoy the land for mining purposes and owns all minerals that are lawfully mined from the land which is the subject of the lease.

An M remains in force for a period of 21 years and may be renewed for successive periods of 21 years with the tenement holder entitled to the first renewal as of right.

An M may only be applied for in instances where the Director of Geological Survey is satisfied that significant mineralisation exists or where a mining proposal has been prepared. “Significant mineralisation” is defined in the WA Mining Act as a deposit of minerals where there is a reasonable prospect of those minerals being obtained by mining operations. A mining proposal is a document which sets out in detail the mining operations proposed to be carried out on the area of the application.

Miscellaneous Licence

A Miscellaneous Licence (**L**) may be granted for various purposes (including, but not limited to, the construction of roads, pipelines and water extraction) provided that they are directly connected with mining operations. Ls may be granted over land which is the subject of an existing mining tenement.

Ls applied for or granted before 10 February 2006 remain in force for 5 years and may be renewed for 2 successive periods not exceeding 5 years, at the discretion of the Minister. Ls applied for or granted on or after 10 February 2006 remain in force for 21 years and can be renewed for one further period of 21 years as of right. Thereafter, on application and at the discretion of the Minister, the licence may be further renewed for successive periods not exceeding 21 years.

General Purpose Lease

A General Purpose Lease (**G**) entitles the holder of the lease to exclusive occupation of the land for one or more of the purposes for which the lease is granted. These purposes include the erecting, placing and operating of machinery in connection with mining operations, the depositing or treating of minerals or tailings obtained from any land in accordance with the WA Mining Act and use of the land for any other specified purpose directly connected with mining operations, all in relation to which the G was granted.

A G can be granted over an area of land not exceeding 10 hectares, unless the Minister is satisfied that more land is needed, and will be limited to the depth stipulated by the lease, or if no depth is stipulated, then a depth of 15 metres below the lowest part of the natural surface of the land.

Gs are granted for a term that coincides with the associated M upon which mining operations are occurring, or, a date that is 21 years from the date upon which the G commenced, whichever is the later. It may be renewed for successive periods of 21 years, with the tenement holder entitled to the first renewal as of right.

Retention Licence

The holder of a P or E granted, or applied for before 10 February 2006, and the holder of an M (whenever granted or applied for) may apply for a Retention Licence (**R**). An R, while it remains in force, authorises the holder to enter the subject land for further exploration for minerals, and to carry on such operations and carry out such works necessary for that purpose including digging pits, trenches and holes, excavating, extracting and removing earth, soil, rock, stone, fluid or mineral bearing substances not exceeding 1,000 tonnes and to take and divert water. The land in respect of which an R is granted must be, in the opinion of the Minister, sufficient to include the land in, on or under which an identified mineral resource is located and also additional land as may be required for future mining operations.

An R remains in force for a term of 5 years and may, at the discretion of the Minister, be renewed for successive periods of up to 5 years. An application for a retention licence must be accompanied by a statutory declaration to the effect that there is an identified mineral resource within the proposed licence area and mining of that resource is for the time being impracticable for either economic or political reasons or because it is required to sustain the future operations of an existing or proposed mining operation.

The holder of a P or E granted or applied for after 10 February 2006 can no longer apply for a retention licence but may apply for "retention status". The "retention status" provisions are similar to the current retention licence provisions but a separate title will not be required. The Minister may approve retention status in respect of parts of the licence if a mineral resource is identified but it is impractical to mine because the resource is not economic at the time but may become so in the future, or the resource is required to sustain an existing or proposed mining operation, or there are existing political, environmental or other difficulties in obtaining requisite approvals. Once retention status has been granted, the holder of a P or E is not required to comply with the prescribed expenditure conditions.

Royalty

Royalties payable to the State of Western Australia are prescribed under the WA Mining Act and the *Mining Regulations 1981* (WA). The royalties payable in respect of coal are as follows:

(a) for coal (including lignite) that is not exported, A$1 per tonne, to be adjusted each year at 30 June in accordance with the percentage increase in the average ex-mine value of Collie coal for the year ending on that date when compared with the corresponding value of Collie coal for the year ending on 30 June 1981; and

(b) for coal that is exported, 7.5% of the royalty value, where royalty value means the gross invoice value of the mineral less any allowable deductions for the mineral.

Subject to the Regulations, royalties for a mineral shall be paid within 30 days after the end of the quarter during which the relevant amount of the mineral was produced or obtained.

Land Access

Under the WA Mining Act, a granted tenement will not give access to the area of that tenement that is 30 metres from the natural surface of private or pastoral lease land and is within a specified distance of certain infrastructure or improvements on that land without the consent of the private land owner and occupier or occupier of the pastoral lease (as applicable). A tenement application can still be granted without that consent but access will be limited to the area that is below a depth of 30 metres from the natural surface of the land in the relevant areas and the tenement register will be endorsed accordingly. The consent is commonly given under the terms of an access agreement whereby the tenement holder also agrees to pay compensation to the owner and/or occupier for losses including damage or disturbance caused to the surface of the land, damage to improvements or loss of earnings.

Industrial Relations

The following industrial relations laws and regulations are applicable to Yanzhou's Premier Coal mine operation in Western Australia, which the Company manages on Yanzhou's behalf:

(a) *Fair Work Act 2009* (Cth);

(b) *Fair Work Regulations 2009* (Cth); and

(c) *Coal Mining Industry (Long Service Leave Funding) Act 1992* (Cth).

Work Health and Safety Legislation

The following work health and safety laws and regulations are applicable to Yanzhou's Premier Coal mine operation in Western Australia, which the Company manages on Yanzhou's behalf:

(a) *Mines Safety and Inspection Act* 1994 (WA);

(b) *Mines Safety and Inspection Regulations* 1995 (WA);

(c) *Occupational Safety and Health Act* 1984 (WA); and

(d) *Occupational Safety and Health Regulations* 1996 (WA).

Workers compensation

The following workers compensation laws and regulations are applicable to Yanzhou's Premier Coal mine operation in Western Australia, which the Company manages on Yanzhou's behalf:

(a) *Workers' Compensation and Injury Management Act 1981* (WA);

(b) *Workers' Compensation and Injury Management Regulations 1982* (WA); and

(c) *Workers' Compensation Code of Practice (Injury Management) 2005* (WA).

Aboriginal Cultural Heritage

The *Aboriginal Heritage Act 1972* (WA) provides for (amongst other things) the preservation of objects and places customarily used by, or traditional to, Aboriginal people. It is an offence to (amongst other things) alter or damage an Aboriginal object or place without the authorisation of the Registrar (in the case of a proposed excavation) or the consent of the Minister (in the case of a proposed use of land by "the owner of any land" as defined in s. 18(1).) The authorisations in question are generally administrative. That is, they are operationally important but are unlikely to have material impact on the value of the asset.

2. REGULATIONS IN RELATION TO FOREIGN INVESTMENT IN AUSTRALIA

Restrictions on the acquisition of Shares under the FATA

The main laws and regulations that regulate foreign investment in Australia are the *Foreign Acquisitions and Takeovers Act 1975* (Cth) (**FATA**), the *Foreign Acquisitions and Takeovers Fees Imposition Act 2015* and the *Foreign Acquisitions and Takeovers Regulation 2015* (**FATR**). Together these rules give the Australian Treasurer (**Treasurer**) the power to review foreign investment proposals that meet certain criteria and to block such proposals that are contrary to the national interest, or apply conditions to the way such proposals are implemented to ensure they are not contrary to the national interest (these proposals are called 'significant actions'). Some significant actions must be notified – failure to do so is an offence under the law (these are called 'notifiable actions'). Other significant actions do not have to be notified, but doing so and obtaining a statement of no objection cuts off the Treasurer's power.

The Foreign Investment Review Board (**FIRB**) is a non-statutory body which provides advice to the Treasurer in connection with foreign investment proposals. The process of notifying a transaction and obtaining a statement of no objection in relation to it is known as obtaining 'FIRB approval'.

Whether an investment is a significant action (including a notifiable action) requiring FIRB approval depends on the background of the investor (particularly whether the investor is a "foreign government investor" (as defined in the FATR) (**Foreign Government Investor**)), the type and value of the asset(s) to be acquired, and the sector in which the investment is to be made.

Whether FIRB approval is required for a foreign investor to acquire an interest in the Company is determined on a case by case basis. It is the responsibility of the investor to determine if it requires FIRB approval before acquiring Offer Shares under the Global Offering, and it is the responsibility of the investor to otherwise ensure that it complies with the FATA in relation to investments in Australian companies or businesses, including the obtaining of any governmental or other consents which may be required, and that it complies with other necessary approval and registration requirements and other formalities.

A "foreign person" (as defined in the FATA) (**Foreign Person**) is required to obtain FIRB approval from the Treasurer to acquire Offer Shares as part of the Global Offering if they are a Foreign Government Investor from the PRC. Due to the operation of association rules under the FATA and the current level of ownership of the Company by Foreign Government Investors from the PRC, any acquisition of Offer Shares by Foreign Government Investors from the PRC will require prior approval by the Treasurer. In addition, a Foreign Person is required to obtain prior approval from the Treasurer to acquire Offer Shares as part of the Global Offering if they are a Foreign Government Investor from a country other than the PRC and they are acquiring 10% or more of the Shares of the Company as part of the Global Offering. These approvals are 'notifiable actions' – that is, failure to notify is an offence under the law.

This is not necessarily an exhaustive description of the circumstances in which an acquisition of Offer Shares as part of the Global Offering will require FIRB approval. Investors should seek independent legal advice prior to making an acquisition of Offer Shares as part of the Global Offering.

If FIRB approval for an acquisition of Offer Shares under the Global Offering was required, but was not obtained, the Treasurer may, among other things, direct the disposal of the acquired Shares, restrain the exercise of rights attached to the acquired Shares, or prohibit or defer the payment of any sums due in respect of the acquired Shares.

FIRB Approval for certain Foreign Government Investors from PRC

In order to facilitate the participation by certain Foreign Government Investors from the PRC in the Global Offering, the Company has made an application for FIRB Approval on their behalf. This application only covers Foreign Government Investors from the PRC who have been advised of that by the Company and who have also provided a written consent to the Company to have the application for FIRB Approval made on their behalf.

Any allocation of Shares under the Global Offering to the Foreign Government Investors from the PRC referred to above will be conditional upon receipt of FIRB Approval.

The Company expects that the Treasurer may impose "standard tax conditions" as a requirement of his approval of that investment into Offer Shares under the Global Offering. The standard tax conditions can be found at Attachment B of FIRB's guidance note 47 (https://cdn.tspace.gov.au/uploads/sites/79/2016/11/GN47-tax-conditions.pdf).

The standard tax conditions do not change the amount of tax that would otherwise apply. Instead, they require applicants and their controlled groups to abide by Australian tax laws (including co-operating with tax authorities and paying tax debts (if any) on time) and to report to FIRB within 60 days of a change in their Shareholdings in the Company.

Under the standard tax conditions, applicants must also provide a simple annual report to FIRB confirming their compliance with the conditions. Each report must be provided by the due date for lodgement of the applicant's tax return for that year.

Investors should seek independent taxation advice prior to making an acquisition of Offer Shares as part of the Global Offering in order to ascertain whether they may have any Australian taxation obligations arising from their acquisition, ownership or disposal of Offer Shares. As noted above, the standard tax conditions do not change the amount of tax that would otherwise apply.

Investment restrictions on the Company under the FATA

Due to the identity of the Company's major shareholders, the Company is currently considered to be a Foreign Person and Foreign Government Investor for the purposes of the FATA. The Company will remain a Foreign Person and Foreign Government Investor following the Global Offering, regardless of what percentage of the Offer Shares are issued to other Foreign Persons or Foreign Government Investors.

As a Foreign Person and Foreign Government Investor, certain further investments in Australia by the Company may be subject to review and prior approval by the Treasurer, which may or may not be given or may be given only subject to conditions that the Company may need to comply with. If such approval is required and not obtained in relation to an investment, the Company will not be able to proceed with that investment.

This Appendix contains a summary of the Constitution of the Company. As the information set out below is in summary form, it does not contain all of the information that may be important to potential investors.

Set out below is a summary of certain provisions of the Constitution of the Company and of certain aspects of the Australia Corporations Act.

GENERAL

The Company was incorporated in Victoria, Australia with limited liability on 18 November 2004 under the Australia Corporations Act. The Company was listed on the ASX on 28 June 2012.

The rights attaching to shares in the Company are detailed in the Constitution, the Australia Corporations Act, the ASX Listing Rules and general law. Set out below is a summary of some material provisions of the Constitution concerning the Company's share capital. A copy of the Constitution is available on the Company's website.

SHARE CAPITAL

The issued share capital of the Company as at the Latest Practicable Date is 1,256,071,756 Shares. The Shares have no nominal or par value (such concept does not exist under Australian law) and are recorded in the accounts of the Company at their issue price.

The Company does not have an authorised share capital, as such term is understood in Hong Kong, that sets the limit to the number of shares a company can issue. There is generally no limit in the Australia Corporations Act on the power of the Directors to issue shares. However, subject to certain exceptions (including those in respect of pro rata issues and issues under employee schemes):

- Rule 7.1 of the ASX Listing Rules prohibits a company which is listed on the ASX from issuing shares or options representing more than 15% of its issued capital in any rolling twelve month period without shareholder approval. Such shareholder approval requires an ordinary resolution passed by a simple majority; and

- Chapter 6 of the Australia Corporations Act forbids the acquisition of a "relevant interest" in voting shares in the Company (whether by transfer or issue) if, as a result, the "voting power" of the acquirer (or any other person) would increase from 20% or below to more than 20%, or from a starting point that is above 20% and below 90%.

There is no similar statutory requirement under Australian law, as is found under Hong Kong law, providing that Shareholders have a right to be offered any Shares in the Company which are being newly issued for cash before the same can be offered to new Shareholders. Consequently, there is no requirement for Shareholders in general meetings to provide a waiver to this obligation.

Subject to the ASX Listing Rules, the Company, in accordance with the Australia Corporations Act, may by ordinary resolution:

- consolidate and divide all or any of its Shares into shares of larger amount than its existing Shares; and
- sub-divide all or any of its shares into Shares of smaller amount.

Subject to the Australia Corporations Act, the Company may reduce its share capital in any way.

Subject to the Australia Corporations Act and the ASX Listing Rules, the Company may buy back its own shares on such terms and at such times as may be determined by the Directors from time to time. Subject to the Australia Corporations Act, the Company may give financial assistance to any person for the purchase of its own shares on such terms and at such times as may be determined by the Directors from time to time.

The Directors are not required to hold any Shares in the Company.

Save as disclosed in this prospectus:

- no Share of the Company has been issued or is now proposed to be issued, fully or partly paid, either for cash or for a consideration other than cash;
- no Share of the Company is subject to an option granted or created by the Company or is agreed conditionally or unconditionally to be put under an option granted or created by the Company;
- no commission, discount, brokerage or other special term has been granted by the Company or is now proposed in connection with the issue or sale of any part of the share capital of the Company;
- no founder, management or deferred shares have been issued by the Company; and
- no amount or benefit has been paid or is to be paid or given to any promoter of the Company.

SUMMARY OF KEY AUSTRALIAN CORPORATE LAWS

The Constitution of the Company, was adopted by a special resolution dated 30 May 2014. The following is a summary of some key issues arising from the Australia Corporations Act, the ASX Listing Rules and the Constitution.

Objects

The Company does not have an objects clause in its constitution because an Australian company, unlike companies incorporated under the laws of Hong Kong, is not required to have an objects clause. Pursuant to section 124 of the Australia Corporations Act, the Company has the legal capacity and powers of an individual and all powers of a body corporate.

Voting rights

Each Shareholder entitled to vote may vote in person or by proxy, attorney or representative of a body corporate. On a show of hands every person present who is a Shareholder or a proxy, attorney or representative of a Shareholder has one vote and on a poll every person present who is a Shareholder or proxy, attorney or representative of a Shareholder shall in respect of each fully paid share held by him have one vote per share but in respect of partly paid shares shall have such number of votes being equivalent to the proportion paid up on those shares.

Dividends

Section 254T of the Australia Corporations Act restricts the Company from paying a dividend unless (1) the Company's assets exceed its liabilities immediately before the dividend is declared and the excess is sufficient for the payment of the dividend; (2) the payment of the dividend is fair and reasonable to the Company's shareholders as a whole; and (3) the payment of the dividend does not materially prejudice the company's ability to pay its creditors.

Subject to the Australia Corporations Act, the ongoing cash needs of the business, the statutory and common law duties of the Directors and the Shareholders' rights under Article 7.10 of the Constitution, the Directors may pay interim and/or final dividends not less than 40% of net profit after tax (pre-Abnormal Items) in each financial year. However, if the directors determine that it is necessary in order to prudently manage the company's financial position, they must pay as interim and/or final dividends not less than 25% of net profit after tax (pre-Abnormal Items) in any given financial year. According to Article 7.10(b)(5) of the Constitution, the majority of Shareholders must approve the payment of a dividend (including the amount and date of payment).

The Directors may rescind a decision to pay a dividend if they decide, before the payment date, that the Company's financial position no longer justifies the payment.

The Directors, when paying or declaring a dividend, may direct payment of the dividend from any available source permitted by law, including wholly or partly by distribution of specific assets, including fully-paid shares in the Company and any other corporation.

The Directors may determine the method of payment of any dividend or other amount in respect of a share. Different methods of payment may apply to different Shareholders.

All dividends declared but unclaimed for at least 11 calendar months may be invested by the Directors as they think fit for the benefit of the Company until claimed. The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the requirement of paragraph 3(2) of Appendix 3 of the Listing Rules which requires that where there is a power to forfeit unclaimed dividends, that power shall not be exercised until six years or more after the date of declaration of the dividend, subject to the Directors agreeing that it would not exercise any of the rights under the provision of Rule 4.(o) of the Constitution until at least six years after the date of the declaration.

Under Australian law, a company is able to pay dividends out of current year profits even though it has accumulated losses, and there is no restriction in the Constitution that would prevent current year profits from being paid out as dividends in this way. Accordingly, the Company's accumulated losses do not prevent it from being able to pay dividends, provided that current year profits are not used to offset prior period losses and the Company is otherwise able to satisfy the other legal requirements of paying a dividend under Australian law.

Distribution of assets on a winding-up

On winding up, the liquidators of the Company may divide by sanction of special resolution among the Shareholders in kind the whole or any part of the property of the Company and may determine how the division is to be carried out as between the Shareholders or different classes of Shareholders according to their rights and interests in the Company.

Transfer of shares

The transfer document of any shares must be in writing in any usual form or in any other form which the Directors may approve or in such form as is required under the ASX Settlement Operating Rules. As set out in the Constitution, the Directors may refuse to register a transfer of Shares in accordance with the Australia Corporations Act and the ASX Listing Rules.

Variation of rights

If at any time the share capital of the Company is divided into different classes of shares, the rights attached to any class may, whether or not the Company is being wound up, be varied or abrogated in any way with the consent in writing of the holders of three quarters of the issued shares of that class, or with the sanction of a special resolution passed at a separate meeting of the holders of the shares of that class.

The rights conferred on the holders of the shares of any class are deemed not to be varied by the creation or issue of further shares ranking equally with the first-mentioned shares.

Borrowing powers

The Directors may exercise all the powers of the Company to borrow money, to charge any property or business of the Company or all or any of its uncalled capital and to issue debentures or give any other security for a debt, liability or obligation of the Company or of any other person.

Article 7.10(b)(14) of the Constitution requires that a majority of shareholders approve any borrowing by the Company which is (1) more than the value of 20% of the net assets of the consolidated group; or (2) causes the company to have a gearing (net debt/total assets) above 60%.

Issue of shares

Without prejudice to any special rights previously conferred on the holders of any existing shares or class of shares but subject to the Australia Corporations Act and the ASX Listing Rules, shares are under the control of the Directors who may issue all or any of the same to such persons at such times and on such terms and conditions and having attached to them such preferred, deferred or other special rights or such restrictions, as the Directors think fit.

Pre-emptive rights on new issues of shares

Under the Australia Corporations Act, Shareholders do not have the right to be offered any Shares which are newly issued for cash before those Shares can be offered to non-Shareholders.

Non marketable Parcels

In certain circumstances the Company may sell unmarketable parcels of shares held by Shareholders (i.e. those that have a value of less than A$500) ("**Non marketable Parcels**"). This is consistent with, and subject to, the ASX Listing Rules and the Australia Corporations Act.

The Constitution provides that the power of the Company to sell Non marketable Parcels may be invoked only once in any 12 month period.

The Company cannot require a Shareholder to sell a Non marketable Parcel. All Shareholders holding a Non marketable Parcel will be given an opportunity to request that it retain its Non marketable Parcel. The ASX Listing Rules also contain a number of safeguards that protect the holders of Non marketable Parcels including:

- the Company may only seek to sell any Non marketable Parcels once in any 12 month period;
- the Company must notify the relevant Shareholder of its intention to sell the Non marketable Parcel;
- the Shareholder must be given at least a six week notice period from the date that the notice is sent in which to tell the Company that it wishes to retain its Non marketable Parcel, and if the Shareholder does so inform the Company, the Non marketable Parcel will not be sold;
- the sale of the Non marketable Parcel must stop following the announcement of any takeover bid for the Company but may be started again after the close of offers made under the takeover bid;
- only the Unmarketable Parcels held by Shareholders who do not respond in writing to the Company during the notice period or who expressly state that they want their Unmarketable Parcel sold, may be sold by the Company; and
- the Company must pay the costs of the sale.

Remuneration of Directors

Each Director is entitled to such remuneration from the Company for their service as approved by Shareholders. The total amount provided to all Directors for their services as directors must not exceed the aggregate in any financial year the amount fixed by the Company.

As at the Latest Practicable Date, the aggregate remuneration cap for all non-executive Directors is A$3,500,000 per annum. Consistent with the Constitution, the remuneration payable to each non-executive Director has been approved by the company's majority Shareholder Yanzhou.

If a Director, with the concurrence of the Directors, performs extra services or makes any special exertions for the benefit of the Company, that Director may be paid out of the funds of the company such special and additional remuneration as the Directors decide is appropriate having regard to the value to the Company of the extra services or special exertions. However, the remuneration of a Director (who is not an executive Director) must not include a commission on, or a percentage of, profits or operating revenue.

Indemnity

To the extent permitted by the Australia Corporations Act, the Company must indemnify every person who is or has been an Director, alternate director or senior executive officer of the Company and to such any other officer or former officer of the Company or of its related bodies corporate that the Directors in each case determine (each, an "**Officer**"). The Company must indemnify each Officer on a full indemnity basis and to the full extent permitted by law against all losses, liabilities, costs, charges and expenses incurred by the Officer as a director or an officer of the Company.

Pensions and benefits for former Directors

The Directors may at any time after a Director dies or ceases to hold office as a Director for any other reason, pay or provide to the Director or a legal personal representative, spouse, relative or dependant of the Director, a pension or benefit for past services rendered by that director.

Directors' interests in contracts

Article 8.5(h) of the Constitution provides that a director who has an interest in a matter that is being considered at a meeting of directors may, despite that interest, vote, be present and be counted in a quorum at the meeting, unless that is prohibited by the Australia Corporations Act. No act, transaction, agreement, instrument, resolution or other thing is invalid or voidable only because a director fails to comply with that prohibition. The Australia Corporations Act prescribes the circumstances where a director who has a material personal interest may be present at a board meeting and may vote on the relevant resolution. These exceptions are generally similar to the exceptions permitted by the Stock Exchange in Note 1 to Appendix 3 of the Listing Rules.

A Director is not disqualified from contracting or entering into an arrangement with the Company as vendor, purchaser or in another capacity, merely because the Director holds office as a director or because of the fiduciary obligations arising from that office.

The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the requirement of paragraph 4(1) of Appendix 3 to the Listing Rules which provides that subject to the exceptions specified in the articles of association as the Stock Exchange may approve, a director shall not vote on any board resolution approving any contract or arrangement or any other proposal in which he or any of his close associates has a material interest nor shall he be counted in the quorum present at the meeting, on the basis that the exceptions set out in the Australia Corporations Act are generally similar to those set out in Note 1 to Appendix 3 of the Listing Rules.

Restrictions on Directors' voting

A Director who has a material personal interest in a matter that is being considered at a meeting of Directors will only be excluded or prohibited from voting on the matter, being counted in a quorum for the purposes of the meeting or being present while the matter is being considered, if the Director is so prohibited or excluded under the Australia Corporations Act. The ASX Listing Rules also contain restrictions on Directors voting in certain circumstances.

Number of Directors

The number of directors must be such number not less than four and not more than eleven unless the Company resolves otherwise in a general meeting. All Directors shall be natural persons. At least two Directors must be persons who ordinarily reside within Australia.

A director is not required to hold any shares in the Company.

Directors' appointment and retirement by rotation

No Director may hold office without re-election beyond the third annual general meeting following the meeting at which the director was last elected or re-elected. The Directors to retire at any annual general meeting must be those who have been longest in office since their last election, but, as between persons who became directors on the same day, those to retire must (unless they otherwise agree among themselves) be determined by lot. A retiring Director is eligible for re-election.

General meetings

In accordance with the Australia Corporations Act, the Company must hold an annual general meeting at least once every calendar year, and within the period of 5 months after the end of the financial year, at such time and place as determined by the Directors.

A general meeting of the Company may also be convened by:

- the Directors, at any time they think fit; and
- Shareholder(s) holding at least 5% of the total votes (the Shareholder(s) must pay the expenses of calling and holding the meeting, except where the Shareholder(s) request the Directors to convene the meeting in accordance with the next paragraph).
- The Directors must also convene a general meeting on the request of Shareholder(s) entitled to at least 5% of the total voting rights of all Shareholders.

If the Directors do not convene a general meeting within 21 days of being requisitioned to do so, the Shareholder(s) representing more than 50% of the votes of all the Shareholders who requested the meeting may convene a meeting. The meeting must then be held within three months of the request being given to the Company. The Company must repay the requisitioning Shareholders any reasonable expenses incurred by them by reason of the failure of the Directors to convene a meeting. The Company may recover the amount of expenses from the Directors.

At least 28 days' notice must be given to the Shareholders of a general meeting.

In accordance with the Australia Corporations Act, while the Company has a financial year ending 31 December, the annual general meeting of the Company will be held by the end of May of each year.

Election of directors

Article 8.1(i) of the Constitution provides that notices of intention to propose a person for election as a director (and the candidate's consent to be elected) may be lodged with the Company at least 35 business days (as defined in ASX Listing Rules) but no earlier than 90 business days before a general meeting at which the candidate seeks election.

Written notice of each annual general meeting will be given to all of the Company's shareholders (including those who are Hong Kong residents) at least 28 days prior to the annual general meeting. The notice of meeting will contain particulars of the proposed election of directors, including details of each candidate that has been nominated for election.

The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the requirements of paragraphs 4(4) and 4(5) of Appendix 3 of the Listing Rules which set out the minimum length of the period during which notice to the issuer of the intention to propose a person for election as a director and during which notice to the issuer by such person of his willingness to be elected may be given, on the basis that the Company has complied with the requirement of ASX Listing Rule 14.3 and the effect of the existing provision provides adequate protection to Shareholders.

Appointment of certain positions

The Constitution provides that a shareholder or shareholders holding a majority of the issued voting shares of the Company (the "**Majority Shareholders**") may by writing to the Company (1) nominate a Director to the office of Chairperson of the Directors and (2) elect one or more Directors to the office of Vice Chairperson of Directors.

The Vice Chairperson will be appointed by the Board to be the Chair of the Executive Committee.

Disclosure of shareholding

The Australia Corporations Act requires that a Shareholder with a voting power of 5% or more of the Shares must give a prescribed notice to the Company and ASX of the fact, and that Shareholder must continue to give a prescribed notice if there is a movement of at least 1% in their holding (up or down).

Classes of shares

A company may have only one class of ordinary shares unless the ASX approves the terms of an additional class. The Company has only one class of ordinary shares.

The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the requirement of paragraphs 10(1) and (2) of Appendix 3 of the Listing Rules to provide in the Constitution that where the share capital includes shares which do not carry voting rights or carry different voting rights, the words "non-voting" or "restricted voting" or "limited voting" must appear in the designation of such shares, on the basis that if the Company were to issue any such shares, it would include such words on the relevant share certificates.

Reductions of capital

An ordinary resolution of Shareholders is required for an equal reduction of capital. A reduction of capital is an equal reduction of capital if:

- it relates only to ordinary shares;
- it applies to each holder of ordinary shares in proportion to the number of ordinary shares he/she holds; and
- the terms of the reduction are the same for each holder of ordinary shares.

Any other reduction of capital is a selective reduction. A selective reduction must be approved by either:

- A special resolution of Shareholders (excluding the votes of any person who is to received consideration as part of the reduction or whose liability to pay amounts unpaid on shares is to be reduced); or
- A resolution passed by all ordinary Shareholders.

Redeemable shares

The Company may issue preference shares in accordance with the Australia Corporations Act and the Constitution. A company may only redeem redeemable preference shares on the terms on which they were issued. A company may only redeem redeemable preference shares if the shares are fully paid-up and out of profits or the proceeds of a new issue of shares made for the purpose of redemption.

The Company does not currently have any preference shares on issue.

Share repurchases

Share repurchases must be authorised by the Company in a general meeting or by a special resolution, subject to limited exceptions. An exception applies where the proposed repurchase would not exceed 10% of the smallest number, at any time during the previous 12 months, of voting shares in the Company.

Financial assistance

Financial assistance for the acquisition of a company's own shares is generally prohibited, except with shareholder approval by special resolution (excluding the votes of any person acquiring the shares) or approval by all ordinary shareholders, or where an exception applies. The principal exception is where the assistance does not materially prejudice:

- the interests of the company or its shareholders; or
- the company's ability to pay its creditors.

Statutory derivative actions

A Shareholder or an officer (or a former Shareholder or officer) of the Company may bring proceedings on behalf of the Company where leave is granted by the Court. The Court must grant leave if it is satisfied that:

- it is probable that the Company will not itself bring the proceedings;
- the applicant is acting in good faith;
- it is in the best interests of the Company that the applicant be granted leave;
- there is a serious question to be tried; and
- at least 14 days written notice has been given to the Company of the intention to apply for leave (or it is appropriate to grant leave despite the notice requirement not being satisfied).

Protection of minorities

A Shareholder may apply for a court order where the conduct of the Company's affairs is, among other things, oppressive to, unfairly prejudicial to, or unfairly discriminatory against, a Shareholder or Shareholders. The orders that may be sought include winding up, amendment to the Constitution, orders regulating the conduct of the Company's affairs, orders for the purchase of shares, orders that the Company institute, defend or discontinue specified proceedings, and other similar orders.

Disposal of assets

The Australia Corporations Act contains no specific restrictions on the powers of directors to dispose of the assets of a company. However, in the exercise of those powers, the Directors must discharge their duties of care to act in good faith, for a proper purpose and in the best interests of the company as required under the director duties in Chapter 2D of the Australia Corporations Act and fiduciary obligations under general law in Australia.

The Company cannot give a financial benefit to a related party of the Company without Shareholder approval, unless one of the exceptions specified in Part 2E of the Australia Corporations Act applies. A related party includes a director or a person or entity related to a director.

Under ASX Listing Rule 11.1, if the Company proposes to make a significant change to the nature or scale of its activities, the Company must comply with the requirements of the ASX, which are likely to include Shareholder approval, and may require the Company to recomply with the requirements for admission to the official list of the ASX.

Under ASX Listing Rule 10.1, the Company cannot acquire a "substantial asset" from, or dispose of a "substantial asset" including to, a director or an entity holding 10% or more of the Company's issued voting securities (or their respective associates) without shareholder approval. For this purpose, a "substantial asset" is an asset valued at 5% or more of the equity interests of the Company.

Accounting and auditing requirements

An Australian public company that is listed on the ASX, such as the Company, must prepare half yearly and annual financial statements which must be audited. The annual financial statements and the auditors' report must also be laid before the annual general meeting of Shareholders.

Financial and other reports

Under the Australia Corporations Act, the Company must send to its shareholders the financial report for the year, the directors' report and the auditors' report or (if the shareholder elects) a concise report for the year by the earlier of 21 days before the next annual general meeting after the end of the financial year or 4 months after the end of the financial year.

The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the requirement of paragraph 5 of Appendix 3 of the Listing Rules which provides that the articles of association should contain provisions relating to the sending of financial and other reports to shareholders, on the basis that the provision of such reports is governed by the Australia Corporations Act.

Register of members

The Company must keep a register of its members in an up-to-date index form which sets out the member's name, address and date on which their name was entered into the register.

Inspection of books and records

A Shareholder who is not a Director or company secretary does not have the right to inspect any of the Company's papers, books, records or documents, except as provided by law, the Constitution, or as authorised by the Directors or the Majority Shareholders.

On application by a Shareholder, an Australian court may make an order:

- authorising the applicant to inspect books of the Company; or
- authorising another person to inspect books of the Company on the applicant's behalf.

Special resolutions

The Australia Corporations Act provides that a resolution is a special resolution when it has been passed by a majority of not less than 75% of the votes cast by members entitled to vote on the resolution.

Subsidiary owning shares in parent

The Australia Corporations Act does not permit a company to hold shares in its parent company.

Reconstructions

There are statutory provisions which facilitate reconstructions and amalgamations approved by:

- a majority in number of the members present and voting; and
- 75% of the votes cast on the resolution.

The transaction must also be approved by order of an Australia court.

Winding Up

A company may be wound up either by an order of the court or by a special resolution of its members.

TAKEOVER REGULATION

The takeover provisions in Chapter 6 of the Australia Corporations Act apply to dealings in the Shares. These provisions apply to listed companies and unlisted companies with more than 50 members. This is a summary of a complex area of law and the Company recommends that all Shareholders take their own advice on their compliance with this law.

The Australia Corporations Act forbids the acquisition of a "relevant interest" (described below) in the voting shares in a company incorporated in Australia if, as a result, the "voting power" of the acquirer (or any other person) would increase from 20% or below to more than 20%. Similarly, such an acquisition is forbidden if any person who already has more than 20%, but less than 90%, of the voting power increases their voting power in the target company. However, it is not mandatory for a person who already exceeds these thresholds to make a takeover bid for all Shares. This restriction is referred to as the "**Takeovers Threshold**".

In this context, a person's "voting power" means the aggregate percentage of the Company's shares that the person and their "associates" hold a "relevant interest" in.

What is a "relevant interest"?

The concept of a "relevant interest" under the Australia Corporations Act is concerned with a person's capacity to exercise a degree of influence over securities and the concept extends more broadly than direct ownership. A person will have a "relevant interest" in voting shares of a company where they are the registered holder of shares, have the power to exercise (or control the exercise of) the voting rights of shares, or have the power to dispose of (or control over disposal of) shares. Any person who acquires Shares in the Global Offering will get a relevant interest in those Shares.

Importantly, a person can also be deemed to have a "relevant interest" in voting shares through control of other entities. A person will be deemed to have a relevant interest in any securities held by a body corporate in which the person's voting power is above 20%. In the Company's case, this means that Yanzhou is deemed to hold a relevant interest in any securities in which Yancoal holds a relevant interest.

What is an "associate"?

A person ("**Person A**") will be an associate of a second person ("**Person B**") in one of three situations:

- (**Control Test**) Person A is a body corporate and Person B is:
  - a body corporate that is "controlled" by Person A; or
  - a body corporate that "controls" Person A; or
  - a body corporate that is "controlled" by an entity that "controls" Person A;

  The concept of "control" means one entity's capacity to determine the outcome of decisions about a second entity's financial and operating policies.
- (**Relevant Agreement Test**) Person A and Person B have a "relevant agreement" for the purpose of controlling or influencing the composition of the Company's Board or the conduct of the Company business affairs; or
- (**Acting in Concert Test**) Person A and Person B are acting in concert in relation to the Company's business affairs.

It is important to bear in mind that in calculating a person's voting power, the relevant interest that they hold must be aggregated with the relevant interest held by their associates. Accordingly, if, as a result of an acquisition of Shares by Person B, Person A would experience an increase in their voting power that breached the Takeovers Threshold, that acquisition cannot happen, other than under an exception to the Takeovers Threshold.

Are there any exceptions to the Takeovers Threshold?

There are several exceptions which allow acquisitions which would otherwise be prohibited from taking place. These exceptions include acquisitions:

- under a formal takeover offer in which all Shareholders can participate;
- that result from an issue of securities under a "rights issue";
- with the approval of the Shareholders given at a general meeting of the Company; and
- in 3% increments every six months (provided that the acquirer has had voting power of at least 19% in the target company for at least six months).

A person who has made a takeover bid where at the end of the offer period that person (and its associates) have a relevant interest in 90% of the issued shares and acquired 75% (by number) of shares held by other shareholders, may compulsorily acquire any remaining shares it does not hold at the same price offered under the bid, within one month after the end of the offer period. Even if a takeover bid has not been made, a person who otherwise lawfully acquires a relevant interest in 90% of the issued shares is able to acquire the remaining shares for fair value (confirmed by an independent expert), within six months after the person first acquires an interest in 90% of the issued shares.

There have not been any public takeover bids in respect of the Shares during the current or previous financial year.

OTHER APPLICABLE OWNERSHIP RESTRICTIONS IN THE SHARES

Under the Australian *Foreign Acquisition and Takeovers Act 1975* (Cth), subject to certain exemptions, a non-Australian foreign person or entity cannot acquire a substantial interest in 20% or more, or two or more foreign entities or persons cannot acquire an aggregate substantial interest in 40% or more, of the Company's issued shares, without first obtaining approval from the Foreign Investment Review Board.

SUBSTANTIAL HOLDING DISCLOSURE OBLIGATIONS

Under the Australia Corporations Act, where any person has acquired a voting power of 5% or more (a "**substantial shareholding**"), it is required to disclose this interest to the target company and to the ASX. Notice must also be given of any increase or decrease in voting power of 1% or more above or below 5% or if the holder ceases to have a substantial shareholding.

Substantial holding notices must be given within 2 business days after the substantial shareholding is acquired, ceases or changes. A substantial holding notice must attach to it a copy of all relevant agreements giving rise to the substantial holding and will be publicly available on the ASX's website.

Australia has a minimum disclosure threshold of a 1% movement and requires disclosure within 2 business days of the change in shareholding. Shareholders will be required to disclose the relevant interests they hold, as well as the interests they are deemed to hold through their associates and interests in bodies corporate.

The relevant substantial shareholding disclosure forms can be found on ASIC's website at **https://asic.gov.au/regulatory-resources/forms.aspx**, but are not lodged with ASIC. Rather, a copy must be provided to the Company, with another copy sent to the ASX for release on the public ASX market announcements platform. The ASX market announcements office is open from 7.00am to 7.30pm (and 8.30pm during daylight savings time) Sydney time. During this time, a substantial shareholding disclosure form can be lodged via ASX Online [https://www.asxonline.com/login/] (if the substantial shareholder or its professional adviser has access to this portal) or via fax.

The fax numbers for this facility are:

For announcements sent within Australia	1300 135 638
For announcements sent from New Zealand	0800 449 707
For announcements not sent from Australia or New Zealand	+61 2 9347 0005
	+61 2 9778 0999

If a substantial shareholder fails to lodge the relevant notice within the prescribed time, they will have civil liability to any person who suffers loss or damage because of the contravention. Criminal fines and penalties may also apply.

SHAREHOLDER PROTECTIONS

The Company was incorporated in Australia and is subject to the Australia Corporations Act and other applicable laws and regulations in Australia. Set out below is a discussion on the key shareholder protection standards offered under the Constitution and the Australian laws and regulations that we consider material to the Company's Shareholders and potential investors and as required under the Joint Policy Statement.

Matters requiring a super-majority vote

Paragraph 36 of Joint Policy Statement requires the following matters to be approved by a super-majority vote of the shareholders:

- changes to the rights attached to any class of shares of an overseas company (vote by members of that class);
- material changes to an overseas company's constitutive documents, however framed; and
- voluntary winding up of an overseas company.

Under the Australia Corporations Act and the Constitution, a "special resolution" of members is required to approve:

- variation to the rights attached to any class of shares;
- any amendment to, or replacement of, the Constitution; and
- where the Company is being wound up by the court or voluntarily.

Paragraphs 37 and 38 of the Joint Policy Statement requires a super-majority vote to mean at least a two-third majority where an overseas company has a low quorum requirement. When an overseas company's threshold for deciding the matters in the paragraph headed "Matter requiring a super-majority vote" above is a simple majority only, these matters must be decided by a significantly higher quorum.

Under section 9 of the Australia Corporations Act, a "special resolution" means a resolution of which notice has been given in accordance with certain prescribed rules and that has been passed by at least 75% of the votes cast by members entitled to vote on that resolution.

Variation of rights

Article 2.5(a) of the Constitution provides that a special resolution or the written consent of 75% of those in a class is required to approve a variation of rights of that class of shares. Article 2.5(b) of the Constitution provides that the provisions of the Constitution relating to general meetings apply, with necessary changes, to separate class meetings as if they were general meetings. Article 7.4(b) of the Constitution provides that a quorum is 5 or more members present at the meeting and entitled to vote on a resolution at the meeting.

The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the requirement of paragraph 6(2) of Appendix 3 of the Listing Rules which provides that the quorum for a separate class meeting (other than an adjourned meeting) to consider a variation of the rights of any class of shares shall be the holders of at least one-third of the issued shares of that class, on the basis that there is no requirement under the Australia Corporations Act or the ASX Listing Rules for a quorum for separate class meetings and the effect of Article 2.5(b) already provides adequate protection to holders of any separate class of shares.

Changes to the Constitution

Section 136(2) of the Australia Corporations Act and Article 7.10 of the Constitution provides that a special resolution of Shareholders is required for any variation to, or replacement of, the Constitution.

Winding-up

A special resolution of Shareholders is required to approve (i) winding-up by the court under section 461(1)(a) of the Australia Corporations Act or (ii) voluntary winding-up under section 491(1) of the Australia Corporations Act.

In addition, if the Company is wound up, Article 12.2 of the Constitution provides that the liquidator may (with the sanction of a special resolution of Shareholders):

- divide among the members the whole or any part of the Company's property; and
- decide how the division is to be carried out as between the members or different class of members.

Individual members to approve increase in members' liability

Paragraph 39 of the Joint Policy Statement requires that there should not be any alteration in an overseas company's constitutional document to increase an existing member's liability to the company unless such increase is agreed by such member in writing.

Under section 140(2)(b) of the Australia Corporations Act, unless a member of the Company agrees in writing to be bound, that member will not be bound by any alteration of the Constitution made after the date on which they became a member, if and to the extent that alteration increases the member's liability to contribute to the share capital of, or otherwise to pay money to, the Company.

Appointment of auditors

Paragraph 40 of the Joint Policy Statement requires that the appointment, removal and remuneration of auditors must be approved by a majority of an overseas company's members or other body that is independent of the board of directors, for example the supervisory board in systems that have a two tier board structure.

Appointment

In Australia, the directors of a public company must appoint an auditor within 1 month after the company's registration, and section 327B(1) of the Australia Corporations Act provides that a public company must approve the appointment of an auditor at its first annual general meeting and must appoint an auditor to fill any vacancy in the office of auditor at each subsequent annual general meeting. Appointments are made by way of a resolution passed by a simple majority of members.

Article 7.10(b)(11) of the Constitution requires that members holding a majority of the issued shares of the Company approve the appointment or removal of the auditor.

Removal

Section 329(1) of the Australia Corporations Act provides that an auditor of the company may be removed by simple majority resolution of the members of a company at a general meeting, provided notice of intention to move the resolution is given to the company at least two months before the meeting.

Article 7.10(b)(11) of the Constitution requires that members holding a majority of the issued shares of the Company approve the appointment or removal of the auditor.

Remuneration

Section 250R(1) of the Australia Corporations Act provides that the business of an annual general meeting may include the consideration of the annual financial report, directors' report and auditor's report, the election of directors, the appointment of the auditor, and the fixing of the auditor's remuneration.

Article 7.10(b)(11) of the Constitution requires that members holding a majority of the issued shares of the Company approve the annual remuneration paid to the auditor for services provided in relation to the annual audit of the company (not including any amounts paid to the auditor for special or additional services provided by the auditor to the company as determined by the directors of the company). Under Article 8.7(p) of the Constitution, the directors have the power to determine the remuneration of the Company's auditor for temporary work outside the scope of the annual audit.

Proceedings at general meetings

Annual general meetings

Paragraph 41 of the Joint Policy Statement requires that an overseas company is required to hold a general meeting each year as its annual general meeting. Generally, not more than 15 months should elapse between the date of one annual general meeting of the overseas company and the next.

Section 250N of the Australia Corporations Act provides that the Company must hold an annual general meeting at least once in each calendar year and within five months after the end of its financial year.

Notice of general meetings

Paragraph 42 of the Joint Policy Statement requires that an overseas company must give its members reasonable written notice of its general meetings.

Section 249H(1) of the Australia Corporations Act provides that the Company must give at least 28 days' notice of a meeting of members.

Rights to speak and vote at the general meetings

Paragraph 43 of the Joint Policy Statement requires that all members must have the right to speak and vote at a general meeting, except in cases where a member is required by the Listing Rules to abstain from voting to approve the transaction or arrangement (e.g. the member has a material interest in the transaction or arrangement).

Article 7.8 of the Constitution sets out the rights of Shareholders to vote at a general meeting of the Company.

Section 250S of the Australia Corporations Act also provides that the chair at an annual general meeting must allow reasonable opportunity for the Shareholders as a whole at the meeting to ask questions about or make comments on the management of the Company.

Rights to convene extraordinary general meeting and add resolutions

Paragraph 44 of the Joint Policy Statement requires that members holding a minority stake in an overseas company must be allowed to convene an extraordinary general meeting and add resolutions to a meeting agenda. The minimum level of members' support required to convene a meeting must be no higher than 10%.

Under section 249D of the Australia Corporations Act, Shareholders with at least 5% of the votes that may be cast at a general meeting have the right to require the Directors to call a general meeting or may convene a general meeting themselves at their own expense under section 249F of the Australia Corporations Act.

Under section 249N of the Australia Corporations Act, Shareholders representing at least 5% of the total votes that may be cast on the resolution or at least 100 Shareholders who are entitled to vote at a general meeting may require resolutions to be put before a general meeting.

Proxies or corporate representatives

Paragraph 45 of the Joint Policy Statement requires that a recognised Hong Kong clearing house must be entitled to appoint proxies or corporate representatives to attend general meetings and creditors meetings. These proxies/corporate representatives should enjoy statutory rights comparable to those of other shareholders, including the right to speak and vote.

Paragraph 46 further provides that where the laws of an overseas jurisdiction prohibit a recognised clearing house from appointing proxies/corporate representatives, the overseas company must make the necessary arrangements with HKSCC Nominees to ensure that Hong Kong investors holding shares through HKSCC Nominees enjoy the rights to vote, attend (personally or by proxy) and speak at general meetings.

The Australia Corporations Act does not contain any provision to the effect that a recognised clearing house would be prohibited from appointing proxies or corporate representatives. Article 7.9(g) of the Constitution provides that a proxy, attorney or representative appointed by a Shareholder has the same rights to speak, demand a poll, join in demanding a poll or acting generally as the Shareholder would have had if the Shareholder was present.

Article 2.6(d) of the Constitution provides that, except where persons are jointly entitled to a share because of a transmission event (as defined in the Constitution), such as death or dissolution of the shareholder, or where required by the ASX Listing Rules or the ASX Settlement Operating Rules, the Company may, but is not required to, register more than 3 persons as joint holders of the share. Paragraph 1(3) of Appendix 3 of the Listing Rules requires that if there is any limit to the number of shareholders in a joint account, such limit must not prevent the registration of a maximum of four persons.

The Company has applied for, and the Stock Exchange has granted, a waiver from strict compliance with the requirement of paragraph 11(2) of Appendix 3 of the Listing Rules, which provides that a corporation may execute a form of proxy under the hand of a duly authorised officer, for Australian-incorporated companies on the basis that the relevant requirements regarding the execution of proxy forms by Australian-incorporated companies are governed by the Australia Corporations Act.

GENERAL

Gilbert + Tobin, the Company's legal counsel on Australian law, has sent to the Company a letter of advice summarising certain aspects of Australian company law. This letter is available for inspection as referred to in "*Appendix VIII – Documents Delivered to the Registrar of Companies and Available for Inspection*". Any person wishing to have a detailed summary of Australian company law or advice on the differences between it and the laws of any other jurisdiction is recommended to seek independent legal advice.

The Shares are currently listed on the ASX and the Company intends to list the Shares on the Stock Exchange. A summary of the major differences between the Listing Rules and the ASX Listing Rules, certain applicable laws and regulations of Australia and Hong Kong and certain relevant legislations concerning companies with listed securities is set out below.

This summary is for general guidance only and is not and shall not be relied on as legal advice or any other advice to Shareholders. The summary is not meant to be a comprehensive or exhaustive description of all the relevant Australian and Hong Kong laws, rules and regulations. In addition, Shareholders should also note that the laws, rules and regulations applicable to our Company and Shareholders may change, whether as a result of proposed legislative reforms to the Australian or Hong Kong laws, rules or regulations or otherwise.

In the event of any conflict between the Hong Kong laws, rules and regulations, including but not limited to the Listing Rules, the Takeovers Code and Part XV of the SFO, on the one hand, and the Australia laws, rules and regulations, including but not limited to the ASX Listing Rules and the Australia Corporations Act, on the other hand, the Company will comply with the more restrictive and stringent rule unless an applicable waiver has been obtained.

Summary of the major differences between the Hong Kong Listing Rules, the ASX Listing Rules and certain applicable Hong Kong and Australian laws

Hong Kong Listing Rules and Hong Kong laws[1]	**ASX Listing Rules and Australian laws[2]**
Changes in capital and new issues	
HK LR 13.36 – Pre-emptive rights	**ASX LR 7.1 – Issues exceeding 15% of capital**
HK LR 13.36(1)	Subject to ASX LR 7.1A and ASX LR 7.1B, without the approval of holders of ordinary securities, an entity must not issue or agree to issue more equity securities than the number calculated according to the following formula. (A x B) – C
(a) Except in the circumstances mentioned in rule 13.36(2), the directors of the issuer (other than a PRC issuer, to which the provisions of rule 19A.38 apply) shall obtain the consent of shareholders in general meeting prior to allotting, issuing or granting: (i) shares; (ii) securities convertible into shares; or (iii) options, warrants or similar rights to subscribe for any shares or such convertible securities.	**A** = The number of fully paid ordinary securities on issue 12 months before the issue date or date of agreement to issue, plus the number of fully paid ordinary securities issued in the 12 months under an exception in ASX LR 7.2, plus the number of partly paid ordinary securities that became fully paid in the 12 months,

[1] Terms used in this column have the meanings given to them in the Listing Rules.

[2] Terms used in this column have the meaning given to them in the ASX Listing Rules.

Hong Kong Listing Rules and Hong Kong laws[1]

Note: Importance is attached to the principle that a shareholder should be able to protect his proportion of the total equity by having the opportunity to subscribe for any new issue of equity securities. Accordingly, unless shareholders otherwise permit, all issues of equity securities by the issuer must be offered to the existing shareholders (and, where appropriate, to holders of other equity securities of the issuer entitled to be offered them) pro rata to their existing holdings, and only to the extent that the securities offered are not taken up by such persons may they be allotted or issued to other persons or otherwise than pro rata to their existing holdings. This principle may be waived by the shareholders themselves on a general basis, but only within the limits of rules 13.36(2) and (3).

(b) Notwithstanding rule 13.36(2)(b), the directors of the issuer (other than a PRC issuer, to which the provisions of rule 19A.38 apply) shall obtain the consent of the shareholders in general meeting prior to allotting any voting shares if such allotment would effectively alter the control of the issuer.

HK LR 13.36(5)

In the case of a placing of securities for cash consideration, the issuer may not issue any securities pursuant to a general mandate given under rule 13.36 (2)(b) if the relevant price represents a discount of 20% or more to the benchmarked price of the securities, such benchmarked price being the higher of:

(a) the closing price on the date of the relevant placing agreement or other agreement involving the proposed issue of securities under the general mandate; and

ASX Listing Rules and Australian laws[2]

plus the number of fully paid ordinary securities issued in the 12 months with approval of holders of ordinary securities under ASX LR 7.1 or ASX LR 7.4,

less the number of fully paid ordinary securities cancelled in the 12 months.

B = 15%

C = The number of equity securities issued or agreed to be issued in the 12 months before the issue date or date of agreement to issue that are not issued:

under an exception in ASX LR 7.2;

under ASX LR 7.1A.2; or

with the approval of the holders of ordinary securities under ASX LR 7.1 or ASX LR 7.4.

Hong Kong Listing Rules and Hong Kong laws[1]	ASX Listing Rules and Australian laws[2]
(b) the average closing price in the 5 trading days immediately prior to the earlier of: (i) the date of announcement of the placing or the proposed transaction or arrangement involving the proposed issue of securities under the general mandate; (ii) the date of the placing agreement or other agreement involving the proposed issue of securities under the general mandate; and (iii) the date on which the placing or subscription price is fixed, unless the issuer can satisfy the Exchange that it is in a serious financial position and that the only way it can be saved is by an urgent rescue operation which involves the issue of new securities at a price representing a discount of 20% or more to the benchmarked price of the securities or that there are other exceptional circumstances. The issuer shall provide the Exchange with detailed information on the allottees to be issued with securities under the general mandate.	

Hong Kong Listing Rules and Hong Kong laws[1]

Exceptions to HK LR 13.36(1)

HK LR 13.36(2)

No such consent as is referred to in rule 13.36(1)(a) shall be required:

(a) for the allotment, issue or grant of such securities pursuant to an offer made to the shareholders of the issuer which excludes for that purpose any shareholder that is resident in a place outside Hong Kong provided the directors of the issuer consider such exclusion to be necessary or expedient on account either of the legal restrictions under the laws of the relevant place or the requirements of the relevant regulatory body or stock exchange in that place and, where appropriate, to holders of other equity securities of the issuer entitled to be offered them, pro rata (apart from fractional entitlements) to their existing holdings; or

(b) if, but only to the extent that, the existing shareholders of the issuer have by ordinary resolution in general meeting given a general mandate to the directors of the issuer, either unconditionally or subject to such terms and conditions as may be specified in the resolution, to allot or issue such securities or to grant any offers, agreements or options which would or might require securities to be issued, allotted or disposed of, whether during the continuance of such mandate or thereafter, subject to a restriction that the aggregate number of securities allotted or agreed to be allotted must not exceed the aggregate of:

    (i) 20% of the number of issued shares of the issuer as at the date of the resolution granting the general mandate (or in the case of a scheme of arrangement involving an introduction in the circumstances set out in rule 7.14(3), 20% of the number of issued shares of an overseas issuer following the implementation of such scheme); and

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Exceptions to ASX LR 7.1

ASX LR 7.1 does not apply in any of the following cases:

Exception 1 An issue to holders of ordinary securities made under a pro rata issue and to holders of other equity securities to the extent that the terms of issue of the equity securities permit participation in the pro rata issue.

Exception 2 An issue under an underwriting agreement to an underwriter of a pro rata issue to holders of ordinary securities if the underwriter receives the securities not later than 15 business days after the close of the offer.

Exception 3 An issue to make up the shortfall on a pro rata issue to holders of ordinary securities. The entity must make the issue not later than 3 months after the close of the offer, and the directors of the entity (in the case of a trust, the responsible entity) must have stated as part of the offer that they reserve the right to issue the shortfall at their discretion. The issue price must not be less than the price at which the securities were offered under the pro rata issue.

Exception 4 An issue on the conversion of convertible securities. The entity must have issued the convertible securities before it was listed or complied with the ASX LR when it issued the convertible securities.

Exception 5 An issue under a takeover bid or under a merger by way of scheme of arrangement under Part 5.1 of the Australia Corporations Act. Exception 5 is not available if the issue is being made under a reverse takeover.

Exception 6 An issue to fund the cash consideration payable under a takeover bid or under a merger by way of scheme of arrangement under Part 5.1 of the Australia Corporations Act where the terms of the issue are disclosed in the takeover or scheme documents.**Exception 6** is not available if the issue is being made to fund a reverse takeover.

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(ii) the number of such securities repurchased by the issuer itself since the granting of the general mandate (up to a maximum number equivalent to 10% of the number of issued shares of the issuer as at the date of the resolution granting the repurchase mandate), provided that the existing shareholders of the issuer have by a separate ordinary resolution in general meeting given a general mandate to the directors of the issuer to add such repurchased securities to the 20% general mandate.

HK LR 13.36(3)

A general mandate given under rule 13.36(2) shall only continue in force until:

(a) the conclusion of the first annual general meeting of the issuer following the passing of the resolution at which time it shall lapse unless, by ordinary resolution passed at that meeting, the mandate is renewed, either unconditionally or subject to conditions; or

(b) revoked or varied by ordinary resolution of the shareholders in general meeting, whichever occurs first.

HK LR 13.36(4)

Where the issuer has obtained a general mandate from its shareholders pursuant to rule 13.36(2)(b), any refreshments of the general mandate before the next annual general meeting shall be subject to the following provisions:

(a) any controlling shareholders and their associates or, where there are no controlling shareholders, directors (excluding independent non-executive directors) and the chief executive of the issuer and their respective associates shall abstain from voting in favour;

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Exception 7 An issue under a dividend or distribution plan excluding an issue to the plan's underwriters. Exception 7 is only available where the dividend or distribution plan does not impose a limit on participation.

[*No exception 8*]

Exception 9 An issue under an employee incentive scheme if within 3 years before the issue date one of the following occurred.

(a) In the case of a scheme established before the entity was listed – a summary of the terms of the scheme were set out in the prospectus, PDS or information memorandum.

(b) Holders of ordinary securities have approved the issue of securities under the scheme as an exception to this rule. The notice of meeting must have included each of the following.

(i) A summary of the terms of the scheme.

(ii) The number of securities issued under the scheme since the date of the last approval.

(iii) A voting exclusion statement.

Exception 10 An issue of preference shares which do not have any rights of conversion into another class of equity security. The preference shares must comply with chapter 6 of the Australia Corporations Act.

Exception 11 The reissue or sale of forfeited shares within 6 weeks after the day on which the call was due and payable.

Exception 12 is only available if each of the following applies:

(a) The entity complied with the ASX LR when it issued the options.

(b) The underwriter receives the underlying securities within 10 business days after expiry of the options.

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(b) the Exchange reserves the right to require the following parties to abstain from voting in favour of the relevant resolution at the general meeting:

(i) any parties who were controlling shareholders of the issuer at the time the decision to seek a refreshment of the mandate was made or approved by the board, and their associates;

(ii) where there were no such controlling shareholders, directors (excluding independent non-executive directors) and the chief executive of the issuer at the time the decision to seek a refreshment of the mandate was made or approved by the board, and their respective associates; or

(c) the issuer must comply with the requirements set out in rules 13.39(6) and (7), 13.40, 13.41 and 13.42;

(d) the relevant circular to shareholders must contain information relating to the issuer's history of refreshments of mandate since the last annual general meeting, the amount of proceeds raised from the utilisation of such mandate, the use of such proceeds, the intended use of any amount not yet utilised and how the issuer has dealt with such amount. The circular must also contain information required under rule 2.17; and

where the issuer offers or issues securities to its shareholders pro rata to their existing holdings (including where overseas shareholders are excluded for legal or regulatory reasons), it will not be necessary for the issuer to comply with rules 13.36(4)(a), (b) or (c) in order for it to refresh its general mandate immediately thereafter such that the amount in percentage terms of the unused part of the general mandate upon refreshment is the same as the unused part of the general mandate immediately before the issue of securities. In such cases, it need only obtain approval from its shareholders and comply with rule 13.36(4)(d).

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(c) The underwriting agreement was disclosed under ASX LR 3.11.3.

Exception 13 An issue under an agreement to issue securities. The entity must have complied with the ASX LR when it entered into the agreement to issue the securities.

Exception 14 An issue made with the approval of holders of ordinary securities under ASX LR 10.11 or ASX LR 10.14. The notice of meeting must state that if approval is given under listing ASX LR 10.11 or ASX LR 10.14 (as the case may be), approval is not required under ASX LR 7.1.

Exception 15 An issue of securities under a security purchase plan, excluding an issue to the plan's underwriters. Exception 15 is only available once in any 12 month period and if both of the following apply:

– The number of securities to be issued is not greater than 30% of the number of fully paid ordinary securities already on issue.

– The issue price of the securities is at least 80% of the volume weighted average market price for securities in that class,

calculated over the last 5 days on which sales in the securities were recorded, either before the day on which the issue was announced or before the day on which the issue was made.

Exception 16 An issue of securities approved for the purposes of Item 7 of section 611 of the Australia Corporations Act.

ADDITIONAL INFORMATION: *Item 7 of section 611 of the Australia Corporations Act:*

"Approval by resolution of target: An acquisition approved previously by a resolution passed at a general meeting of the company in which the acquisition is made, if:

(a) no votes are cast in favour of the resolution by:

(i) the person proposing to make the acquisition and their associates; or

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	(ii) the persons (if any) from whom the acquisition is to be made and their associates; and
	(b) the members of the company were given all information known to the person proposing to make the acquisition or their associates, or known to the company, that was material to the decision on how to vote on the resolution, including:
	(i) the identity of the person proposing to make the acquisition and their associates; and
	(ii) the maximum extent of the increase in that person's voting power in the company that would result from the acquisition; and
	(iii) the voting power that person would have as a result of the acquisition; and
	(iv) the maximum extent of the increase in the voting power of each of that person's associates that would result from the acquisition; and
	(v) the voting power that each of that person's associates would have as a result of the acquisition."

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HK LR 14.78 – Takeovers Code

HK LR 14.78 Listed issuers and their directors must comply with the Takeovers Code. Any breach of the Takeovers Code will be deemed to be a breach of the Exchange Listing Rules. The Exchange may penalise the listed issuer and/or its directors for breaches in accordance with the disciplinary powers contained in Chapter 2A of the Exchange Listing Rules.

Takeovers Code Rule 4 – No Frustrating Action

Takeovers Code Rule 4

Once a bona fide offer has been communicated to the board of an offeree company or the board of an offeree company has reason to believe that a bona fide offer may be imminent, no action which could effectively result in an offer being frustrated, or in the shareholders of the offeree company being denied an opportunity to decide on the merits of an offer, shall be taken by the board of the offeree company in relation to the affairs of the company without the approval of the shareholders of the offeree company in general meeting. In particular the offeree company's board must not, without such approval, do or agree to do the following:

(a) issue any shares;

(b) create, issue or grant, or permit the creation, issue or grant of, any convertible securities, options or warrants in respect of shares of the offeree company;

(c) sell, dispose of or acquire assets of a material amount;

(d) enter into contracts, including service contracts, otherwise than in the ordinary course of business; or

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ASX LR 7.9 – Issues during a takeover offer or takeover announcement

An entity must not issue or agree to issue equity securities, without the approval of holders of ordinary securities, for 3 months after it is told in writing that a person is making, or proposes to make, a takeover for securities in it. This rule does not apply to an issue or agreement to issue in any of the following cases:

Exception 1 An issue notified to ASX before the entity was told, or made under an agreement to issue notified to ASX before the entity was told.

Exception 2 A pro rata issue to holders of ordinary securities.

Exception 3 An issue made on the exercise of rights of conversion.

Exception 4 An issue made under an off-market bid that is required to comply with the Corporations Act or under a merger by way of scheme of arrangement under Part 5.1 of the Australia Corporations Act.

Exception 5 An issue made under a dividend or distribution plan that is in operation at the time the notice is received.

Exception 6 An agreement to issue equity securities that is conditional on holders of ordinary securities approving the issue before the issue is made. If an entity relies on this exception it must not issue the equity securities without approval.

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(e) cause the offeree company or any subsidiary or associated company to buy back, purchase or redeem any shares in the offeree company or provide financial assistance for any such buy-back, purchase or redemption.	
Where the offeree company is under a prior contractual obligation to take any such action, or where there are other special circumstances, the Executive must be consulted at the earliest opportunity. In appropriate circumstances the Executive may grant a waiver from the general requirement to obtain shareholders' approval.	
Notes to Rule 4:	
1. Consent by the offeror *The requirement of a shareholders' meeting may be waived by the Executive if the offeror (or, in the case of more than one offeror, all offerors) agrees.*	
2. Service contracts – The Executive will regard amending or entering into a service contract with, or creating or varying the terms of employment of, a director as entering into a contract "otherwise than in the ordinary course of business" for the purpose of this Rule 4 if the new or amended contract or terms constitute an abnormal increase in his emoluments or a significant improvement in his terms of service. This will not prevent any such increase or improvement which results from a genuine promotion or new appointment but the Executive must be consulted in advance in such cases.	
3. Votes of controlling shareholders and directors – The Executive should be consulted on whether shareholdings of controlling shareholders, directors and their respective associates should be voted at the shareholders' meeting, where an actual or potential conflict of interest exists.	

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4. Executive waiver – The Executive, when deciding whether to grant a waiver of the requirement to obtain shareholders' approval, will take particular account of what details, if any, the offeree company's board of directors has disclosed to its shareholders of any contractual obligation, duty or right, the fulfilment or enforcement of which may result in the offer being frustrated or the shareholders of the offeree company being denied the opportunity to decide on the merits of the offer.	
5. Notice of general meeting – The notice convening a meeting of shareholders pursuant to this Rule 4 must include information about the offer or possible offer.	
6. "Material amount" – For the purpose of determining whether a disposal or acquisition is of a "material amount" the Executive will, in general, apply the same tests as those set out in the Listing Rules to determine whether a transaction is a "disclosable transaction". If several transactions relevant to this Rule 4, but not individually material, occur or are intended, the Executive will aggregate such transactions to determine whether the requirements of this Rule 4 are applicable to any of them. The Executive should be consulted in advance where there may be any doubt as to the application of the above.	
7. When there is no need to proceed with an offer – The Executive may allow an offeror not to proceed with its offer if, prior to the posting of the offer document, the offeree company: – (a) passes a resolution in general meeting as envisaged by this Rule 4; or (b) announces a transaction which would require such a resolution but for the fact that it is pursuant to a contract entered into earlier or that the Executive has ruled that an obligation or other special circumstance exists.	

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8. *Established share option schemes – Where the offeree company proposes to grant options over shares, the timing and level of which are in accordance with its normal practice under an established share option scheme, the Executive will normally give its consent.*	
9. *Interim dividends – The declaration and payment of an interim dividend by the offeree company, outside the normal course, during an offer period may be contrary to General Principle 9 and this Rule 4 in that it could effectively frustrate an offer. The offeree companies and its advisers must, therefore, consult the Executive in advance.*	
HK LR 7.19(6)	**ASX LR 7.11.3 – Rules that apply to all pro rata issues**
If the proposed rights issue would increase either the number of issued shares or the market capitalisation of the issuer by more than 50% (on its own or when aggregated with any other rights issues or open offers announced by the issuer (i) within the 12 month period immediately preceding the announcement of the proposed rights issue or (ii) prior to such 12 month period where dealing in respect of the shares issued pursuant thereto commenced within such 12 month period, together with any bonus securities, warrants or other convertible securities (assuming full conversion) granted or to be granted to shareholders as part of such rights issues or open offers):	The ratio of securities offered must not be greater than one security for each security held. This rule does not apply to a bonus issue. This rule also does not apply if the following conditions are met. The offer is renounceable. The issue price is not more than the volume weighted average market price for securities in that class, calculated over the last 5 days on which sales in the securities were recorded before the day on which the issue was announced.
(a) the rights issue must be made conditional on approval by shareholders in general meeting by a resolution on which any controlling shareholders and their associates or, where there are no controlling shareholders, directors (excluding independent non-executive directors) and the chief executive of the issuer and their respective associates shall abstain from voting in favour. The issuer must disclose the information required under rule 2.17 in the circular to shareholders;	

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(b) the issuer shall set out in the circular to shareholders the purpose of the proposed rights issue, together with the total funds expected to be raised and a detailed breakdown and description of the proposed use of the proceeds. The issuer shall also include the total funds raised and a detailed breakdown and description of the funds raised on any issue of equity securities in the 12 months immediately preceding the announcement of the proposed rights issue, the use of such proceeds, the intended use of any amount not yet utilised and how the issuer has dealt with such amount; and	
(c) the Exchange reserves the right to require the rights issue to be fully underwritten.	
HK LR 7.19(7)	
Subject to rule 10.08, in the period of 12 months from the date on which dealings in the securities of a new applicant commence on the Exchange, the issuer shall not effect any rights issue, unless it is made conditional on the approval of shareholders in general meeting by a resolution on which any controlling shareholder and its associates or, where there are no controlling shareholders, directors (excluding independent non-executive directors) and the chief executive of the issuer and their respective associates shall abstain from voting in favour. The issuer must disclose the information required under rule 2.17 in the circular to shareholders.	
HK LR 7.19(8)	
Where shareholders' approval is required under rules 7.19(6) or 7.19(7), the Exchange reserves the right to require the following parties to abstain from voting in favour of the relevant resolution at the general meeting:	
(a) any parties who were controlling shareholders of the issuer at the time the decision for the transaction or arrangement involving the rights issue was made or approved by the board and their associates; or	

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(b) where there were no such controlling shareholders, directors (excluding independent non-executive directors) and the chief executive of the issuer at the time the decision for the transaction or arrangement involving the rights issue was made or approved by the board, and their respective associates.	
No comparable rule in Hong Kong.	**ASX LR 7.4 – Subsequent approval of an issue of securities** An issue of securities made without approval under ASX LR 7.1 is treated as having been made with approval for the purpose of ASX LR 7.1 if each of the following apply. 7.4.1 The issue did not breach ASX LR 7.1. 7.4.2 Holders of ordinary securities subsequently approve it.
No comparable rule in Hong Kong.	**ASX LR 7.6 – No issue without approval before a meeting to appoint directors** An entity must not issue or agree to issue any equity securities without the approval of the holders of its ordinary securities to the issue or the agreement to issue if the holder or beneficial owner of more than 50% of the ordinary securities tells the entity in writing that th be person intends to call a general meeting to appoint or remove directors. An agreement to issue equity securities that is conditional on holders of ordinary securities approving the issue before the issue is made is not treated as an agreement but the entity must not issue the equity securities without approval. 7.6.1 The restriction applies for 2 months after the date of the advice, but does not prevent an issue under a written contract entered into before the entity received the advice. 7.6.2 If the person giving the advice is not a member, the advice must be accompanied by a statutory declaration verifying the person's beneficial ownership.

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HK LR 10.06 – Restrictions and Notification Requirements on Issuers Purchasing their own Shares on a Stock Exchange

HK LR 10.06(1)(a)

An issuer whose primary listing is on the Exchange may only purchase shares on the Exchange, either directly or indirectly, if:–

(a) the shares proposed to be purchased by the issuer are fully-paid up;

(b) the issuer has previously sent to its shareholders an Explanatory Statement complying with the provisions of rule 10.06(1)(b); and

(c) its shareholders have given a specific approval or a general mandate to its directors to make the purchase(s), by way of an ordinary resolution which complies with rule 10.06(1)(c) and which has been passed at a General Meeting of the issuer duly convened and held;

HK LR 10.06(2)

(a) An issuer shall not purchase its shares on the Exchange if the purchase price is higher by 5% or more than the average closing market price for the 5 preceding trading days on which its shares were traded on the Exchange;

(b) an issuer shall not purchase its shares on the Exchange for a consideration other than cash or for settlement otherwise than in accordance with the trading rules of the Exchange from time to time;

(c) an issuer shall not knowingly purchase its shares from a core connected person and a core connected person shall not knowingly sell shares to the issuer, on the Exchange;

(d) an issuer shall procure that any broker appointed by the issuer to effect the purchase of its shares shall disclose to the Exchange such information with respect to purchases made on behalf of the issuer as the Exchange may request;

ASX Listing Rules and Australian laws[2]

ASX LR 7.29 – pre-condition for an on-market buy-back

A company may only buy shares under an on-market buy-back if transactions in the company's shares were recorded on ASX on at least 5 days in the 3 months before it buys back the shares.

ASX LR 7.33 – Purchase price under on-market buy-back

A company may only buy back shares at a price which is not more than 5% above the volume weighted average market price for securities in that class, calculated over the last 5 days on which sales in the shares were recorded before the day on which the purchase under the buy-back was made.

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(e) an issuer shall not purchase its shares on the Exchange at any time after inside information has come to its knowledge until the information is made publicly available. In particular, during the period of one month immediately preceding the earlier of: (i) the date of the board meeting (as such date is first notified to the Exchange in accordance with the Listing Rules) for the approval of the issuer's results for any year, half-year, quarterly or any other interim period (whether or not required under the Listing Rules); and (ii) the deadline for the issuer to announce its results for any year or half year under the Listing Rules, or quarterly or any other interim period (whether or not required under the Listing Rules), and ending on the date of the results announcement, the issuer may not purchase its shares on the Exchange, unless the circumstances are exceptional;	
(f) an issuer whose primary listing is on the Exchange may not purchase its shares on the Exchange if that purchase would result in the number of listed securities which are in the hands of the public falling below the relevant prescribed minimum percentage for that issuer (as determined by the Exchange at the time of listing under rule 8.08); and	
(g) the Exchange may waive all or part of the above restrictions if, in the opinion of the Exchange, there are exceptional circumstances (such as, but without limitation, political or economic events having a material adverse effect on the price of shares of the issuer or issuers listed on the Exchange generally) justifying the waiver of such restrictions. A waiver may be granted either with respect to a fixed amount of securities of an issuer or generally or on such conditions as the Exchange shall specify and may be expressed to continue for a stated period of time or until further notice.	

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HK LR 10.06(3) – Subsequent Issues An issuer whose primary listing is on the Exchange may not make a new issue of shares or announce a proposed new issue of shares for a period of 30 days after any purchase by it of shares, whether on the Exchange or otherwise (other than an issue of securities pursuant to the exercise of warrants, share options or similar instruments requiring the issuer to issue securities, which were outstanding prior to that purchase of its own securities), without the prior approval of the Exchange.	
HK LR 13.66 – Closure of books and record date HK LR 13.66(1) (a) An issuer must announce any closure of its transfer books or register of members in respect of securities listed in Hong Kong at least six business days before the closure for a rights issue, or 10 business days before the closure in other cases. In cases where there is an alteration of book closing dates, the issuer must, at least five business days before the announced closure or the new closure, whichever is earlier, notify the Exchange in writing and make a further announcement. If, however, there are exceptional circumstances (e.g. a typhoon) that render the giving of the notification to the Exchange and publication of the announcement impossible, the issuer must comply with the requirements as soon as practicable. Where the issuer decides on a record date without book closure, these requirements apply to the record date.	**ASX LR 7.40 – Compliance with timetables** An entity must comply with ASX LR Appendix 7A. ***ADDITIONAL INFORMATION:*** *Appendix 7A of the ASX LR contains timetables that must be followed for the conduct of share issuances on the ASX. For example, Appendix 7A contains rules around the timing for record dates and for applying for quotation of new shares.* *Once listed on the Exchange, Yancoal will not be able to conduct an "accelerated" entitlement offer, as permitted by Appendix 7A because the book closure requirements under Rule 13.66 of the Hong Kong Listing Rules must be complied with and no exception for "accelerated"offer to institutional investors exists under the Hong Kong Listing Rules.*

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(b) An issuer must ensure that the last day for trading in the securities with entitlements falls at least one business day after the general meeting, if the entitlements require the approval of shareholders in the general meeting or are contingent on a transaction that is subject to the approval of shareholders in the general meeting. This rule shall not apply where the issuer announces the timetable of an entitlement on or before 19 June 2011.	
Notes:	
(a) See Practice Note 8 for emergency share registration arrangements during a typhoon and/or a black rainstorm warning.	
(b) In addition, for a rights issue, the issuer must provide at least two trading days for trading in the securities with entitlements (i.e. before the ex-date) after publication of the book closure. If trading on the Exchange is interrupted due to a typhoon and/or a black rainstorm warning, the book-close date will be automatically postponed, where necessary, to provide at least two trading days (during neither of which trading is interrupted) for trading of the securities with entitlements during the notice period. In these circumstances the issuer must publish an announcement on the revised timetable.	
(c) For the purposes of rule 13.66(2),	
– the record date (when there is no book closure) or the last registration date (when there is a book closure) must be at least three business days after the general meeting; and	
– if the issuer fails to publish the result of the poll conducted in the general meeting in the manner prescribed under rule 13.39(5), it must ensure there is at least one trading day for trading in the securities with entitlements after publication of the results of the poll. The issuer must publish an announcement on any revised timetable.	

Hong Kong Listing Rules and Hong Kong laws[1]	ASX Listing Rules and Australian laws[2]

Transactions with persons of influence

HK LR 14A.32 – Requirements for connected transactions

14A.33 Exemptions or waivers from all or some of the requirements are available for specified categories of connected transactions. *See rules 14A.73 to 14A.105 (below).*

14A.34 – Written agreement – The listed issuer's group must enter into a written agreement for a connected transaction.

14A.35 – Announcement – The listed issuer must announce the connected transaction as soon as practicable after its terms have been agreed. See rule 14A.68 for the content requirements.

Note: If the connected transaction is subsequently terminated or there is any material variation of its terms or material delay in the completion, the listed issuer must announce this fact as soon as practicable. The listed issuer must also comply with all other applicable provisions under the Rules.

14A.36 – Shareholders' approval – The connected transaction must be conditional on shareholders' approval at a general meeting held by the listed issuer. Any shareholder who has a material interest in the transaction must abstain from voting on the resolution.

14A.37 The Exchange may waive the general meeting requirement and accept a written shareholders' approval, subject to the conditions that: (1) no shareholder of the listed issuer is required to abstain from voting if a general meeting is held to approve the transaction; and (2) the approval is given by a shareholder or a closely allied group of shareholders who (together) hold more than 50% of the voting rights in the general meeting.

14A.38 If the listed issuer discloses inside information to any shareholder in confidence to solicit the written approval, it must ensure that the shareholder is aware that he must not deal in the securities before the information has been made available to the public.

ASX LR 10.1 – Approval required for certain acquisitions or disposals

An entity (in the case of a trust, the responsible entity) must ensure that neither it, nor any of its child entities, acquires a substantial asset from, or disposes of a substantial asset to, any of the following persons without the approval of holders of the entity's ordinary securities.

10.1.1 A related party of the entity.

10.1.2 A child entity of the entity.

10.1.3 A substantial holder in the entity, if the person and the person's associates have a relevant interest, or had a relevant interest at any time in the 6 months before the transaction, in at least 10% of the total votes attached to the voting securities in the entity.

10.1.4 An associate of a person referred to in ASX LR 10.1.1 to ASX LR 10.1.3.

10.1.5 A person whose relationship to the entity or a person referred to in ASX LR 10.1.1 to ASX LR 10.1.4 is such that, in ASX's opinion, the transaction should be approved by security holders. If an entity breaks this rule, ASX may require it to take the corrective action set out in ASX LR 10.9.

ADDITIONAL INFORMATION:

*A '**related party**' means:*

(a) in relation to a body corporate, the meaning in section 228 of the Australia Corporations Act.

(b) in relation to a person: his or her spouse, de facto spouse, parent, child, or a spouse or de facto spouse of that person; an entity controlled by one or more of those persons; an entity that he or she controls; a person who acts in concert with anyone referred to above; a person who was a related party in the previous 6 months, or would be a related party in the future.

Hong Kong Listing Rules and Hong Kong laws[1]

14A.39 If the connected transaction requires shareholders' approval, the listed issuer must (1) set up an independent board committee; and (2) appoint an independent financial adviser.

14A.40 – Independent board committee – The independent board committee must, taking into account the recommendation of an independent financial adviser, advise the listed issuer's shareholders: (1) whether the terms of the connected transaction are fair and reasonable; (2) whether the connected transaction is on normal commercial terms or better and in the ordinary and usual course of business of the listed issuer's group; (3) whether the connected transaction is in the interests of the listed issuer and its shareholders as a whole; and (4) how to vote on the connected transaction.

14A.41 The independent board committee must consist only of independent non-executive directors who do not have a material interest in the transaction.

14A.42 If all the independent non-executive directors have a material interest in the transaction, an independent board committee will not be formed.

14A.43 If an independent board committee is formed, the circular must include a letter from the independent board committee containing its opinion on the matters in rule 14A.40 and its recommendation.

HK LR 14A.07 – Definition of a connected person

A '**connected person**' is:

a director, chief executive or substantial shareholder of the listed issuer or any of its subsidiaries;

a person who was a director of the listed issuer or any of its subsidiaries in the last 12 months;

a supervisor of a PRC issuer or any of its subsidiaries;

ASX Listing Rules and Australian laws[2]

Section 228 Australia Corporations Act

"Controlling entities

(1) An entity that controls a public company is a related party of the public company.

Directors and their spouses

(2) The following persons are related parties of a public company:

(a) directors of the public company;

(b) directors (if any) of an entity that controls the public company;

(c) if the public company is controlled by an entity that is not a body corporate – each of the persons making up the controlling entity;

(d) spouses of the persons referred to in paragraphs (a), (b) and (c).

Relatives of directors and spouses

(3) The following relatives of persons referred to in subsection (2) are related parties of the public company:

(a) parents;

(b) children.

Entities controlled by other related parties

(4) An entity controlled by a related party referred to in subsection (1), (2) or (3) is a related party of the public company unless the entity is also controlled by the public company.

Related party in previous 6 months

(5) An entity is a related party of a public company at a particular time if the entity was a related party of the public company of a kind referred to in subsection (1), (2), (3) or (4) at any time within the previous 6 months.

Hong Kong Listing Rules and Hong Kong laws[1]

an associate of any of the above persons;

a connected subsidiary;

or a person deemed to be connected by the Exchange.

ADDITIONAL INFORMATION:

*A '**substantial shareholder**' is a person who is entitled to exercise, or control the exercise of, 10% or more of the voting power at any general meeting.*

*A '**connected subsidiary**' is:*

(a) a non-wholly-owned subsidiary of the listed issuer where any connected person(s) at the issuer level, individually or together, can exercise or control the exercise of 10% or more of the voting power at the subsidiary's general meeting. This 10% excludes any indirect interest in the subsidiary which is held by the connected person(s) through the listed issuer; or

(b) any subsidiary of a non-wholly-owned subsidiary referred to in (a) above

*An '**associate**' of a connected person described in rule 14A.07(1), (2) or (3) who is an individual includes:*

(1) (a) his spouse; his (or his spouse's) child or step-child, natural or adopted, under the age of 18 years (each an "immediate family member");

(b) the trustees, acting in their capacity as trustees of any trust of which the individual or his immediate family member is a beneficiary or, in the case of a discretionary rust, is (to his knowledge) a discretionary object (other than a trust which is an employees' share scheme or occupational pension scheme stablished for a wide scope of participants and the connected persons' aggregate interests in the scheme are less than 30%) (the "trustees"); or

ASX Listing Rules and Australian laws[2]

Entity has reasonable grounds to believe it will become related party in future

(6) An entity is a related party of a public company at a particular time if the entity believes or has reasonable grounds to believe that it is likely to become a related party of the public company of a kind referred to in subsection (1), (2), (3) or (4) at any time in the future.

Acting in concert with related party

(7) An entity is a related party of a public company if the entity acts in concert with a related party of the public company on the understanding that the related party will receive a financial benefit if the public company gives the entity a financial benefit."

*A '**child entity**' means in relation to a body corporate, each of the following:*

(a) an entity which is controlled by the body corporate within the meaning of section 50AA of the Australia Corporations Act; or

(b) an entity which is a subsidiary of the body corporate.

Section 50AA Australia Corporations Act

"(1) For the purposes of this Act, an entity controls a second entity if the first entity has the capacity to determine the outcome of decisions about the second entity's financial and operating policies.

(2) In determining whether the first entity has this capacity:

(a) the practical influence the first entity can exert (rather than the rights it can enforce) is the issue to be considered; and

(b) any practice or pattern of behaviour affecting the second entity's financial or operating policies is to be taken into account (even if it involves a breach of an agreement or a breach of trust).

Hong Kong Listing Rules and Hong Kong laws[1]

(c) a 30%-controlled company held, directly or indirectly, by the individual, his immediate family members and/or the trustees (individually or together), or any of its subsidiaries; or

(2) (a) a person cohabiting with him as a spouse, or his child, step-child, parent, stepparent, brother, step-brother, sister or step-sister (each a "family member"); or

(b) a majority-controlled company held, directly or indirectly, by the family members (individually or together), or held by the family members together with the individual, his immediate family members and/or the trustees, or any of its subsidiaries.

*14A.13 An "**associate**" of a connected person described in rule 14A.07(1), (2) or (3) which is a company includes:*

(1) its subsidiary or holding company, or a fellow subsidiary of the holding company;

(2) the trustees, acting in their capacity as trustees of any trust of which the company is a beneficiary or, in the case of a discretionary trust, is (to its knowledge) a discretionary object (the "trustees"); or

(3) a 30%-controlled company held, directly or indirectly, by the company, the companies referred to in (1) above, and/or the trustees (individually or together), or any of its subsidiaries

14A.08 Where a listed issuer is an investment company listed under Chapter 21, its connected persons also include an investment manager, investment adviser or custodian (or any connected person of any of them).

[*Note: Other important definition include "Deemed connected person" (HKEX 14A.19-19-22)]*

ASX Listing Rules and Australian laws[2]

(3) The first entity does not control the second entity merely because the first entity and a third entity jointly have the capacity to determine the outcome of decisions about the second entity's financial and operating policies.

(4) If the first entity:

(a) has the capacity to influence decisions about the second entity's financial and operating policies; and

(b) is under a legal obligation to exercise that capacity for the benefit of someone other than the first entity's members;

the first entity is taken not to control the second entity."

Hong Kong Listing Rules and Hong Kong laws[1]

HK LR Chapter 14 and Chapter 14A

The Exchange looks at various thresholds to determine when a transaction is required to be announced and is subject to shareholders' approval. For transactions which are not with a connected person, the Exchange looks at the size of the assets, revenue, profits and consideration of the subject asset relative to the assets, revenue, profits and market capitalisation of the listed company. Equity capital ratio will also be applicable if an acquisition of assets is to be conducted by the listed issuer and the consideration to be paid by the listed issuer includes securities for which listing will be sought. If any of the applicable ratios are 5% or more and less than 25%, only an announcement is required and if any of the applicable ratios are 25% or more, shareholders' approval will also be required. For transactions with connected persons, the Exchange looks at the size of the assets, revenue and consideration of the subject asset relative to the assets, revenue and market capitalisation of the listed company (note that the profits is not relevant for this analysis). Subject to an exemption rule that may apply, if any of the ratios exceed 0.1% and are less than 5%, only an announcement is required and if any of the ratios are 5% or more, independent shareholders' approval will also be required. However, if the connected transaction only involves connected person(s) at the subsidiary level, no announcement is required to be made if any of the ratios is less than 1% and only an announcement is required if any of the ratios exceeds 1%.

ASX Listing Rules and Australian laws[2]

ASX LR 10.2 – What is a substantial asset?

An asset is substantial if its value, or the value of the consideration for it is, or in ASX's opinion is, 5% or more of the equity interests of the entity as set out in the latest accounts given to ASX under the ASX LR.

10.2.1 In calculating the value, each of the following rules applies.

Intangibles will be included.

Provisions for depreciation and amortisation will be deducted.

Liabilities acquired as part of an acquisition will not be deducted. Separate transactions will be aggregated if, in ASX's opinion, they form part of the same commercial transaction.

Hong Kong Listing Rules and Hong Kong laws[1]

HK LR 14A.73 – Exemptions

Exemptions from the connected transaction requirements are available for the following types of transactions:

– *de minimis* transactions (rule 14A.76);

– financial assistance (rules 14A.87 to 14A.91);

– issues of new securities by the listed issuer or its subsidiary (rule 14A.92);

– dealings in securities on stock exchanges (rule 14A.93);

– repurchases of securities by the listed issuer or its subsidiary (rule 14A.94);

– directors' service contracts and insurance (rules 14A.95 and 14A.96);

– buying or selling of consumer goods or services (rule 14A.97);

– sharing of administrative services (rule 14A.98);

– transactions with associates of passive investors (rules 14A.99 and 14A.100); and

– transactions with connected persons at the subsidiary level (rule 14A.101).

HK LR 14A.17

If a listed issuer's subsidiaries are connected persons only because they are the subsidiaries of a connected subsidiary, transactions between these subsidiaries will not be treated as connected transactions.

HK LR 14A.18

A subsidiary of the listed issuer is not a connected person if:

it is directly or indirectly wholly-owned by the listed issuer; or

it falls under the definition of a connected person because it is:

– a substantial shareholder of another subsidiary of the listed issuer; or

– an associate of a director (or a person who was in the past 12 months a director), a chief executive, a substantial shareholder or a supervisor of any subsidiary of the listed issuer.

ASX Listing Rules and Australian laws[2]

ASX LR 10.3 – Exceptions to ASX LR 10.1

ASX LR 10.1 does not apply to any of the following:

A transaction between the entity and a wholly owned subsidiary.

A transaction between wholly owned subsidiaries of the entity.

An issue of securities by the entity for cash.

In the case of a trust, a transaction involving a substantial asset that was not beneficially held for the trust before the transaction and is not beneficially held for the trust after the transaction.

A transaction between the entity and a person who is a related party by reason only of the transaction and the application to it of section 228(6) of the Australia Corporations Act.

ADDITIONAL INFORMATION:

Section 228(6) of the Australia Corporations Act:

"An entity is a related party of a public company at a particular time if the entity believes or has reasonable grounds to believe that it is likely to become a related party of the public company of a kind referred to in subsection (1), (2), (3) or (4) at any time in the future."

Section 208 of the Australia Corporations Act:

"(1) For a public company, or an entity that the public company controls, to give a financial benefit to a related party of the public company:

(a) the public company or entity must:

(i) obtain the approval of the public company's members in the way set out in sections 217 to 227; and

(ii) give the benefit within 15 months after the approval; or

(b) the giving of the benefit must fall within an exception set out in sections 210 to 216."

Hong Kong Listing Rules and Hong Kong laws[1]

HK LR 14A.74

The exemptions are broadly divided into two categories:

(1) fully exempt from shareholders' approval, annual review and all disclosure requirements; and

(2) exempt from shareholders' approval requirement.

HK LR 14A.75

The Exchange has the power to specify that an exemption will not apply to a particular transaction.

HK LR 14A.102 – Waivers

The Exchange may waive any requirements under this Chapter in individual cases, subject to any conditions that it may impose.

HK LR 14A.36 – Shareholder approval

The connected transaction must be conditional on shareholders' approval at a general meeting held by the listed issuer. Any shareholder who has a material interest in the transaction must abstain from voting on the resolution.

ASX Listing Rules and Australian laws[2]

Section 210 of the Australia Corporations Act:

"Member approval is not needed to give a financial benefit on terms that:

(a) would be reasonable in the circumstances if the public company or entity and the related party were dealing at arm's length; or

(b) are less favourable to the related party than the terms referred to in paragraph (a)."

Other exemptions are potentially applicable.

ASX LR 10.11 – Approval required for an issue of securities

Unless one of the exceptions in ASX LR 10.12 applies, an entity must not issue or agree to issue equity securities to any of the following persons without the approval of holders of ordinary securities.

10.11.1 A related party.

10.11.2 A person whose relationship with the entity or a related party is, in ASX's opinion, such that approval should be obtained.

Hong Kong Listing Rules and Hong Kong laws[1]

HK LR 14A.92 – Issue of new securities by the listed issuer or its subsidiary

An issue of new securities by a listed issuer or its subsidiary to a connected person is fully exempt if:

1. the connected person receives a pro rata entitlement to the issue as a shareholder;

2. the connected person subscribes for the securities in a rights issue or open offer through excess application or in his or its capacity as an underwriter or sub-underwriter of the rights issue or open offer;

3. the securities are issued to the connected person under a share option scheme that complies with Chapter 17 or a share option scheme adopted by the listed issuer before its securities first start dealing on the Exchange, and where the Exchange has approved the listing of the securities to be issued under the scheme;

4. the securities are issued to the connected person under a "top up placing and subscription" that meets the following conditions:

   (a) the new securities are issued to the connected person:

      (i) after it has reduced its holding in the same class of securities by placing them to third parties who are not its associates under a placing agreement; and

      (ii) within 14 days from the date of the placing agreement;

   (b) the number of new securities issued to the connected person does not exceed the number of securities placed by it; and

   (c) the new securities are issued at a price not less than the placing price. The placing price may be adjusted for the expenses of the placing.

Note: an issue of new securities by a subsidiary of the listed issuer may be exempt as a de minimis transaction.

ASX Listing Rules and Australian laws[2]

ASX LR 10.12 – Exceptions to ASX LR 10.11

Exception 1 the person receives the securities under a pro rata issue.

Exception 2 the person receives the securities under an underwriting agreement in relation to a pro rata issue, provided the person receives the securities not later than 15 business days after close of the offer and the terms of the underwriting were included in offer documents sent to holders of ordinary securities.

Exception 3 the person receives the securities under a dividend or distribution plan (only where the plan does not impose a limit on participation).

Exception 4 an issue of securities under the employee incentive scheme made with the approval of holders of ordinary securities under ASX LR 10.14.

Exception 4A a grant of options or other rights to acquire securities under an employee incentive scheme, where the securities to be acquired on the exercise of the options or in satisfaction of the rights are required by the terms of the scheme to be purchased on-market.

Exception 5 the person receives the securities under an off-market bid that was required to comply with the Australia Corporations Act, or as part of a merger by way of scheme of arrangement under Part 5.1 of the Australia Corporations Act.

Exception 6 the person is a related party by reason only of the transaction which is the reason for the issue of the securities and the application to it of section 228(6) of the Australia Corporations Act.

Exception 7 the person receives the securities on the conversion of convertible securities. The entity must have issued the convertible securities before it was listed or complied with the ASX LR when it issued the convertible securities.

Exception 8 an issue of securities under a share purchase plan, excluding an issue the plan's underwriters. Exception (8) is only available once in any 12 month period and both of the following must apply:

Hong Kong Listing Rules and Hong Kong laws[1]	ASX Listing Rules and Australian laws[2]
	the number of securities to be issued is not greater than 30% of the number of fully paid ordinary securities already on issue; and the issue price of the securities is at least 80% of the 5 day volume weighted average price for securities in that class. **Exception 9** an issue under an agreement to issue securities. The entity must have complied with the ASX LR when it entered into the agreement to issue the securities. **Exception 10** an agreement to issue equity securities that is conditional on holders of ordinary securities approving the issue before the issue is made. If an entity relies on this exception it must not issue the equity securities without approval.

Significant transactions

HK LR 14.08 – Classification and explanation of terms

The table below summarises the classification and percentage ratios resulting from the calculations set out in rule 14.07. However, listed issuers should refer to the relevant rules or the specific requirements.

Type	Assets ratio	Consideration ratio	Profits ratio	Revenue ratio	Equity capital ratio
Share transaction	<5%	<5%	<5%	<5%	<5%
Disclosable transaction	≥5% but <25%	≥5% but <25%	≥5% but <25%	≥5% but <25%	≥5% but <25%
Major transaction – disposal	≥25% but <75%	≥25% but <75%	≥25% but <75%	≥25% but <75%	N/A
Major transaction- acquisition	≥25% but <100%	≥25% but <100%	≥25% but <100%	≥25% but <100%	≥25% but <100%
Very substantial disposal	≥75%	≥75%	≥75%	≥75%	≥75%
Very substantial acquisition	≥100%	≥100%	≥100%	≥100%	≥100%

HK LR 14.33 – Notification publication and shareholders' approval requirements

The table below summarises the notification, publication and shareholders' approval requirements which will generally apply to each category of notifiable transaction. However, listed issuers should refer to the relevant rules for the specific requirements.

ASX LR 11.1 – Proposed change to nature or scale of activities

If an entity proposes to make a significant change, either directly or indirectly, to the nature or scale of its activities, it must provide full details to ASX as soon as practicable. It must do so in any event before making the change. The following rules apply in relation to the proposed change.

11.1.1 The entity must give ASX information regarding the change and its effect on future potential earnings, and any information that ASX asks for.

11.1.2 If ASX requires, the entity must get the approval of holders of its ordinary securities and must comply with any requirements of ASX in relation to the notice of meeting. The notice of meeting must include a voting exclusion statement.

11.1.3 If ASX requires, the entity must meet the requirements in chapters 1 and 2 of the ASX LR as if the entity were applying for admission to the ASX official list.

	Notification to Exchange	Publicly announce	Circular	Shareholder approval	Accountant Report
Share transaction	Yes	Yes	No	No[3]	No
Disclosable transaction	Yes	Yes	No	No	No
Major transaction	Yes	Yes	Yes	Yes	Yes
Very substantial disposal	Yes	Yes	Yes	Yes	No
Very substantial acquisition	Yes	Yes	Yes	Yes	Yes
Reverse takeover	Yes	Yes	Yes	Yes	Yes

For explanations of the different types of transactions and ratios, see 14.06 and 14.07.

ADDITIONAL INFORMATION: *The ASX has provided guidance on ASX LR 11 in Guidance Note 12 "Significant Changes to Activities". For clarity and ease of application, ASX has adopted 25% as an appropriate benchmark for determining whether or not a transaction involves a significant change to the scale of an entity's activities that requires notification to ASX under LR 11.1. ASX considers that the following transactions involve a significant change to the nature or scale of an entity's activities and therefore ought to be notified to ASX under LR 11.1:*

an entity is proposing to embark on a transaction or a series of transactions, that will result in a change to the nature of its main undertaking;

an entity is proposing to dispose of, or to embark on a series of disposals that together will result in a disposal of, its main undertaking;

an entity is proposing:

to acquire a business and the acquisition is likely to result in an increase of 25% or more in; or

to dispose of or abandon an existing business, if the business in question accounts for 25% or more of,

any of the following measures:

consolidated total assets;

consolidated total equity interests;

consolidated annual revenue, or in the case of a mining exploration entity, oil and gas exploration entity or other entity that is not earning – material revenue from operations, consolidated annual expenditure;

consolidated EBITDA; or

consolidated annual profits before tax.

[3] No shareholder approval is necessary if the consideration shares are issued under a general mandate. However, if the shares are not issued under a general mandate, the listed issuer is required, pursuant to Rule 13.36(2) or Rule 19A.38, to obtain shareholders' approval in general meeting prior to the issue of the consideration shares.

Hong Kong Listing Rules and Hong Kong laws

HK LR 14.08

Major acquisitions or disposals (relating to 25% or more but less than 75% of an entity's assets) require shareholder approval.

HK LR 14.89

Material changes With the exception of a listed issuer that has successfully transferred its listing from GEM to the Main Board pursuant to Chapter 9A, in the period of 12 months from the date on which dealings in the securities of a listed issuer commence on the Exchange, the listed issuer shall not effect any acquisition, disposal or other transaction or arrangement, or a series of acquisitions, disposals or other transactions or arrangements, which would result in a fundamental change in the principal business activities of the listed issuer as described in the listing document issued at the time of its application for listing.

HK LR 14.90

The Exchange may grant a listed issuer a waiver of the requirements of rule 14.89:

(1) if it is satisfied that the circumstances surrounding the proposed fundamental change are exceptional; and

(2) subject to the acquisition, disposal or other transaction or arrangement, or series of acquisitions, disposals or other transactions or arrangements, being approved by shareholders in general meeting by a resolution on which any controlling shareholder (or, where there are no controlling shareholders, any chief executive or directors (excluding independent non-executive directors) of the listed issuer) and their respective associates shall abstain from voting in favour. Any shareholders with a material interest in the transaction and their associates shall abstain from voting on resolution(s) approving such transaction at a general meeting called for the purpose of this rule.

ASX Listing Rules and Australian laws[1]

ASX LR 11.2 – Change involving main undertaking

If the significant change involves the entity disposing of its main undertaking, the entity must get the approval of holders of its ordinary securities and must comply with any requirements of ASX in relation to the notice of meeting. The notice of meeting must include a voting exclusion statement. The entity must not enter into an agreement to dispose of its main undertaking unless the agreement is conditional on the entity getting that approval. Rules 11.1.1 and 11.1.3 apply.

ADDITIONAL INFORMATION: *If an entity is proposing to dispose of all, or substantially all, of its assets and businesses, ASX will regard that as a disposal of its main undertaking, regardless of the make-up of those assets and businesses. If an entity is proposing to dispose of something less than all, or substantially all, of its assets and businesses, Listing Rule 11.2 will only apply if what is being disposed of constitutes its main undertaking. The term 'dispose' is defined expansively to include not only direct disposals but also indirect disposals through another person. It also captures disposals effected by any means, include granting or exercising an option, using an asset, decreasing an economic interests and disposing of part of an asset. It is not necessary to dispose of all of the assets used in its main undertaking for it to dispose of its main undertaking. If it disposes of the key assets needed to conduct its main undertaking and the commercial outcome is that it will no longer continue to conduct its main undertaking, ASX will regard that as a disposal of its main undertaking. For example, a mining exploration entity that disposes of all of its mining tenements will be regarded as having disposed of its main undertaking, even though it may retain some or all of its mining equipment (**ASX Guidance Note 12**).*

Hong Kong Listing Rules and Hong Kong laws	ASX Listing Rules and Australian laws[1]
HK LR 14.92 – Restriction on Disposal A listed issuer may not dispose of its existing business for a period of 24 months after a change in control (as defined in the Takeovers Code) unless the assets acquired from the person or group of persons gaining such control or his/their associates and any other assets acquired by the listed issuer after such change in control can meet the trading record requirement of HK LR 8.05. ***ADDITIONAL INFORMATION:*** *LR 8.05 relates to the profit test or target capitalisation/revenue/cash flow test.*	
HK LR 14.93 A disposal by a listed issuer which does not meet the requirement under rule 14.92 will result in the listed issuer being treated as a new listing applicant.	
No comparable rule in Hong Kong.	**ASX LR 11.4 – No disposal of major asset without offer, or approval for no offer** An entity must not dispose of a major asset if, at the time of the disposal, it is aware that the person acquiring the asset intends to issue or offer securities with a view to becoming listed. The entity must do each of the following if one of its child entities holds the major asset. It must not sell securities in the child entity with a view to the child entity becoming listed. It must make sure that the child entity does not issue securities with a view to becoming listed. 11.4.1 This rule does not apply in either of the following cases. (a) The securities, except those to be retained by the entity or child entity, are offered pro rata to holders of ordinary securities in the listed entity, or in another way that, in ASX's opinion, is fair in all the circumstances. (b) Holders of ordinary securities in the listed entity approve of the disposal without the offer referred to in ASX LR 11.4.1(a) being made. The notice of meeting must include a voting exclusion statement.

Hong Kong Listing Rules and Hong Kong laws	ASX Listing Rules and Australian laws[1]

Applying for quotation

HK LR 13.25A(1) – Changes in issued shares

In addition and without prejudice to specific requirements contained elsewhere in the Exchange Listing Rules, an issuer must, whenever there is a change in its issued shares as a result of or in connection with any of the events referred to in rule 13.25A(2), submit through HKEx-EPS, or such other means as the Exchange may from time to time prescribe, for publication on the Exchange's website a return in such form and containing such information as the Exchange may from time to time prescribe by not later than 30 minutes before the earlier of the commencement of the morning trading session or any pre-opening session on the business day next following the relevant event.

HK LR 13.25A(2) – The events referred to in rule 13.25A(1) are as follows:

(a) any of the following: (i) placing; (ii) consideration issue; (iii) open offer; (iv) rights issue; (v) bonus issue; (vi) scrip dividend; (vii) repurchase of shares or other securities; (viii) exercise of an option under the issuer's share option scheme by any of its directors; (ix) exercise of an option other than under the issuer's share option scheme by any of its directors; (x) capital reorganisation; or (xi) change in issued shares not falling within any of the categories referred to in rule 13.25A(2)(a)(i) to (x) or rule 13.25A(2)(b); and

(b) subject to rule 13.25A(3), any of the following: (i) exercise of an option under a share option scheme other than by a director of the issuer; (ii) exercise of an option other than under a share option scheme not by a director of the issuer; (iii) exercise of a warrant; (iv) conversion of convertible securities; or (v) redemption of shares or other securities.

ASX LR 2.8 – Time limits for applying for quotation

An entity must apply for quotation of securities on the ASX as follows:

2.8.1. In accordance with Appendix 6A or Appendix 7A (see below).

2.8.2. If the securities are restricted securities – within 10 business days after the end of the escrow period.

2.8.2A. If unquoted partly paid securities become fully paid securities in the same class as quoted fully paid securities – within 10 business days after the date of final payment.

2.8.2B. If the securities are subject to restrictions on transfer under an employee incentive scheme – within 10 business days after the end of the restrictions.

2.8.3. In other cases – on or before the issue date.

ADDITIONAL INFORMATION:

Appendix 7A of the ASX LR contains timetables that must be followed for the conduct of share issuances on the ASX. Appendix 7A contains rules around the timing for applying for quotation of new shares.

Importantly, for entitlement offers conducted in Australia, an application for quotation of the shares to be issued is made to the ASX on the day the offer is announced.

Once an application for quotation is received from the ASX, the relevant shares can be quoted on the ASX the next day.

Hong Kong Listing Rules and Hong Kong laws	ASX Listing Rules and Australian laws[1]
13.25A (3) – The disclosure obligation for an event in rule 13.25A(2)(b) only arises where: (a) the event, either individually or when aggregated with any other events described in that rule which have occurred since the listed issuer published its last monthly return under rule 13.25B or last return under this rule 13.25A (whichever is the later), results in a change of 5% or more of the listed issuer's issued shares; or (b) an event in rule 13.25A(2)(a) has occurred and the event in rule 13.25A(2)(b) has not yet been disclosed in either a monthly return published under rule 13.25B or a return published under this rule 13.25A. Appendix 5, Form C1 – Must be lodged 4 clear Business Days before the issue date (or 10 Business Days before the issuer proposes to bulk print the listing document (if there is a listing document)).	

A. FURTHER INFORMATION ABOUT THE COMPANY

1. Incorporation

The Company was incorporated in Victoria, Australia under the Australia Corporations Act with limited liability on 18 November 2004 under the name "Yancoal Australia Pty Limited". The Company was converted from a proprietary company limited by shares to a public company limited by shares and its name was changed to "Yancoal Australia Ltd" on 23 March 2010. The Company was listed on the ASX and began trading on the ASX under the ticker code YAL on 28 June 2012.

The Company has established a place of business in Hong Kong at Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong. The Company was registered as a non-Hong Kong company in Hong Kong under Part 16 of the Companies Ordinance (Chapter 622 of the Laws of Hong Kong) and the Companies (Non-Hong Kong Companies) Regulation (Chapter 622J of the Laws of Hong Kong) on 22 June 2018, with Yee Har Susan LO and Wing Tsz Wendy HO of Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong appointed as the Hong Kong authorised representatives of the Company on 5 June 2018 for acceptance of the service of process and any notices required to be served on the Company in Hong Kong.

As the Company was incorporated in Australia, its operations are subject to Australian law and to its Constitution. A summary of the Constitution of the Company and the Australia Corporations Act is set out in "*Appendix V – Summary of the Constitution of the Company and the Australia Corporations Act*".

2. Changes in the Share Capital of the Company

The following alterations in the issued and paid-up share capital of the Company have taken place since its date of incorporation up to the date of this prospectus:

(a) the Company was incorporated on 18 November 2004 with one initial subscriber, Yanzhou, holding one Share;

(b) the issue of 30,000,000 shares to Yanzhou on 29 November 2004;

(c) the issue of 33,999,999 shares to Yanzhou on 15 December 2006;

(d) the issue of 12,975,000 shares to Yanzhou on 10 August 2011;

(e) prior to listing Yanzhou held 775,488,994 shares in Yancoal via a new share issuance of 698,513,994 shares on 7 June 2012;

(f) as part of the Scheme of Arrangement pursuant to which the Company merged with Gloucester Coal Limited, the Company issued 218,727,665 ordinary shares and 87,645,184 contingent value rights shares to the previous shareholders of Gloucester Coal Limited on 6 July 2012;

(g) on 4 March 2014 the Company completed a buy-back of all 87,645,184 contingent value rights shares;

(h) the issue on 31 December 2016 of 60,000 shares on conversion of 60 Subordinated Capital Notes;

(i) the issue of 23,464,929,520 Shares under the Entitlement Offer, 1,500,000,000 under the Placement and 18,000,181,943 Shares on conversion of 18,000,111 Subordinated Capital Notes on 31 August 2017, the issue of 58,490 Shares on conversion of 31 Subordinated Capital Notes on 15 September 2017, and the issue of 3,015,976 Shares on the conversion of 1,606 Subordinated Capital Notes on 31 January 2018, further details of which are set out in the section headed "*History and Corporate Structure*"; and

(j) the Shareholders approved the Share Consolidation by ordinary resolution at the general meeting of the Company held on 26 September 2018. The Share Consolidation took effect on 28 September 2018 which resulted in the issued capital of the Company being consolidated on the basis of one Share for every 35 Shares in issue on 1 October 2018, and fractional entitlements as a result of holdings not being evenly divisible by 35 were rounded up to the nearest whole number.

As a result of the foregoing transactions, as at the Latest Practicable Date, a total of 1,256,071,756 Shares have been issued.

Save as disclosed above, there has been no alteration in the share capital of the Company since the date of its incorporation.

3. Subsidiaries

Details of the subsidiaries of the Company are set out in "*Appendix IA – Accountants' Report of the Group*".

The following subsidiaries of the Company were incorporated within two years immediately preceding the date of this prospectus:

Name of Subsidiary	Place of Incorporation	Date of Incorporation
Parallax Holdings Pty Limited	Australia	30 June 2017
HVO Services Pty Ltd	Australia	27 October 2017

Details of the changes in the share capital of the Company's subsidiaries during the two years immediately preceding the date of this prospectus are set out below:

(a) Coal & Allied Operations Pty Ltd originally held 1 share in HV Operations Pty Ltd but, in preparation of the HVO JV with Glencore, an additional 50 shares were issued to Coal & Allied Operations Pty Ltd. On completion of the HVO JV, an additional 49 shares were issued to Anotero Pty Ltd (a wholly owned subsidiary of Glencore). Save as set out above and in "*Appendix IA – Accountants' Report of the Group*", there has been no alteration in the share capital of the subsidiaries of the Company within two years immediately preceding the date of this prospectus.

So far as is known to any Director or chief executive of the Company, as at the Latest Practicable Date, the following persons are directly or indirectly interested in 10% or more of the issued voting shares of the following subsidiaries of the Company:

Name of Subsidiary	Name of Shareholder	Number of Shares held or interested in	Approximate Percentage
			(%)
Mount Thorley Coal Loading Ltd	Warkworth Coal Sales Ltd	555,000	13.9%
	United Collieries Pty Ltd	555,000	13.9%
	Wambo Coal Pty Ltd	555,000	13.9%
HVO Coal Sales Pty Ltd	Anotero Pty Ltd (Glencore)	490	49.0%
Miller Pohang Coal Company Pty Ltd	POSCO Australia Pty Ltd	20	20.0%
Middlemount Coal Pty Ltd	Peabody Custom Mining Pty Ltd (Peabody Energy)	160,726	50.0%
HV Operations Pty Ltd	Anotero Pty Ltd (Glencore)	49	49.0%

4. Repurchases by the Company of its Own Securities

This section sets out information required by the Stock Exchange to be included in this prospectus concerning the repurchase by the Company of its own securities.

(a) Provisions of Australian laws

Section 257A of the Corporations Act provides that a company may buy-back its own shares if:

(a) the buy-back does not materially prejudice the company's ability to pay its creditors; and

(b) the company follows the procedures summarised below.

Under the Corporations Act there are five types of permitted buy-backs. These are:

(a) minimum holding buy-backs;

(b) employee share scheme buy-backs;

(c) on market buy-backs;

(d) equal access scheme buy-backs; and

(e) selective buy-backs.

The Australian requirements applicable to each of these types of buy-back are as follows:

(i) Minimum holding buy-backs

A "minimum holding buy-back" is a buy-back of all of a holder's shares if the shares are less than a marketable parcel within the meaning of the rules of the relevant financial market. Under the ASX Listing Rules a marketable parcel of shares is a parcel of not less than A$500 based on the most recent closing price.

Minimum holding buy-backs do not require approval by the shareholders in general meeting nor is there a requirement to given ASIC fourteen days' notice. The company is required, however, to inform ASIC of the number of shares acquired and cancelled.

(ii) Employee share scheme buy-backs

An "employee share scheme buy-back" is defined in section 9 of the Corporations Act to mean a buy-back under a scheme that:

(a) has as its purpose the acquisition of shares in a company by, or on behalf of:

- employees of the company, or of a related body corporate; or
- directors of the company, or a related body corporate, who hold a salaried employment or office in the company or in a related body corporate; and

(b) has been approved by the company in general meeting (to the extent that buy-back will exceed the 10/12 limit (as described below)).

One of the purposes of the employee share scheme buy-back provisions is to allow shares held by departing employees to be bought back on the cessation of employment.

The buy-back offer must be approved by shareholders by ordinary resolution in general meeting if the 10/12 limit is exceeded (as described below) and fourteen days' notice of the buy-back must be given to ASIC.

An ASX-listed company which proposes to conduct an employee share scheme buy-back is required to comply with the lodgement requirements in ASX Listing Rule 3.8A. These requirements include the lodging of Appendices 3C to 3F during the course of the buy-back:

(a) Appendix 3C is the announcement of the buy-back and must be lodged immediately as soon as the company decides to undertake the buy-back. The details to be included in Appendix 3C for an on market buy-back include:

- the name of the broker who will act on the company's behalf;
- the reason for the buy-back;

- if the company intends to buy-back a maximum number of shares, that number;
- if the company intends to buy-back shares within a period of time, that period of time;
- if the company intends that the buy-back be of unlimited duration, that intention;
- if the company intends to buy-back shares if conditions are met – those conditions.

Additionally, the company is required to provide any other information material to a shareholder's decision whether to accept the offer (for example, details of any proposed takeover bid).

(b) Appendix 3D is a notice that must be lodged immediately after any change is made to information the company has given to ASX in the Appendix 3C.

(c) Appendix 3E is a daily buy-back notice and is required to be given to ASX on the first business day after any shares have been acquired under the buy-back. The Appendix 3E provides details on a running total basis of the number of shares bought on the previous day and since commencement of the buy-back. It also includes details of the consideration paid for the shares and details of the highest and lowest prices paid. Details of the remaining number of shares to be bought back must also be included if there is an announced maximum number.

(d) Appendix 3F (Final share buy-back notice) is required to be lodged at the conclusion of the buy-back detailing the number of shares bought back and the total consideration paid for those shares.

(iii) On market buy-backs

A buy-back is an on market buy-back if it results from an offer made by a listed corporation on the ASX in the ordinary course of trading (section 257B(6)).

An on market buy-back will need the approval of the company's shareholders by ordinary resolution in general meeting if the buy-back will cause the company to exceed the 10/12 limit (described below).

The company must provide ASIC fourteen days' notice of the buy-back.

On market buy-backs are also regulated by ASX. A company can only buy shares under an on market buy-back if:

(a) Under ASX Listing Rule 7.29, transactions in the company's shares were recorded on ASX on at least five days in the three months before the company buys back the shares; and

(b) Under ASX Listing Rule 7.33, the price at which the shares are bought back is not more than 5% above the average of the market price for securities in that class. The average is calculated over the last 5 days on which sales in the shares were recorded before the day on which the purchase under the buy-back was made.

Under ASX Listing Rule 3.8A the company must lodge Appendices 3C to 3F during the course of the buy-back.

(iv) Equal access scheme buy-backs

To be an "equal access" scheme, section 257B(2) of the Corporations Act requires the scheme to satisfy all the following conditions:

(a) the offers under the scheme relate only to ordinary shares;

(b) the offers are to be made to every person who holds ordinary shares to buy-back the same percentage of their ordinary shares;

(c) all of those persons have a reasonable opportunity to accept the offers made to them;

(d) buy-back agreements are not entered into until a specified time for acceptances of offers has closed; and

(e) the terms of all the offers are the same.

With an equal access scheme buy-back, the company must include with the offers to shareholders to buy-back shares, a statement setting out all information known to the company that is material to the decision whether to accept the offer.

The company must lodge with ASIC, before the agreement is entered into, a document setting out the terms of the offer and any document that is to accompany it.

An equal access scheme will require approval at a general meeting of the company if the 10/12 limit is exceeded (as described below).

Before the notice of the meeting is sent to shareholders, the company must lodge with ASIC a copy of the notice of meeting and any documents relating to the buy-back that will accompany the notice of meeting sent to shareholders.

ASX-listed companies wishing to undertake an equal access share buy-back scheme must comply with ASX Listing Rule 3.8A. This requires the lodgement of Appendices 3C to 3F during the course of the buy-back.

There is also a specific timetable for the conduct of an equal access scheme buy-back in Appendix 7A of the ASX Listing Rules, covering such things as setting the record date and the minimum closing period for acceptances (at least 15 Business Days after the record date).

(v) Selective buy-backs

Any buy-back that is not one of the above recognised types will be a selective buy-back.

Where a company wants to undertake a selective buy-back, shareholder approval will always be required. The notice of meeting must be accompanied by a statement setting out all information known to the company that is material to a shareholder's decision on how to vote on the resolution other than information which the company has previously disclosed to its shareholders, and which it would be unreasonable to require the company to disclose again.

A selective buy-back agreement must be approved either by:

(a) a special resolution passed at a general meeting of the company, with no votes being cast in favour of the resolution by any person whose shares are proposed to be bought back, or by their associates; or

(b) a resolution agreed to by all ordinary shareholders at a general meeting.

Where an ASX listed company proposes to conduct a selective buy-back, the company must lodge the relevant Appendices 3C, 3E and 3F as discussed above.

The company must lodge with ASIC, before the agreement is entered into, a document setting out the terms of the offer and any document that is to accompany it.

Further, before the notice of meeting is sent to shareholders, the company must lodge with ASIC a copy of the notice and of any document that is to accompany it.

(vi) 10/12 Limit

As noted above, shareholder approval by ordinary resolution is required in the case of a selective buy-back, or in the case of any buy-back that will cause the Company to exceed the 10/12 limit.

The 10/12 limit is a materiality threshold set by the Australia Corporations Act. A proposed buy-back would exceed the 10/12 limit if the number of votes attaching to:

(a) all the voting shares in the company that have been bought back during the last 12 months; and

(b) the voting shares that will be bought back if the proposed buy-back is made,

would exceed 10% of the smallest number, at any time during the last 12 months, of votes attached to voting shares of the company (section 257B).

If a proposed buy-back will exceed the 10/12 limit, a company will be required to have regard to the need for shareholder approval before entering into buy-back agreements with shareholders. It can do this by either:

(a) obtaining shareholder approval by ordinary resolution approving the terms of the buy-back agreement before it is entered into; or

(b) making the buy-back agreement conditional on shareholder approval.

(b) Provisions of the Listing Rules

The Listing Rules permit companies with a primary listing on the Stock Exchange to repurchase their own securities on the Stock Exchange subject to certain restrictions, the more important of which are summarised below:

(i) Shareholders' Approval

All proposed repurchase of shares (which must be fully paid up) by a company with a primary listing on the Stock Exchange must be approved in advance by an ordinary resolution of the shareholders, either by way of general mandate or by specific approval of a particular transaction.

(ii) Source of Funds

Repurchases of shares by a listed company must be funded out of funds legally available for the purpose in accordance with the constitutive documents of the listed company, the Listing Rules and the applicable laws and regulations of the listed company's jurisdiction of incorporation. A listed company may not repurchase its own shares on the Stock Exchange for a consideration other than cash or for settlement otherwise than in accordance with the trading rules of the Stock Exchange.

(iii) Trading Restrictions

The total number of shares which a listed company may repurchase on the Stock Exchange is the number of shares representing up to a maximum of 10% of the aggregate number of shares in issue. A company may not issue or announce a proposed issue of new shares for a period of 30 days immediately following a repurchase (other than an issue of securities pursuant to an exercise of warrants, share options or similar instruments requiring the company to issue securities which were outstanding prior to such repurchase) without the prior approval of the Stock Exchange. In addition, a listed company is prohibited from repurchasing its shares on the Stock Exchange if the purchase price is 5% or more than the average closing market price for the five preceding trading days on which its shares were traded on the Stock Exchange. The Listing Rules also prohibit a listed company from repurchasing its shares if that repurchase would result in the number of listed shares which are in the hands of the public falling below the relevant prescribed minimum percentage as required by the Stock Exchange. A company is required to procure that the broker appointed by it to effect a repurchase of shares discloses to the Stock Exchange such information with respect to the repurchase as the Stock Exchange may require.

(iv) Status of Repurchased Shares

All repurchased shares (whether effected on the Stock Exchange or otherwise) will be automatically delisted and the certificates for those shares must be cancelled and destroyed. Under Australian law, a company's purchased shares shall be treated as cancelled and the amount of the Company's issued share capital shall be reduced by the issue price of the purchase shares.

(v) Suspension of Repurchase

A listed company may not make any repurchase of shares after inside information has come to its knowledge until the information has been made publicly available. In particular, during the period of one month immediately preceding the earlier of (1) the date of the board meeting (as such date is first notified to the Stock Exchange in accordance with the Listing Rules) for the approval of a listed company's results for any year, half-year, quarterly or any other interim period (whether or not required under the Listing Rules) and (2) the deadline for publication of an announcement of a listed company's results for any year or half-year under the Listing Rules, or quarterly or any other interim period (whether or not required under the Listing Rules), the listed company may not repurchase its shares on the Stock Exchange other than in exceptional circumstances. In addition, the Stock Exchange may prohibit a repurchase of shares on the Stock Exchange if a listed company has breached the Listing Rules.

(vi) Reporting Requirements

Certain information relating to repurchase of shares on the Stock Exchange or otherwise must be reported to the Stock Exchange not later than 30 minutes before the earlier of the commencement of the morning trading session or any pre-opening session on the following business day. In addition, a listed company's annual report is required to disclose details regarding repurchases of shares made during the year, including a monthly analysis of the number of shares repurchased, the purchase price per share or the highest and lowest price paid for all such repurchases, where relevant, and the aggregate price paid for such repurchases.

(vii) Connected Persons

A listed company is prohibited from knowingly repurchasing securities on the Stock Exchange from a "core connected person", that is, a director, chief executive or substantial shareholder of the company or any of its subsidiaries or their close associates and a core connected person is prohibited from knowingly selling his securities to the company.

(c) General

If, as a result of any repurchase of Shares, a Shareholder's proportionate interest in the voting rights of the Company is increased, such increase will be treated as an acquisition for the purposes of the Takeovers Code. Accordingly, a Shareholder or a group of Shareholders acting in concert could obtain or consolidate control of the Company and become obliged to make a mandatory offer in accordance with Rule 26 of the Takeovers Code.

Any repurchase of Shares that results in the number of Shares held by the public being reduced to less than 15% of the Shares then in issue or such higher percentage held by the public as described in "*Waivers from Strict Compliance with the Listing Rules and Exemptions from Strict Compliance with the Companies (WUMP) Ordinance – 5. Waiver in relation to the public float requirements*" could only be implemented if the Stock Exchange agreed to waive the Listing Rules requirements regarding the public shareholding referred to above.

(d) Documents of Title

Rule 10.06(5) provides that repurchased shares must be cancelled and the documents of title destroyed. Shares that are repurchased by the Company are cancelled immediately after the registration of the transfer of the repurchased shares to the Company pursuant to section 257H(3) of the Australia Corporations Act.; however, no documents of title will be destroyed with respect to repurchased Shares in the Australian Share Registry as Shares in the Australian Share Registry are in uncertificated form (i.e. there are no documents of title to the Shares).

B. FURTHER INFORMATION ABOUT THE BUSINESS

1. Summary of Material Contracts

The Group has entered into the following contracts (not being contracts entered into in the ordinary course of business) within the two years immediately preceding the date of this prospectus that are or may be material:

(a) the Hong Kong Underwriting Agreement dated 23 November 2018 and entered into amongst the Company, the Joint Global Coordinators, the Joint Sponsors and the Hong Kong Underwriters on the terms as more particularly set out in "*Underwriting – Underwriting Arrangements and Expenses*";

(b) the Cornerstone Investment Agreement dated 22 November 2018 and entered into amongst the Company, Shaanxi Coal and Chemical Industry Group Co., Ltd. and the Joint Global Coordinators pursuant to which Shaanxi Coal and Chemical Industry Group Co., Ltd. agreed to subscribe at the Offer Price for such number of Offer Shares (rounded down to the nearest whole board lot of 100 Shares) that may be subscribed for in the Hong Kong dollar equivalent amount of US$40,000,000; and

(c) the Offer Management Agreement dated 1 August 2017 and entered into amongst Yancoal Australia Limited, China International Capital Corporation Hong Kong Securities Limited, J.P. Morgan Australia Limited and Morgan Stanley Australia Securities Limited in relation to the offer and placement of securities of Yancoal Australia Limited in 2017.

2. Intellectual Property

As at the Latest Practicable Date, the following intellectual property rights are material to the Group's business:

(a) Trademarks

As at the Latest Practicable Date, the Group had applied for registration of the following trademark which is material to its business:

No	Trademark	Class	Applicant	Place of Registration	Application Number	Application Date
1.	(A) YANCOAL 兗煤澳大利亚有限公司 (B) YANCOAL 兗煤澳大利亚有限公司	1, 4, 7 and 37	The Company	Hong Kong	304550526	4 June 2018

(b) Domain Names

As at the Latest Practicable Date, the Group had registered the following domain names which are material to its business:

No.	Domain Name	Registered Owner	Expiry Date
1.	www.yancoal.com.au	The Company	18 November 2018
2.	ashtoncoal.com.au	The Company	14 August 2018
3.	austarcoalmine.com.au	The Company	10 February 2019
4.	camebydownscoal.com.au	The Company	23 November 2019
5.	coalandallied.com.au	The Company	13 October 2019
6.	donaldsoncoal.com.au	The Company	26 May 2020
7.	duraliecoal.com.au	The Company	02 March 2020
8.	moolarbencoal.com.au	The Company	10 November 2019
9.	mountthorleywarkworthcoal.com.au	The Company	15 July 2019
10.	mtwcoal.com.au	The Company	15 July 2019
11.	premiercoal.com.au	The Company	10 September 2019
12.	stratfordcoal.com.au	The Company	10 November 2018
13.	syntechresources.com.au	The Company	10 July 2019
14.	yarrabeecoal.com.au	The Company	28 February 2019

C. FURTHER INFORMATION ABOUT THE DIRECTORS

1. Interests of the Directors and Chief Executive of the Company

Immediately following the completion of the Global Offering (assuming the Over-allotment Option is not exercised), the interests and/or short positions (as applicable) of the Directors and the chief executive of the Company in the Shares and debentures of the Company and any interests and/or short positions (as applicable) in shares or debentures of any of the Company's associated corporations (within the meaning of Part XV of the SFO) which (1) will have to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and/or short positions (as applicable) which they are taken or deemed to have under such provisions of the SFO), (2) will be required, pursuant to Section 352 of the SFO, to be entered in the register referred to therein or (3) will be required, pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Listing Rules, to be notified to the Company and the Stock Exchange, in each case once the Shares are listed on the Stock Exchange, will be as follows:

(a) Interests/Short Positions in the Shares

Name of Director or Chief Executive	Number of Shares	Nature of Interest	Approximate Percentage
Baocai ZHANG	260,471	Beneficial owner	0.01980%
Gregory James FLETCHER	1,983	Beneficial owner	0.00015%
Geoffrey William RABY	22,858	Beneficial owner	0.00174%
Reinhold SCHMIDT	312,278	Beneficial owner	0.02374%

Save as disclosed above, none of the Directors or the chief executive of the Company will, immediately following the completion of the Global Offering, have an interest and/or short position (as applicable) in the Shares or debentures of the Company or any interests and/or short positions (as applicable) in the shares or debentures of the Company's associated corporations (within the meaning of Part XV of the SFO) which (i) will have to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they are taken or deemed to have under such provisions of the SFO), (ii) will be required, pursuant to Section 352 of the SFO, to be entered in the register referred to therein or (iii) will be required, pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Listing Rules, to be notified to the Company and the Stock Exchange, in each case once the Shares are listed on the Stock Exchange.

2. Particulars of Letters of Appointment and Service Contracts

Each Director has entered into a letter of appointment in relation to his/her role as a director of the Company, which is subject to termination by the Director or the Company in accordance with the terms of the letter of appointment, the requirements of the Listing Rules and the provisions relating to the retirement and rotation of the Directors under the Constitution.

Pursuant to the terms of the letter of appointment entered into between each Director (on the one part) and the Company (on the other part), (a) the Executive Director and the non-executive Directors are not entitled to receive any director's fees; (b) the annual director's fees payable by the Company to each Independent Non-executive Director are A$150,000 (save for Mr. Greg Fletcher who receives fees as set out in (e) below); (c) an Independent Non-executive Director (save for Mr. Greg Fletcher) will receive from the Company an additional fee of A$30,000 for being the chairman of the audit and risk management committee, the strategy and development committee, the nomination and remuneration committee or the health, safety and environment committee, (d) an Independent Non-Executive Director (save for Mr. Greg Fletcher) will receive from the Company an additional fee of A$15,000 for being a member of the audit and risk management committee, the health, safety and environment committee, the nomination and remuneration committee or the strategy and development committee, and certain additional fees on a per day basis as approved by the Board for the role on an independent board committee for any major related party transactions, and (e) Mr. Greg Fletcher will receive A$330,000 including superannuation in aggregate for his role as a Co-Vice Chair of the Board, chairman of the audit and risk management committee, member of the nomination and remuneration committee and chair of the independent board committee.

Each Director is entitled to be indemnified by the Company (to the extent permitted under the Constitution and applicable laws) and to be reimbursed by the Company for all necessary and reasonable out-of-pocket expenses properly incurred in connection with the performance and discharge of his/her duties under his/her letter of appointment.

Save as disclosed above, none of the Directors has entered into any service contracts as a director with any member of the Group (excluding contracts expiring or determinable by the employer within one year without payment of compensation (other than statutory compensation)).

3. Directors' Remuneration

For details of the Directors' remuneration, see "*Directors and Senior Management – Directors' Remuneration and Remuneration of Five Highest Paid Individuals*".

4. Agency Fees or Commissions Received

The Underwriters will receive an underwriting commission in connection with the Underwriting Agreements, as detailed in "*Underwriting – Commissions and Expenses*". Save in connection with the Underwriting Agreements, no commissions, discounts, brokerages or other special terms have been granted by the Group to any person (including the Directors and experts referred to in "– *Other Information – Qualifications and Consents of Experts*" below) in connection with the issue or sale of any capital or security of the Company or any member of the Group within the two years immediately preceding the date of this prospectus.

5. Personal Guarantees

The Directors have not provided personal guarantees in favour of lenders in connection with banking facilities granted to the Group.

6. Disclaimers

(a) None of the Directors nor any of the experts referred to in "– *Other Information – Qualifications and Consents of Experts*" below has any direct or indirect interest in the promotion of, or in any assets which have been, within the two years immediately preceding the date of this prospectus, acquired or disposed of by, or leased to, any member of the Group, or are proposed to be acquired or disposed of by, or leased to, any member of the Group.

(b) Save in connection with the Underwriting Agreements, none of the Directors nor any of the experts referred to in "– *Other Information – Qualifications and Consents of Experts*" below, is materially interested in any contract or arrangement subsisting at the date of this prospectus which is significant in relation to the business of the Group.

(c) None of the Directors has any existing or proposed service contracts with any member of the Group (excluding contracts expiring or determinable by the employer within one year without payment of compensation (other than statutory compensation)).

(d) Save as disclosed in "*Relationship with the Controlling Shareholders*", neither the Controlling Shareholders nor the Directors are interested in any business apart from the Group's business which competes or is likely to compete, directly or indirectly, with the business of the Group.

(e) No cash, securities or other benefit has been paid, allotted or given within the two years preceding the date of this prospectus to any promoter of the Company nor is any such cash, securities or benefit intended to be paid, allotted or given on the basis of the Global Offering or related transactions as mentioned.

(f) So far as is known to the Directors, none of the Directors or their associates or any Shareholders who are expected to be interested in 5% or more of the issued share capital of the Company has any interest in the five largest customers or the five largest suppliers of the Group.

D. EQUITY INCENTIVE PLAN

1. Summary

The following is a summary of the principal terms of the Equity Incentive Plan of the Company as approved by the Board on 18 April 2018 (the "**Plan**").

2. Purpose

The purpose of the Plan is to:

(a) attract, retain and motivate Eligible Employees essential for the continued growth and development of the Company;

(b) provide a strategic, value based reward for Eligible Employees who make a key contribution to the success of the Group;

(c) align the interests of Eligible Employees more closely with the interests of Shareholders by providing an opportunity for Eligible Employees to receive an equity interest in the form of Awards;

(d) provide Eligible Employees with the opportunity to share in any future growth in value of the Company; and

(e) provide greater incentive for Eligible Employees to focus on the Company's longer term goals.

3. Who may join

Eligible Employees for the purposes of the Plan are those employees that the Board determine are eligible to participate in the Plan (the "**Participants**"). Eligible Employee may receive, at the absolute discretion of the Board, options or rights (a conditional right to receive Shares) ("**Rights**") or a Share (each, an "**Award**") under the Plan.

4. Administration

The Plan will be subject to the administration of the Board. The Board's decision as to all matters arising in relation to the Plan or its interpretation or effect shall be final and binding on all parties. The Board has the power, amongst other things, to terminate or suspend the operation of the Plan at any time, provided that the termination or suspension does not adversely affect or prejudice the rights of Participants holding unvested Shares, Options or Rights at that time or contravene any applicable law.

The Company may also appoint a trustee ("**Trustee**") on any terms and conditions which it considers appropriate to do all such things and perform all such functions as it considers appropriate to operate and administer the Plan.

5. Grant of Awards

The Board may offer an Award to a Participant in writing in such form as the Board may from time to time determine. By accepting an offer the Participant undertakes to hold the Award on the terms on which it is to be granted and to be bound by the terms of the Plan and any other terms and conditions specified by the Board.

6. Exercise

Once Options or Rights have vested, including after applicable vesting conditions have been satisfied, the Board will notify Participants within a reasonable timeframe of the extent to which any exercise conditions (if applicable) have been satisfied or waived by the Board and the vested Options or vested Rights have become exercisable and:

(a) whether the Board has determined to equity settle or cash settle the vested Options or vested Rights that have become exercisable on exercise; and

(b) if the Board has determined to equity settle vested Options or vested Rights, the number of Shares that the Participant will be entitled to receive in respect of each vested Option or vested Right if it is exercised, or how such number of Shares will be determined; or

(c) if the Board has determined to cash settle vested Options or vested Rights, the cash amount to be paid to the Participant upon the exercise of the vested Option or Vested Right or an explanation of how such cash amount will be determined which must be consistent with the terms of the Offer and the Plan Rules.

The exercise of any vested Option or vested Right must be effected in the form and manner determined by the Board and specified in the Offer. The exercise price (if any) in respect of an Option or Right (subject to any adjustment under the Plan) will be determined by the Board and specified in the relevant Offer.

7. Rights attached to the Awards and the Shares

A Participant has no right or interest in a Share the subject of an Option or Right held by the Participant unless and until the Option or Right is exercised and the Share is issued or transferred to the Participant. Nor does the holder of an Option or Right have any rights to dividends, rights to vote or rights to the capital of the Company as a shareholder as a result of holding an Option or a Right. Subject to the Australia Corporations Act and the Constitution, a Participant will not, as a holder of an Option or a Right, have any right to attend to vote at general meetings of holders of Shares.

However, notwithstanding the above, the Board may determine prior to making an Offer that any Options or Rights the subject of the Offer will carry a conditional right to receive a payment in cash or in Shares that is equivalent to the value of dividends that would have been payable to the Participant had they been the holder of the underlying Shares over which the Option or Right ("***Dividend Equivalent Rights***"). The terms of any such Dividend Equivalent Rights will be specified in the Offer. For the avoidance of doubt, any Dividend Equivalent Rights attaching to Options or Rights do not represent an entitlement to actual dividends on the underlying Shares over which the Options or Rights are exercisable, by reason of the Participant not being the holder of the Shares at that time.

8. Corporate Events

The Board may, in its discretion, determine how unvested Shares, Options or Rights held by a Participant will be treated where a Change of Control Event has occurred or occurs in the future, including but not limited to:

(a) determining that unvested Shares, Options or Rights (or a portion of unvested Shares, Options or Rights) will vest and become immediately exercisable with such vesting deemed to have taken place immediately prior to the effective date of the Change of Control Event, regardless of whether or not the employment, engagement or office of the Participant is terminated or ceases in connection with the Change of Control Event;

(b) reducing or waiving:

(i) any of the Share vesting conditions, Option vesting conditions or Right vesting conditions attaching to unvested Shares, unvested Options or unvested Rights; and/or

(ii) any exercise conditions attaching to Options or Rights; and/or

(c) determining that unvested Shares, Options or Rights (or a portion of unvested Shares, Options or Rights) will be forfeited or lapse (as applicable) immediately prior to the effective date of the Change of Control Event.

A "**Change of Control Event**" for the purposes of the Plan occurs where:

(a) an offer is made for Shares pursuant to a takeover bid under Chapter 6 of the Australia Corporations Act and is, or is declared, unconditional; or

(b) the Court sanctions under Part 5.1 of the Australia Corporations Act a compromise or arrangement relating to the Company or a compromise or arrangement proposed for the purposes of or in connection with a scheme for the reconstruction of the Company or its amalgamation with any other company or companies; or

(c) any other merger, consolidation or amalgamation involving the Company occurs which results in the holders of Shares immediately prior to the merger, consolidation or amalgamation being entitled to 50% or less of the voting shares in the body corporate resulting from the merger, consolidation or amalgamation; or

(d) any Group Company enters into agreements to sell in aggregate a majority in value of the businesses or assets (whether or not in the form of shares in a Group Company) of the Group to a person, or a number of persons, none of which are Group Companies;

(e) the Board determines in its reasonable opinion, control of the Company has or is likely to change or pass to one or more persons, none of which are Group Companies;

(f) any event or circumstance occurs (whether specified above or not and whether control of the Company has or is likely to change or pass as a result or not), which the Board determines in its reasonable opinion, means it is not practical or appropriate for Unvested Shares, Unvested Options or Unvested Rights to remain on foot; or

(g) an administrator, liquidator, provisional liquidator, receiver or receiver and manager is appointed in respect of the Company or substantially all of the assets of the Company.

If, while a Participant holds Options or Rights, a resolution for a members' voluntary winding up of the Company is proposed (other than for the purpose of a reconstruction or amalgamation) the Board may, in its discretion, give written notice to Participants of the proposed resolution. Subject to the Option vesting conditions or Right vesting conditions, the Participants may, during the period referred to in the notice, exercise their Options or Rights.

9. Maximum number of shares

Where an Offer is made under the Plan, the Board must, at the time of making the Offer, have reasonable grounds to believe that the total number of Shares (or, in respect of Options or Rights, the total number of Shares which would be issued if those Options or Rights were exercised) will not exceed 5% of the total number of Shares on issue when aggregated with the number of Shares issued or that may be issued as a result of offers made at any time during the previous 3 year period under:

(a) the Plan or any other employee incentive scheme covered by the ASIC Class Order [CO 14/1000] (or any amendment to or replacement of that Class Order) ("**Class Order**"); or

(b) an ASIC exempt arrangement of a similar kind to an employee incentive scheme, ("5% Limit").

10. Transfer restrictions

A Participant may not sell, transfer, assign, novate, etc. any Options or Rights issued under the Plan, unless:

(a) the prior consent of the Board is obtained, which consent may impose such terms and conditions on such assignment, transfer, novation, encumbrance or disposal as the Board sees fit in its sole and absolute discretion; or

(b) such assignment or transfer occurs by force of law upon the death of a Participant to the Participant's legal personal representative.

11. Malus and Clawback

Where, in the opinion of the Board:

(a) a Participant at any time:

(i) acts, or has acted, fraudulently or dishonestly or made a material misstatement on behalf of any Group Company;

(ii) is in material breach of any of his or her duties or obligations to any Group Company;

(iii) has engaged in negligence or gross misconduct;

(iv) has done an act which could reasonably be regarded to have brought any Group Company into disrepute; or

(v) is convicted of an offence or has a judgment entered against them in connection with the affairs of any Group Company;

(b) there is a material misstatement or omission in the financial statements of a Group Company ("**Financial Misstatement Circumstance**") which results in a benefit to a Participant under the Plan (including Awards vesting or becoming exercisable, or a restriction in relation to Awards being lifted), where, in the opinion of the Board, such benefit would not have been obtained but for that Financial Misstatement Circumstance;

(c) a Participant's Awards granted under the Plan vest, or may vest or become as a result of the fraud, dishonesty, negligence or breach of duties or obligations of any other person and, in the opinion of the Board, the Awards would not have otherwise vested or become exercisable;

(d) the Company is required by, or entitled under, law or Company policy to reclaim remuneration from a Participant or restrict the vesting or exercise of a Participant's Awards; or

(e) other adverse events or outcomes arise that the Board considers should impact on a Participant's Awards under this Plan (including the Participant ceasing employment or engagement with Group in order to commence employment or engagement with a direct competitor of the Group or otherwise breaching a restraint under the terms of their employment, engagement or appointment with the Group),

the Board may determine that:

(f) all or some of the Shares acquired by the Participant under the Plan (including Shares acquired upon the exercise of Options or Rights or received under any Dividend Equivalent Right) be forfeited or else remain on foot but subject to conditions;

(g) all or some unvested Options or unvested Rights, or vested but unexercised Options or Rights held by the Participant will lapse or else remain on foot but subject to conditions;

(h) the number of Shares over which all or some Options or Rights are exercisable be adjusted;

(i) the Participant must pay or repay (as the case may be) to the Company as a debt:

  (i) the value of all or part of an Award received under the Plan;

  (ii) all or part of the net proceeds of sale where Shares acquired under the Plan (including on the exercise of Options or Rights or under any Dividend Equivalent Right) have been sold;

  (iii) any dividends received in respect of Shares acquired under the Plan; and/or

  (iv) any payment received under any Dividend Equivalent Right; and/or

(j) adjust fixed remuneration, incentives or participation in this Plan of the relevant Eligible Employee in the current year or any future year,

if it determines that such action is warranted to ensure no unfair benefit is derived by the Participant.

12. Cessation of employment

If a Participant ceases to be an employee due to a Special Circumstance or as a 'good leaver' (i.e. not as a 'Bad Leaver'):

(a) the relevant Participant will be entitled to retain a pro-rata amount of their unvested Shares, unvested Options and/or unvested Rights (based on the proportion of the applicable vesting period that the relevant person was an employee, by reference to the number of whole months employed or engaged);

(b) all other unvested Shares held by the Participant will be forfeited by the Participant; and

(c) all other unvested Options and/or unvested Rights held by the relevant Participant will lapse.

If a Participant ceases to be an employee as a Bad Leaver:

(a) any unvested Shares held by the Participant will be forfeited by the Participant;

(b) unvested Options or unvested Rights held by the relevant Participant will immediately lapse; and

(c) any vested Options or vested Rights held by the relevant Participant must be exercised within the following applicable period or they will also lapse:

(i) if the relevant Participant ceases to be an employee at a time when the Participant would be entitled to deal in the securities of the Company in accordance with Company's share trading policy, within 60 days of the Relevant Person ceasing to be an Employee; or

(ii) if the relevant Participant ceases to be an employee at a time when the Participant would be restricted from dealing in the securities of the Company in accordance with the Company's share trading policy, within 60 days of the such restrictions ceasing to apply.

Subject to the Plan Rules, any unvested Options and/or unvested Rights which the relevant Participant is entitled to retain will continue to be held by the Participant subject to the applicable Option vesting conditions or Right vesting conditions, and any applicable exercise conditions, set out in the Offer, and otherwise subject to and in accordance with the Plan Rules and the terms of the Offer.

"**Special Circumstance**" for the purposes of the Plan means with respect to a Participant:

(a) total and permanent disablement;

(b) mental illness;

(c) redundancy;

(d) retirement; or

(e) the death, or terminal illness.

"**Bad Leaver**" for the purposes of the Plan means a Participant who ceases to be an employee due to:

(a) resignation (other than due to a Special Circumstance);

(b) dismissal for cause or poor performance; or

(c) any other circumstances (other than due to a Special Circumstance) determined by the Board to constitute a Bad Leaver.

13. Adjustments

Unless otherwise determined by the Board and specified in an Offer, a Participant who holds the Shares issued pursuant to the Offer has the same entitlement as any other Shareholder in the Company to participate in any rights issue or bonus issue, provided however, if the Shares held by the Participant are subject to any Share vesting conditions or any restrictions on sale, any shares issued to a Participant under the rights issue or bonus issue will, unless the Board determines otherwise, be subject to the Plan Rules and deemed to have the same Share vesting conditions and restrictions attached as if those shares were Shares issued under the Offer made to the Participant.

In the event of any reorganisation (including consolidation, sub-division, reduction, issue of bonus shares, buy back or cancellation) of the issued share capital of the Company, subject to any provision in the official listing rules of the Australian Securities Exchange, the Board may adjust any or all of the number of Shares issued pursuant to the Offer to a Participant as the Board deems appropriate.

14. Amendment, modification and termination

The Board may at any time: (a) amend the Plan Rules; (b) waive or amend the application of any of the Plan Rules in relation to a Participant; or (c) amend the terms on which any Awards have been granted under the Plan.

No amendment to the Plan Rules, the application of the Plan Rules in relation to a Participant or the terms on which any Award has been granted is to reduce the rights of any Participant in respect of their Awards acquired under the Plan, other than:

(a) an amendment introduced primarily:

(i) for the purposes of complying with or conforming to present or future legislation governing or regulating the Plan or like plans;

(ii) to correct any manifest error or mistake;

(iii) to allow the implementation of a trust arrangement in relation to the holding of Shares granted under the Plan;

(iv) for the purpose of complying with applicable law; and/or

(v) to take into consideration possible adverse taxation implications (including, without limitation, on account of fringe benefits tax) for the Company in respect of the Plan or the Awards granted under the Plan, including as a result of changes to applicable taxation legislation or the interpretation of that legislation by any taxation authority or a court of competent jurisdiction or any rulings from taxation authorities administering such legislation; or

(b) an amendment agreed to in writing by the Participant.

As soon as reasonably practicable after making any amendment to the Plan Rules, the Board will give notice of the amendment to any Participant affected by the amendment. Failure by the Board to notify a Participant of any amendment will not invalidate the amendment as it applies to that Participant.

General

The Trustee will acquire Shares from the market and upon vesting, an Award will be satisfied by the Trustee transferring the Shares underlying that Award to the Participant.

As at the Latest Practicable Date, a portion of the awards of the directors and management team's bonuses granted in 2017 as disclosed in Note 11 to "Appendix 1A – Accountants' Report of the Group" will be made under the Plan.

Details of the Plan, including particulars and movements of the Awards granted during each financial year of the Company, and our employee costs arising from the grant of the Awards will be disclosed in the Company's annual report.

E. THE COMPANY'S AUDITOR

Pursuant to Rule 19.20 of the Listing Rules, the annual accounts of an overseas issuer must be audited by a person, firm or company who must be a practising accountant of good standing. Such person, firm or company must also be independent of the overseas issuer to the same extent as that required of an auditor under the Companies Ordinance and in accordance with the statements on independence issued by the International Federation of Accountants ("**IFAC**") and, if the overseas issuer's primary listing is or is to be on the Stock Exchange, must be either (i) qualified under the Professional Accountants Ordinance (Chapter 50 of the Laws of Hong Kong) for appointment as an auditor of a company; or (ii) a firm of accountants acceptable to the Stock Exchange which has an international name and reputation and is a member of a recognised body of accountants. In addition, the JPS provides that auditors that are not Hong Kong qualified would be considered acceptable if the firm is subject to independent oversight by a regulatory body of a jurisdiction that is a signatory to the International Organization of Securities Commissions Multilateral Memorandum of Understanding.

The Company was incorporated in Australia and the business, operations and management of the Group are all located in Australia. Its financial statements have been prepared in accordance with Australian Accounting Standards and also comply with International Financial Reporting Standards. The Company has engaged ShineWing Australia as its auditors since 2015. It is intended that ShineWing Australia will remain as the auditors of the Group's annual accounts upon, and after, the completion of the Listing as a firm of accountants acceptable to the Stock Exchange pursuant to Rule 19.20(2) of the Listing Rules for the following reasons:

(a) ShineWing Australia is a member firm of ShineWing International, an accounting practice with an international name and reputation;

(b) ShineWing Australia is registered under the applicable laws of Australia and is a member of the Chartered Accountants Australia and New Zealand, which is one of the professional accounting bodies in Australia and a member of the International Federation of Accountants, a global organisation for the accountancy profession. ShineWing Australia is regulated by the Australian Securities and Investment Commission;

(c) ShineWing Australia is independent from the Group under the statements on independence issued by the IFAC; and

(d) ShineWing Australia will continue to audit the Group's annual accounts in accordance with both Australia Accounting Standards and International Financial Reporting Standards.

F. OTHER INFORMATION

1. Estate Duty

The Directors have been advised that no material liability for estate duty is likely to fall on the Group in Hong Kong and Australia.

2. The Joint Sponsors

Morgan Stanley and CMBI satisfy the independence criteria applicable to sponsors set out in Rule 3A.07 of the Listing Rules.

BOCI is not and does not expect to be independent because, among others, it is likely that more than 15% of the proceeds raised from the Global Offering will be used directly or indirectly to settle debts due from the Company to Bank of China Limited, Sydney Branch. Bank of China Limited, Sydney Branch is a subsidiary of Bank of China Limited, of which BOCI Asia Limited is also a subsidiary, and is therefore a member of the sponsor group (as defined in Rule 3A.01(9) of the Listing Rules).

The Joint Sponsors will receive an aggregate fee of US$2,250,000 to act as joint sponsors to the Company in connection with the Global Offering.

3. Preliminary Expenses

The total preliminary expenses of the Company are estimated to be approximately A$1,000 and were paid by the Company.

4. Promoter

The Company has no promoter. Save as disclosed above, within the two years immediately preceding the date of this prospectus, no cash, securities or other benefits have been paid, allotted or given to the promoters in connection with the Global Offering or the related transactions described in this prospectus.

5. Qualifications and Consents of Experts

The qualifications of the experts which have given opinions or advice which are contained in, or referred to in, this prospectus are as follows:

Name of Expert	Qualifications
Morgan Stanley Asia Limited	Licensed under the SFO to conduct Type 1 (dealing in securities), Type 4 (advising on securities), Type 5 (advising on futures contracts), Type 6 (advising on corporate finance) and Type 9 (asset management) regulated activities
CMB International Capital Limited	Licensed under the SFO to conduct Type 1 (dealing in securities) and Type 6 (advising on corporate finance) regulated activities
BOCI Asia Limited	Licensed under the SFO to conduct Type 1 (dealing in securities) and Type 6 (advising on corporate finance) regulated activities
Gilbert + Tobin	Qualified Australian lawyers
SHINEWING (HK) CPA Limited	Certified Public Accountants, Hong Kong
ShineWing Australia	Chartered Accountants, Australia
RPM Advisory Services Pty Ltd	Competent Person
AME Consulting Pty Ltd	Industry consultant
KPMG	Taxation adviser

Each of Morgan Stanley Asia Limited, CMB International Capital Limited, BOCI Asia Limited, Gilbert + Tobin, SHINEWING (HK) CPA Limited, ShineWing Australia, RPM Advisory Services Pty Ltd, AME Consulting Pty Ltd and KPMG has given and has not withdrawn its written consent to the issue of this prospectus with the inclusion of its report and/or letter and/or opinion and/or references to its name included herein in the form and context in which they respectively appear.

6. Binding Effect

This prospectus shall have the effect, if an application is made in pursuance hereof, of rendering all persons concerned bound by all of the provisions (other than the penal provisions) of Sections 44A and 44B of the Companies (Winding Up and Miscellaneous Provisions) Ordinance so far as applicable.

7. Bilingual Prospectus

The English language and Chinese language versions of this prospectus are being published separately, in reliance upon the exemption provided in Section 4 of the Companies Ordinance (Exemption of Companies and Prospectuses from Compliance with Provisions) Notice (Chapter 32L of the Laws of Hong Kong).

8. Miscellaneous

(a) Save as disclosed in "*History and Corporate Structure*", "*Share Capital*", "*Structure of the Global Offering"* and this Appendix VII, within the two years preceding the date of this prospectus, no share or loan capital of the Company or any of its subsidiaries has been issued or has been agreed to be issued fully or partly paid either for cash or for a consideration other than cash.

(b) No share or loan capital of the Company or any of its subsidiaries is under option or is agreed conditionally or unconditionally to be put under option.

(c) No founder, management or deferred shares of the Company or any of its subsidiaries have been issued or have been agreed to be issued.

(d) The Company has no outstanding convertible debt securities or debentures.

(e) None of Morgan Stanley Asia Limited, CMB International Capital Limited, BOCI Asia Limited, Gilbert + Tobin, SHINEWING (HK) CPA Limited, ShineWing Australia, RPM Advisory Services Pty Ltd, AME Consulting Pty Ltd and KPMG:

(i) is interested beneficially or non-beneficially in any shares in any member of the Group; or

(ii) has any right or option (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for securities in any member of the Group save in connection with the Underwriting Agreements.

(f) The English text of this prospectus and the Application Forms shall prevail over their respective Chinese text.

(g) There has not been any interruption in the business of the Group which may have or has had a significant effect on the financial position of the Group in the 12 months preceding the date of this prospectus.

A. DOCUMENTS DELIVERED TO THE REGISTRAR OF COMPANIES

The documents attached to the copy of this prospectus delivered to the Registrar of Companies in Hong Kong for registration were:

(a) a copy of each of the **WHITE**, **YELLOW** and **GREEN** Application Forms;

(b) a copy of each of the material contracts referred to in "*Appendix VII – Statutory and General Information*";

(c) the written consents referred to in "*Appendix VII – Statutory and General Information*"; and

(d) the statement of adjustments to the Accountants' Report of the Group set out in "*Appendix IA – Accountants' Report of the Group*" which was reported on by SHINEWING (HK) CPA Limited and ShineWing Australia.

B. DOCUMENTS AVAILABLE FOR INSPECTION

Copies of the following documents will be available for inspection at the offices of Freshfields Bruckhaus Deringer at 55th Floor, One Island East, Taikoo Place, Quarry Bay, Hong Kong, during normal business hours up to and including the date which is 14 days from the date of this prospectus:

(a) the Constitution of the Company;

(b) the Accountants' Report, the report on the unaudited pro forma financial information and the report on the unaudited pro forma financial information of the Enlarged Group prepared by SHINEWING (HK) CPA Limited and ShineWing Australia, the texts of which are set out in "*Appendix IA – Accountants' Report of the Group*", *"Appendix IIA – Unaudited Pro Forma Financial Information"* and *"Appendix IIB – Unaudited Pro Forma Financial Information of the Enlarged Group*", respectively;

(c) the Accountants' Report on C&A and pro forma consolidated statement of financial position of the Group prepared by ShineWing Australia, the texts of which are set out in "*Appendix IB – Accountants' Report of C&A*" and "*Appendix IIC – Pro Forma Consolidated Statement of Financial Position of the Group*", respectively;

(d) the statement of adjustments to the Accountants' Report of the Group set out in "*Appendix IA – Accountants' Report of the Group*" which was reported on by SHINEWING (HK) CPA Limited and ShineWing Australia;

(e) the audited consolidated financial statements of the Group for the years ended 31 December 2015, 2016 and 2017 and six months ended 30 June 2018;

(f) the letter from Gilbert + Tobin, the Company's Australian legal adviser, summarising the Constitution of the Company and certain aspects of the Australia Corporations Act referred to in "*Appendix V – Summary of the Constitution of the Company and the Australia Corporations Act*";

(g) the competent person's report prepared by RPM Advisory Services Pty Ltd;

(h) the industry report prepared by AME Consulting Pty Ltd;

(i) the letters of appointment referred to in "*Appendix VII – Statutory and General Information*";

(j) the material contracts referred to in "*Appendix VII – Statutory and General Information*"; and

(k) the written consents referred to in "*Appendix VII – Statutory and General Information*".

In addition, investors can access the following documents via the following websites:

(i) the Australia Corporations Act (**https://www.legislation.gov.au/Details/C2018C00131**);

(ii) the ASX Listing Rules (**https://www.asx.com.au/regulation/rules/asx-listing-rules.htm**);

(iii) the ASX Settlement Operating Rules (**https://www.asx.com.au/regulation/rules/asx-settlement-operating-rules.htm**); and

(iv) the Australia Foreign Acquisitions and Takeovers Act (**https://www.legislation.gov.au/Details/C2016C01144**).

Any information contained in, or that can be accessed via the above websites, does not constitute a part of this prospectus.

In this prospectus, unless the context otherwise requires, the following expressions shall have the following meanings.

"100% basis"	the aggregate Coal Resources, Coal Reserves or coal production from our mines, Middlemount and the Watagan Mines, without taking into account our effective ownership interest therein
"A$" or "Australian dollars"	Australian dollars, the lawful currency of Australia
"APCT"	Abbot Point Coal Terminal
"Application Form(s)"	the **WHITE** Application Form(s), **YELLOW** Application Form(s) and **GREEN** Application Form(s) or, where the context so requires, any of them, that are used in connection with the Hong Kong Public Offering
"ASIC"	Australian Securities and Investments Commission
"ASX"	ASX Limited and the financial market operated by it named Australian Securities Exchange
"ASX Listing Rules"	the Listing Rules of the ASX
"attributable basis"	the percentage interest attributable to our ownership, whether contractually or otherwise, in the aggregate JORC Coal Resources or JORC Coal Reserves in, or production from, our mines
"Australia Corporations Act"	the Corporations Act 2001 (Cth) of Australia, as amended or supplemented from time to time
"Australia Foreign Acquisitions and Takeovers Act"	the Foreign Acquisitions and Takeovers Act 1975 of Australia, as amended or supplemented from time to time
"Australian Entitlement Offer"	the accelerated renounceable entitlement offer being undertaken by the Company at or around the time of the Global Offering
"Australian Share Registry"	Computershare Investor Services Pty Limited
"BHP"	BHP Billiton Limited
"BLCP"	BLCP Power Limited
"Board" or "Board of Directors"	the board of directors of the Company
"BOCIF"	BOCI Financial Products Limited, one of the Watagan Bondholders

"business day"	any day (other than a Saturday, Sunday or public holiday) on which banks in Hong Kong are generally open for normal banking business
"C&A"	Coal & Allied Industries Limited
"C&A Acquisition"	our acquisition of 100% of the equity interest in C&A from Rio Tinto, which was completed on 1 September 2017
"CCASS"	the Central Clearing and Settlement System established and operated by HKSCC
"CCASS Account"	a securities account maintained by a CCASS Participant with CCASS
"CCASS Clearing Participant"	a person admitted to participate in CCASS as a direct clearing participant or general clearing participant
"CCASS Custodian Participant"	a person admitted to participate in CCASS as a custodian participant
"CCASS Investor Participant"	a person admitted to participate in CCASS as an investor participant who may be an individual or joint individuals or a corporation
"CCASS Participant"	a CCASS Clearing Participant, a CCASS Custodian Participant or a CCASS Investor Participant
"Centennial Coal"	Centennial Coal Company Limited
"CHESS"	Clearing House Electronic Subregister System for security transfers on the ASX
"Cinda"	Cinda International HGB Investment (UK) Limited
"Coal Reserve"	as defined in the JORC Code, i.e. the economically mineable part of a Measured and/or Indicated Coal Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified

"Coal Resource"	as defined in the JORC Code, i.e. a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Coal Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Coal Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories
"Companies Ordinance"	the Companies Ordinance (Chapter 622 of the Laws of Hong Kong), as amended or supplemented from time to time
"Companies (Winding Up and Miscellaneous Provisions) Ordinance" or "Companies (WUMP) Ordinance"	the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Chapter 32 of the Laws of Hong Kong), as amended or supplemented from time to time
"Company"	Yancoal Australia Ltd, a company incorporated under the laws of Australia with limited liability on 18 November 2004
"Competent Person"	has the meaning ascribed to it under Chapter 18 of the Listing Rules
"Competent Person's Report"	the report prepared and/or supervised by the Competent Persons in compliance with Chapter 18 of the Listing Rules, the text of which is set out in *"Appendix III – Competent Person's Report"*
"Constitution"	the constitution of the Company (as amended from time to time), as adopted by a resolution of the Shareholders on 26 June 2012 and last amended on 30 May 2014, a summary of which is set out in "*Appendix V – Summary of the Constitution of the Company and the Australia Corporations Act*"
"Controlling Shareholders"	has the meaning given to it in the Listing Rules and, unless the context requires otherwise, refers to Yanzhou and Yankuang
"CSIL"	China Shandong Investment Limited, a wholly owned subsidiary of Shandong Lucion Investment Holdings Group Co., Ltd.
"Director(s)"	the director(s) of the Company

"FOB"	free on board
"FY" or "financial year"	financial year ended or ending 31 December
"Glencore"	Glencore Coal Pty Ltd
"Glencore Transaction"	the sale by the Company of a 16.6% interest in HVO to Glencore, which was completed on 4 May 2018, resulting in the 51:49 HVO JV between us and Glencore
"Global Offering"	the Hong Kong Public Offering and the International Offering
"**GREEN** Application Form(s)"	the application form(s) to be completed by the **White Form eIPO** Service Provider, Computershare Hong Kong Investor Services Limited
"Group", "we", "our" or "us"	unless otherwise indicated, the Company, its consolidated subsidiaries and the Company's interests in associates, joint ventures and joint operations
"HK$" or "Hong Kong dollars"	Hong Kong dollars, the lawful currency of Hong Kong
"HKSCC"	Hong Kong Securities Clearing Company Limited, a wholly-owned subsidiary of Hong Kong Exchanges and Clearing Limited
"HKSCC Nominees"	HKSCC Nominees Limited, a wholly-owned subsidiary of HKSCC, in its capacity as nominee for HKSCC (or any successor thereto) as operator of CCASS and any successor, replacement or assign of HKSCC Nominees Limited as nominee for the operator of CCASS
"Hong Kong"	the Hong Kong Special Administrative Region of the PRC
"Hong Kong Offer Shares"	the 5,944,200 Shares initially being offered by the Company pursuant to the Hong Kong Public Offering (subject to reallocation as described in "*Structure of the Global Offering*")
"Hong Kong Public Offering"	the offer of the Hong Kong Offer Shares to the public in Hong Kong for subscription at the Offer Price, on and subject to the terms and conditions set out in this prospectus and the Application Forms, as further described in "*Structure of the Global Offering*"

"Hong Kong Share Registrar"	Computershare Hong Kong Investor Services Limited
"Hong Kong Underwriters"	the underwriters listed in "*Underwriting – Hong Kong Underwriters*", being the underwriters of the Hong Kong Public Offering
"Hong Kong Underwriting Agreement"	the underwriting agreement dated 23 November 2018 relating to the Hong Kong Public Offering entered into among the Company, the Joint Global Coordinators, the Joint Sponsors and the Hong Kong Underwriters, as further described in "*Underwriting*"
"HVO"	the Hunter Valley Operations
"HVO JV"	the unincorporated HVO joint venture, which owns HVO and in which the Company holds a 51% interest
"HVOR"	HVO Resources Pty Ltd, a wholly owned subsidiary of MDP
"IBC"	Industrial Bank Co., Ltd., one of the Watagan Bondholders
"IFRS"	International Financial Reporting Standards
"independent third party"	any party who is not connected (within the meaning of the Listing Rules) with the Company, so far as the Directors are aware after having made reasonable enquiries
"Indicated Coal Resource"	as defined in the JORC Code, i.e. that part of a Coal Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed

"Inferred Coal Resources"	as defined in the JORC Code, i.e. that part of a Coal Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability
"International Offer Shares"	the 53,497,700 Shares initially being offered by the Company pursuant to the International Offering (subject to reallocation as described in "*Structure of the Global Offering*") together with, where relevant, up to an additional 8,916,200 Shares which may be issued by the Company pursuant to any exercise of the Over-allotment Option
"International Offering"	the offer of the International Offer Shares (a) in the United States solely to QIBs pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the U.S. Securities Act or (b) outside the United States in offshore transactions in reliance on Regulation S, for subscription or purchase (as the case may be) at the Offer Price, in each case on and subject to the terms and conditions of the International Underwriting Agreement, as further described in "*Structure of the Global Offering*"
"International Underwriters"	the underwriters named in the International Underwriting Agreement, being the underwriters of the International Offering
"International Underwriting Agreement"	the underwriting agreement relating to the International Offering to be entered into among the Company, the Joint Global Coordinators and the International Underwriters on or about the Price Determination Date, as further described in "*Underwriting*"

"Joint Bookrunners"	Morgan Stanley Asia Limited (in relation to the Hong Kong Public Offering), Morgan Stanley & Co. International plc (in relation to the International Offering), CMB International Capital Limited, BOCI Asia Limited, Citigroup Global Markets Asia Limited (in relation to the Hong Kong Public Offering), Citigroup Global Markets Limited (in relation to the International Offering), CCB International Capital Limited, China Everbright Securities (HK) Limited, Cinda International Securities Limited, Haitong International Securities Company Limited and Zhongtai International Securities Limited
"Joint Global Coordinators"	Morgan Stanley Asia Limited, CMB International Capital Limited, BOCI Asia Limited and Citigroup Global Markets Asia Limited
"Joint Lead Managers"	Morgan Stanley Asia Limited (in relation to the Hong Kong Public Offering), Morgan Stanley & Co. International plc (in relation to the International Offering), CMB International Capital Limited, BOCI Asia Limited, Citigroup Global Markets Asia Limited (in relation to the Hong Kong Public Offering), Citigroup Global Markets Limited (in relation to the International Offering), CCB International Capital Limited, China Everbright Securities (HK) Limited, Cinda International Securities Limited, Haitong International Securities Company Limited and Zhongtai International Securities Limited
"Joint Policy Statement"	the Joint Policy Statement regarding the listing of overseas companies issued by the Stock Exchange and the SFC on 27 September 2013 and amended on 30 April 2018
"Joint Sponsors"	Morgan Stanley Asia Limited, CMB International Capital Limited and BOCI Asia Limited
"JORC Code"	the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 edition, which is used to determine resources and reserves, and is published by Joint Coal Reserves Committee on behalf of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Minerals Council of Australia
"JVMC"	the joint venture management committee through which the Group and Glencore jointly control the HVO JV

"Latest Practicable Date"	18 November 2018, being the latest practicable date for the purpose of ascertaining certain information contained in this prospectus prior to its publication
"Listing"	the listing of the Shares on the Main Board of the Stock Exchange
"Listing Committee"	the listing committee of the Stock Exchange
"Listing Date"	the date, expected to be on or about Thursday, 6 December 2018, on which the Shares are first listed and from which dealings in the Shares are permitted to take place on the Main Board of the Stock Exchange
"Listing Rules"	the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, as amended or supplemented from time to time
"Maximum Offer Price"	HK$25.84 per Offer Share, being the maximum subscription price in the Offer Price Range
"MDP"	Mitsubishi Development Pty Ltd
"Measured Coal Resource"	as defined in the JORC Code, i.e. that part of a Coal Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity
"Middlemount"	the Middlemount mine
"Middlemount JV"	Middlemount Coal Pty Ltd, a joint venture entity in which the Company holds a 49.9997% interest
"Minimum Offer Price"	HK$23.48 per Offer Share, being the minimum subscription price in the Offer Price Range
"Moolarben"	the Moolarben mine
"Moolarben Acquisition"	the Company's planned acquisition of an additional 4% interest in the Moolarben JV

"Moolarben JV"	the unincorporated Moolarben joint venture, which owns Moolarben and in which the Company holds an 81% interest
"Mount Thorley"	the Mount Thorley mine, which is operationally integrated with the Warkworth mine to form MTW
"Mount Thorley JV"	the unincorporated Mount Thorley joint venture, which owns Mount Thorley and in which the Company holds an 80% interest
"Mt"	million tonnes
"Mtpa"	million tonnes per annum
"MTW"	the Mount Thorley Warkworth Operations
"NCIG"	Newcastle Coal Infrastructure Group Pty Ltd, or where the context requires, Newcastle Coal Infrastructure Group coal export terminal, in which the Company holds a 27.0% interest as an associate.
"New Hope"	New Hope Corporation Limited
"NSW"	New South Wales, Australia
"Offer Price"	the final offer price per Offer Share (exclusive of brokerage of 1.0%, SFC transaction levy of 0.0027% and Stock Exchange trading fee of 0.005%) of not more than HK$25.84 and expected to be not less than HK$23.48, such price to be determined by agreement between the Joint Global Coordinators (on behalf of the Underwriters) and the Company on or before the Price Determination Date
"Offer Price Range"	HK$23.48 to HK$25.84 per Offer Share
"Offer Shares"	the Hong Kong Offer Shares and the International Offer Shares, together with, where relevant, any additional Shares which may be issued by the Company pursuant to any exercise of the Over-allotment Option

"Over-allotment Option"	the option expected to be granted by the Company under the International Underwriting Agreement to the International Underwriters, exercisable by the Stabilising Manager (or its affiliate or any party acting for it), pursuant to which the Company may be required to issue up to an additional 8,916,200 Shares (representing not more than approximately 15% of the number of Offer Shares initially being offered under the Global Offering) at the Offer Price, to, among other things, cover over-allocations in the International Offering, if any, as further described in "*Structure of the Global Offering*"
"Peabody Energy"	Peabody Energy Australia Pty Ltd
"PRC" or "China"	the People's Republic of China, but for the purposes of this prospectus only, except where the context requires, references in this prospectus to PRC or China exclude Hong Kong, Macau and Taiwan
"Price Determination Date"	the date, expected to be on or about Thursday, 29 November 2018, on which the Offer Price will be determined and, in any event, not later than Wednesday, 5 December 2018
"Pro Forma Transactions"	the C&A Acquisition, Glencore Transaction and Warkworth Transaction
"PWCS"	Port Waratah Coal Services Pty Ltd, or where the context requires, the Port Waratah Coal Services coal export terminal, in which the Company holds a 30.0% interest as an associate
"QIB"	a qualified institutional buyer within the meaning of the Rule 144A
"QLD"	Queensland, Australia
"Regulation S"	Regulation S under the U.S. Securities Act
"Relevant Persons"	the Joint Global Coordinators, the Joint Sponsors, the Joint Bookrunners, the Underwriters, the Controlling Shareholders, any of their or the Company's respective directors, officers, agents, or representatives or advisers or any other person involved in the Global Offering
"RGTCT"	RG Tanna Coal Terminal
"Rio Tinto"	Rio Tinto Limited

"RMB"	Renminbi, the lawful currency of the PRC
"Rule 144A"	Rule 144A under the U.S. Securities Act
"SCNs"	Subordinated capital notes issued by Yancoal SCN in December 2014 in the amount of A$2.3 billion and redeemed in full on 31 January 2018
"SFC"	the Securities and Futures Commission of Hong Kong
"SFO"	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended or supplemented from time to time
"Shareholder(s)"	holder(s) of Shares
"Shares"	ordinary shares in the share capital of the Company
"Stabilising Manager"	Morgan Stanley Asia Limited
"Stock Borrowing Agreement"	the stock borrowing agreement expected to be entered into on or about the Price Determination Date between the Stabilising Manager (or its affiliate) and Yanzhou
"Stock Exchange"	The Stock Exchange of Hong Kong Limited
"Syndicated Facility"	a secured loan facility with a maximum credit limit of US$2,900 million that the Company obtained in 2009 with a syndicate of banks, including Bank of China Limited, Sydney Branch, China Development Bank Limited, Hong Kong Branch, and China Construction Bank Limited, Hong Kong Branch
"Takeovers Code"	the Hong Kong Code on Takeovers and Mergers
"tonnes"	metric tonne or 1,000 kilograms
"Track Record Period"	the three years ended 31 December 2017 and the six months ended 30 June 2018
"Underwriters"	the Hong Kong Underwriters and the International Underwriters
"Underwriting Agreements"	the Hong Kong Underwriting Agreement and the International Underwriting Agreement
"UNE"	United NSW Energy Limited, one of the Watagan Bondholders

"U.S." or "United States"	the United States of America, its territories and possessions, any state of the United States and the District of Columbia
"US$" or "US dollars"	Dollars, the lawful currency of the U.S.
"U.S. Securities Act"	the United States Securities Act of 1933, as amended
"Warkworth"	the Warkworth mine, which is operationally integrated with the Mount Thorley mine to form MTW
"Warkworth JV"	the unincorporated Warkworth joint venture, which owns Warkworth and in which the Company holds a 55.574% interest
"Warkworth Transaction"	the Company's acquisition of an additional 28.9% interest in the unincorporated Warkworth JV from MDP, which was completed on 7 March 2018
"Watagan"	Watagan Mining Company Pty Ltd, a company with limited liability incorporated under the laws of New South Wales, Australia on 14 December 2015 and a wholly-owned subsidiary of the Company
"Watagan Agreements"	agreements entered into among Watagan, the Company and the Watagan Bondholders in connection with the issuance of the Watagan Bonds
"Watagan Board"	the board of directors of Watagan
"Watagan Bondholders" or "Bondholders"	IBC, BOCIF and UNE
"Watagan Bonds"	US$775 million nine-year secured bonds issued on 31 March 2016 by Watagan to the Watagan Bondholders
"Watagan Group"	Watagan and its subsidiaries
"Watagan Loan"	a loan from the Company to Watagan of A$1,363 million to fund the purchase of the Ashton, Austar and Donaldson mines in March 2016, bearing interest at the bank bill swap rate on the first day of each interest period plus 7.06% with a maturity date of 1 April 2025
"Watagan Mines"	the Ashton, Austar and Donaldson mines

"**White Form eIPO**"	the application for Hong Kong Offer Shares to be issued in the applicant's own name by submitting applications online through the designated website of **White Form eIPO** at **www.eipo.com.hk**
"**White Form eIPO** Service Provider"	Computershare Hong Kong Investor Services Limited
"Whitehaven"	Whitehaven Coal Limited
"WICET"	Wiggins Island Coal Export Terminal Pty Ltd, or where the context requires, the Wiggins Island Coal Export Terminal, in which the Company holds a 9.4% interest as an associate
"Yancoal International"	Yancoal International (Holding) Co., Limited, a company with limited liability incorporated under the laws of Hong Kong on 13 July 2011 and a wholly-owned subsidiary of Yanzhou
"Yancoal SCN"	Yancoal SCN Ltd, a limited liability company incorporated under the laws of Australia on 13 November 2014 and a wholly-owned subsidiary of the Company
"Yankuang"	Yankuang Group Company Limited (兗礦集團有限公司), a company with limited liability reformed and established under the laws of the PRC on 12 March 1996, the controlling shareholder of Yanzhou and the ultimate controlling shareholder of the Company
"Yankuang Group"	Yankuang and its subsidiaries (excluding the Yanzhou Group)
"Yanzhou"	Yanzhou Coal Mining Company Limited (兗州煤業股份有限公司), a joint stock limited company incorporated in the PRC on 25 September 1997, the H shares and A shares of which are listed on the Stock Exchange and the Shanghai Stock Exchange, respectively, a subsidiary of Yankuang and a controlling shareholder of the Company
"Yanzhou Group"	Yanzhou and its subsidiaries (excluding the Group)

In this prospectus, unless the context otherwise requires, the terms "**associate**", "**close associate**", "**connected person**", "**core connected person**", "**connected transaction**", "**subsidiary**" and "**substantial shareholder**" shall have the meanings given to such terms in the Listing Rules, unless the context otherwise requires.

Certain amounts and percentage figures included in this prospectus have been subject to rounding adjustments. Accordingly, figures shown as totals in certain tables may not be an arithmetic aggregation of the figures preceding them.

Unless otherwise specified, certain amounts denominated in Australian dollars or US dollars have been translated into HK dollars at an exchange rate of A$1.00 = HK$5.7405 and US$1.00 = HK$7.8295, respectively, and certain amounts denominated in Renminbi have been translated into Australian dollars at an exchange rate of RMB1.00 = A$0.1966, in each case for illustrative purposes only and such conversions shall not be construed as representations that amounts in Australian dollars or US dollars were or could have been or could be converted into Hong Kong dollars, that amounts in Hong Kong Dollars were or could have been or could be converted into Australian dollars or US dollars and/or that amounts in Renminbi were or could have been or could be converted into Australian dollars at such rate or any other exchange rates.

Unless otherwise specified, all references to any shareholdings in the Company following the completion of the Global Offering assume that the Over-allotment Option is not exercised and does not take into account any Shares which may be taken up by existing Shareholders of the Company under the Australian Entitlement Offer.

This glossary contains explanations of certain terms used in this prospectus in connection with the Group and its business. The terminologies and their meanings may not correspond to standard industry meanings or usage of those terms.

YANCOAL
兖煤澳大利亚有限公司