

ASX ANNOUNCEMENT

19 September 2023

Coal Resources and Coal Reserves for 2023

Whitehaven Coal Limited (ASX:WHC) has updated its managed Coal Resources and Coal Reserves under the JORC Code 2012 as set out in the tables included in this announcement.

Key changes from the previous (August 2022) Coal Resources and Coal Reserves Statements are as follows:

- Coal Resources for Maules Creek, Tarrawonga and Werris Creek decreased due to mining depletion.
- Coal Resources for Narrabri North decreased due to sterilised coal for geotechnical stability and un-mined roof and floor within mining area due to coal quality, in addition to mining depletion.
- The Vickery Resource estimate was last updated in 2015. Total Coal Resources for Vickery have not materially changed from the 2015 estimate. However, the 2023 estimate has recategorised some Resources to apply a standardised relationship between borehole spacing and Resource confidence. The majority of this recategorisation was reducing the confidence levels of potential underground Resources to Inferred.
- Recoverable and Marketable Coal Reserves at Narrabri North, Tarrawonga and Werris Creek decreased due to mining depletion.
- Revisions have been made to the Reserves for the Maules Creek Opencut to align bypass and yield assumptions with actual performance.
- The decrease in Marketable Reserve at Maules Creek is due to an increase in the proportion of washed coal in the Mine Plan. By washing more coal, the mine can produce a lower ash and higher energy product that maximises the economic output for the remaining coal Reserves when compared with a lower wash option.
- The Vickery Opencut Reserves were last updated in 2015. For 2023, revisions have been made to the Vickery Opencut Reserves to account for work that has been undertaken as part of the ongoing Feasibility Study including pit shell adjustments, changes to loss and dilution assumptions and coal quality studies.
- The Reserve changes at Vickery Opencut since the 2015 update are as follows:
 - Recoverable Reserves have reduced from 200Mt to 174Mt
 - Confidence in the Recoverable Reserves has improved with Proved Recoverable Reserves increasing from 0Mt to 166 Mt and Probable Recoverable Reserves reducing from 200Mt to 8Mt
 - Total Marketable Reserves have reduced from 178Mt to 121Mt
 - Confidence in the Marketable Reserves has also improved with Proved Marketable Reserves increasing from 0Mt to 116 Mt and Probable Marketable Reserves reducing from 178Mt to 6Mt.
- This elevated level of confidence in Recoverable and Marketable Reserves has been achieved as a result of detailed work undertaken and completed as part of the ongoing Feasibility Study associated with the Vickery project.
- The reduction in Vickery Opencut Marketable Reserves is largely the result of pit shell changes, and an overall yield change driven by the wash-all strategy adopted as part of the ongoing Feasibility Study. This strategy results in a lower ash and higher energy (6,300+ kcal/kg NAR) product than the 2015 Estimate, maximising the economic output of the Project.

Note 1 (attached) provides further detail on the changes at Vickery.

Note 2 (attached) provides further detail on the changes at Maules Creek.

Information in this document that relates to Coal Resources and Coal Reserves is based on and accurately reflects reports prepared by the Competent Person named beside the respective information. Darryl Stevenson is a Geologist with Whitehaven Coal. Jorham Contreras is a Geologist with Whitehaven Coal. Benjamin Thompson is a Geologist with Whitehaven Coal. Troy Turner is a full-time employee of Xenith Consulting Pty Ltd. Doug Sillar is a full-time employee of RPM Advisory Services Pty Ltd. John Pala is a full-time employee of Palaris Australia Pty Ltd.

Named Competent Persons consent to the inclusion of material in the form and context in which it appears. All Competent Persons named are members of the Australian Institute of Mining and Metallurgy and/or The Australian Institute of Geoscientists and have the relevant experience in relation to the mineralisation being reported on by them to qualify as Competent Persons as defined in the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition).

Whitehaven Coal Limited – Coal Resources – August 2023								
Tenement		Measured Resource (A)	Indicated Resource (B)	Measured + Indicated (A + B)	Inferred Resource (C)	Total Resource (A + B + C)	Competent Person	Report Date
Maules Creek Opencut*	CL375 AUTH346 ML1701 ML1719	340	174	514	44	558	1	Mar-23
Narrabri North Underground**	ML1609	116	137	253	-	253	2	Mar-23
Narrabri South Underground**	EL6243/ML1839	144	169	313	8	322	2	Mar-23
Tarrowonga Opencut	EL5967 ML1579 ML1685 ML1693	31	16	48	13	61	3	Mar-23
Tarrowonga Underground	EL5967 ML1579 ML1685 ML1693	10	15	25	14	39	3	Apr-14
Werris Creek Opencut	ML1563 ML1672	2.2	0.2	2.4	-	2	3	Mar-23
Rocglen Opencut	ML1620	2	3	6	0.2	6	3	Mar-19
Rocglen Underground	ML1620	-	3	3	1	4	3	Mar-19
Vickery Opencut	CL316 ML1838 EL4699 EL5831 EL7407 EL8224	229	75	304	242	545	2	Aug-23
Vickery Underground	ML1464 ML1471 ML1718	-	-	-	200	200	2	Aug-23
Winchester South	MDL 183	340	330	670	445	1100	4	Apr-22
Gunnedah Opencut	ML1624 EL5183 CCL701	7	47	54	89	143	3	Jun-14
Gunnedah Underground	ML1624 EL5183 CCL701	2	138	140	24	164	3	Jun-14
Bonshaw Opencut	EL6450 EL6587	-	4	4	7	11	3	Jun-14
Ferndale Opencut	EL7430	103	135	238	134	372	3	Jan-13
Ferndale Underground	EL7430	-	-	-	73	73	3	Jan-13
Oaklands North Opencut	EL6861	110	260	370	580	950	3	Jun-14
Pearl Creek Opencut***	EPC862	-	15	15	33	48	3	Aug-20
TOTAL COAL RESOURCES		1437	1522	2959	1907	4851		
1. Darryl Stevenson, 2. Jorham Contreras, 3. Benjamin Thompson, 4. Troy Turner * Maules Creek Joint Venture - Whitehaven owns 75% share. ** Narrabri Joint Venture - Whitehaven owns 77.5% share. *** Dingo Joint Venture - Whitehaven owns 70% share. # The Coal Resources for active mining areas are current to the pit surface as at the report date. Note: Figures reported are rounded which may result in small tabulation errors.								

Whitehaven Coal Limited – Coal Reserves – August 2023

Tenement		Recoverable Reserves			Marketable Reserves			Competent Person	Report Date
		Proved	Probable	Total	Proved	Probable	Total		
Maules Creek Opencut*	CL375 AUTH346	290	120	410	240	90	330	1	Mar-23
Narrabri North Underground**	ML1609	57	4	61	55	3	58	2	Mar-23
Narrabri South Underground**	EL6243	92	5	97	88	6	93	2	Mar-23
Tarrawonga Opencut	EL5967 ML1579 ML1685 ML1693	16	9	25	13	7	20	1	Mar-23
Werris Creek Opencut	ML1563 ML1672	1.7	-	1.7	1.7	-	1.7	1	Mar-23
Vickery Opencut	CL316 EL4699 EL7407	166	8	174	116	6	121	1	Aug-23
Winchester South	MDL 183	270	110	380	160	55	215	1	Apr-22
TOTAL COAL RESERVES		893	256	1149	674	167	839		

1. Doug Sillar, 2. John Pala

* Maules Creek Joint Venture - Whitehaven owns 75% share. Recoverable Reserves for Maules Creek Open cut include approximately 30Mt of coal located in an area identified in the mine's project approvals as a vegetated buffer corridor between the mine and the neighbouring Boggabri mine. These project approvals require a suitable alternate corridor to be approved prior to mining of the coal in this corridor. The company is progressing work on potential alternatives to this corridor in conjunction with the owners of the Boggabri mine.

** Narrabri Joint Venture - Whitehaven owns 77.5% share.

The Coal Reserves for active mining areas are current as at report date.

Coal Reserves are quoted as a subset of Coal Resources.

Marketable Reserves are based on geological modeling of the anticipated yield from Recoverable Reserves.

Note: Figures reported are rounded which may result in small tabulation errors.

Investor contact

Kylie FitzGerald
+61 401 895 894
kfitzgerald@whitehavencoal.com.au

Media contact

Michael van Maanen
+61 412 500 351
mvanmaanen@whitehavencoal.com.au

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Note 1 – Vickery Reserve

The most recent update to the Vickery Opencut Reserve was in 2015. Since then, extensive Feasibility Study work has been and continues to be undertaken on the Vickery Extension Project. This study included an assessment of an optimised pit shell and mine plan to maximise economic value. The analysis resulted in changes to both Recoverable (ROM) and Marketable Reserves and is summarised below.

The reasons for the drop in Recoverable Coal Reserves from 200Mt to 174Mt are outlined in Figure 1.

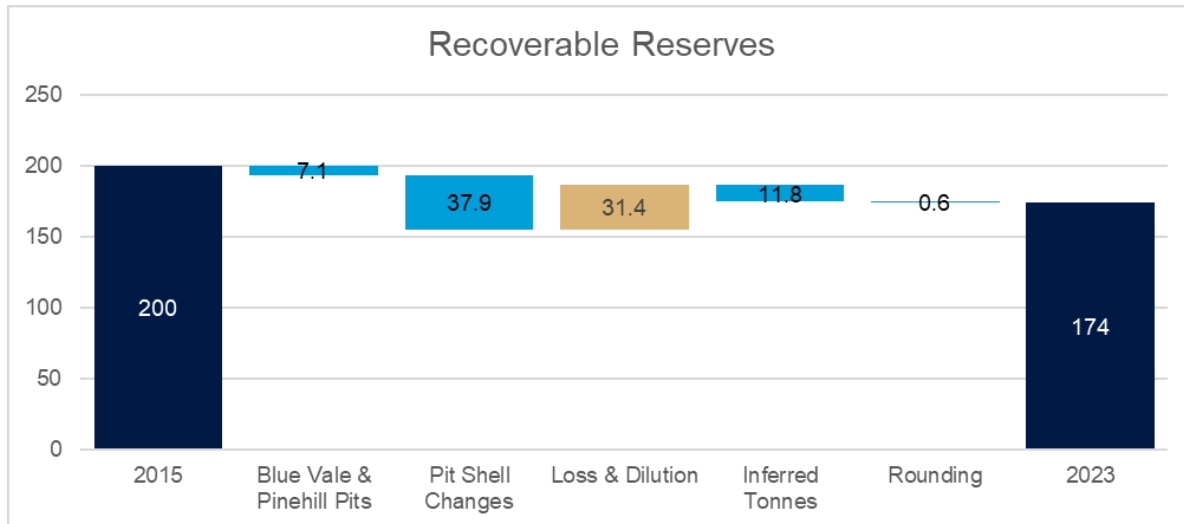


Figure 1 Open Cut Reserve reconciliation 2015 V 2023

Pit shell optimisation was completed as part of the ongoing Feasibility Study and included determining pit limits based on geological inputs, economic inputs and physical limits. Key changes included excluding the Pinehill Pit, Bluevale Pit and areas to the East of the Karu Fault, where a 60m throw significantly increased strip ratio beyond economic limits on the downthrow side of the fault. A small area of pit shell adjacent to ML1718 was also excluded.

Dilution factors have been adjusted to reflect the scale of the proposed mining schedule at Vickery which includes large hydraulic excavators and trucks at a maximum coal mining rate of 10Mtpa. This scale of mining which Whitehaven has experience with at Maules Creek requires bulk mining methods that result in increased dilution. Dilution factors have been adjusted to reflect this mining method and have resulted in a net increase of 31Mt in the Recoverable Reserve.

A change in status of some Resources within the pit shell from indicated to inferred, have meant that 11.8Mt of previously included Reserve from 2015 needs to be excluded from the Reserves for this estimate, as inferred tonnes cannot be converted to a Reserve.

The 2023 Reserve resulted in an increase in the confidence of the deposit, which was upgraded from nil to 166Mt Proved Coal Reserves on the back of increased economic confidence associated with financial modelling in the ongoing Feasibility Study.



Figure 2. Recoverable Coal Reserve – 2015 verses 2023

The drop in total Marketable Reserves is summarised in Figure 3.

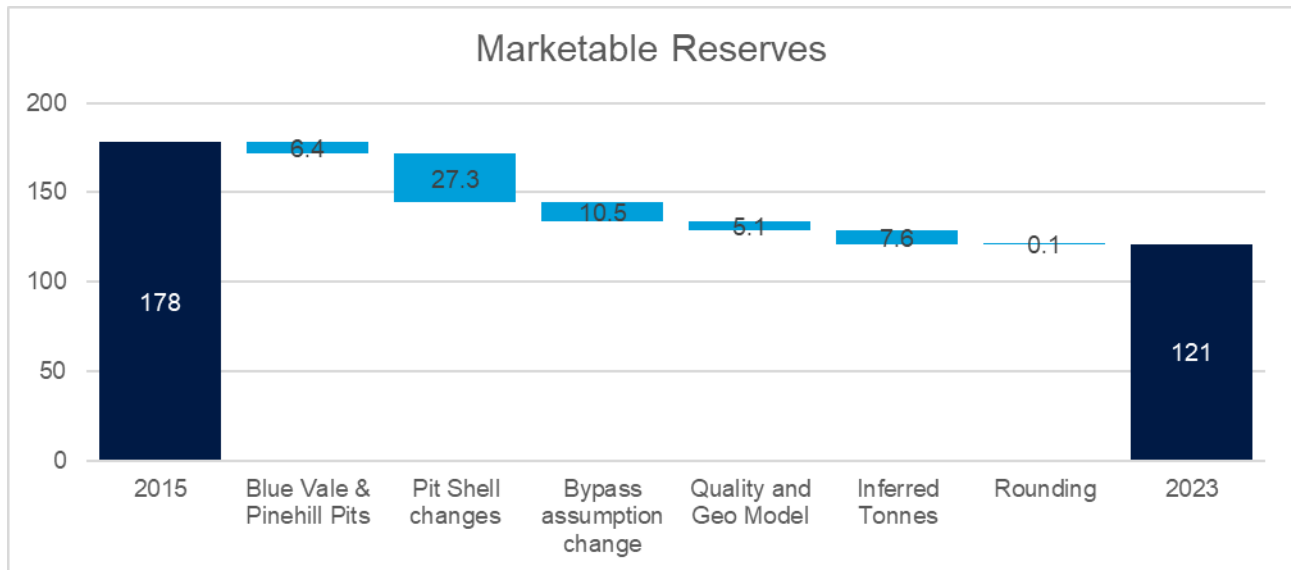


Figure 3

Approximately 30Mt of Marketable coal has been dropped from the Reserve due to changes in the pit shell, as described above. The 2015 bypass assumption has also been reviewed as part of the ongoing Feasibility Study with the current mine plan utilising a wash-all strategy to gain maximum value through a strategy of maximising quality. The resultant 70% yield has caused a reduction of approximately 10.5Mt of product. The net benefit of this strategy is an effective increase in Calorific Value of the Product Coal as ash drops from 14-15% in the 2015 estimate to 7.1-8.5% in 2023. The ongoing Feasibility Study has also evaluated the quality model which has resulted in a reduction of approximately 5Mt. A change in status of some Resources within the pit shell from indicated to inferred, have meant that 7.6Mt of previously included Marketable Reserve needs to be excluded, as inferred tonnes cannot be converted to Reserve. Further drilling work is planned on the inferred Resource area to improve confidence levels.

The 2023 Marketable Reserve was upgraded from 0 to 116Mt Proved based on work done as part of the ongoing Feasibility Study and reflects an upgraded confidence associated with the economics of the project since the 2015 update.

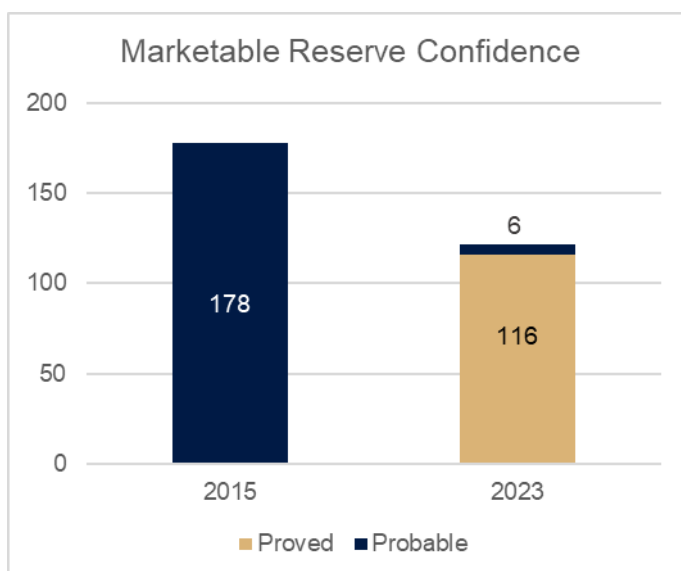


Figure 4 Marketable Coal Reserve – 2015 verses 2023

Vickery Table 1

SECTION 1. SAMPLING TECHNIQUES AND DATA		
CRITERIA	EXPLANATION	COMMENTS
SAMPLING TECHNIQUES	<i>Nature and quality of sampling (e.g. 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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>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 (e.g. 'reverse circulation drilling was used to obtain 1m 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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	Both core and non-core holes have been drilled vertically with geological descriptions of the intersected strata recorded as lithological logs. Lithological logs for non-core holes are generated in the field by geologists describing the chip samples returned as the drill hole penetrates the strata. Where acquired, geophysical logs were used to depth correct the field lithological logs and identify the coal seam depths and thicknesses with improved accuracy. Core hole lithological logs were generated in the field by geologists describing the core samples returned as the drill hole penetrates the strata. Detailed lithological logging of the interburden strata and brightness logging of the coal seams occurred and were recorded on the field logs. Where acquired, geophysical logs were used to correct the depths of the field logs. Recovered core intervals were sampled for coal quality and/or geotechnical analysis with sample depths corrected using geophysical logs. Attempts were made to maximise sample recoveries by using large core diameters and triple tube core barrels. Down-hole geophysical logs have been acquired for most holes drilled since the mid-late 1980s. Typically the standard suite of geophysical logs includes calliper, density and natural gamma; however other logs acquired include sonic, resistivity and deviation. Geological mapping was undertaken within the mining operations to acquire the location and details of faults, igneous intrusions, and coal seams.
DRILLING TECHNIQUES	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-</i>	Both core and non-core holes have been completed at the Vickery Extension project (VEP) using a variety of different drilling methods and diameters, including: - Percussion and rotary non-core holes - HQ3 (triple tube) core- 61 mm diameter

	<i>sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	• NQ3 (triple tube) core- 45 mm diameter • 8C core- 200 mm diameter • 4C core- 100 mm diameter
DRILL SAMPLE RECOVERY	• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>Whether a relationship exists between sample recovery and coal quality and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	• JB Mining and Whitehaven Coal (WHC) validated all coal samples and seam/ply correlations of historic holes. Coal quality sample numbers were added to the database and validated against historical analysis reports. All raw coal quality data has been re-entered from original reports and important historical records of volumetric recoveries recorded. Whitehaven lithology logging procedures have been modified to allow linear core recoveries over analysed sections to be reported directly from the LogCheck quality database for use in situations where a volumetric recovery has not been reported. • Core holes drilled by Whitehaven were logged using the company's standard practices, which includes allocation of core loss and correction to geophysical logs after the hole is completed. These practices result in the calculation of linear recoveries. Corrected depths for coal quality samples are allocated to the laboratories, who determine volumetric recoveries. • Core recoveries for holes drilled at the VEP are generally greater than 90%. Where linear recoveries are less than 90% it is typical that a redrill has occurred. • Losses within coal seams tend to occur within the more brittle, friable, vitrinite rich bright components. These coal components are lower in ash, which would mean any bias due to core loss would result in more conservative results. • HQ3 triple tube as well as larger diameter core (8C and 4C) drilling techniques have been used at Vickery with the objective of maximising core recovery in all holes drilled by Whitehaven.
LOGGING	• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Coal Resource estimation, mining studies and metallurgical studies.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i>	• Lithological logs are available for holes included in the geological model used to estimate resources for the VEP. Whilst the level of detail of lithological logging is variable the standard is suitable for the requirements of coal resource estimation. • Core and chip samples were logged in the field by geologists. Core samples typically have been logged in more detail and additional data usually include, as a minimum, a defect log. • Drill hole data has been collected at VEP since the 1970s. Logging methods and the level of detail has changed slightly over time; however, all data has been reviewed and is considered appropriate. Whitehaven have standardised data to the CoalLog system and stored it in the Micromine GeoBank digital database. • Photos are available for most cored sections of drill holes. Older holes have hard copy photographs stored in their drill hole folders, whilst post-2006 holes have digital photographs stored on Whitehaven's server. • In total 2,056 drill holes are included in the geological model, which comprise more than 160,000 m of lithological logging. 82 drill holes (unreliable and twin holes) were excluded from the model.
SUB-SAMPLING	• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	• Coal quality samples have been taken at VEP from fully or partially cored drill holes. Sampling techniques have changed over time- on occasion the full seam has been taken as a single sample, but

TECHNIQUES AND SAMPLE PREPARATION	• <i>If non-core whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	on others occasions the seam has been sampled in plies. • Full cores are taken for coal quality analysis, as is standard for coal analyses. • For a small number of holes where gas content testing has occurred, coal samples have been halved prior to final analysis. The remaining half underwent normal coal quality analysis. These samples are identified in the geological and coal quality databases and have been accepted as coal quality datapoints for resources if their values were consistent with surrounding data. • Analysis has been undertaken on a variety of core diameters ranging from NQ to 8C; however, the majority of coal quality analysis has been completed on HQ3 diameter core. This diameter is standard for the industry and is considered appropriate.
QUALITY OF ASSAY DATA AND LABORATORY TESTS	• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established).</i>	• Laboratories used to analyse samples for VEP have complied with Australian Standards for coal quality testing and are certified by the National Association of Testing Authorities Australia (NATA). These labs are reviewed on a regular basis by external auditors who benchmark their performance against ISO 17025. • NATA accredited laboratories who employ strict QA/QC procedures and follow Australian Standards for coal quality analysis were used to undertake testing. • Standards, blanks, duplicates, external laboratory checks have not been used by Whitehaven Coal. • Geophysical logging companies who ran down-hole wireline geophysical tools at Vickery have, as standard operating procedures, a calibration process that takes place on a regular basis to ensure consistent results are achieved.
VERIFICATION OF SAMPLING AND ASSAYING	• <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic)</i>	• Vickery is a multi-seam coal deposit with over 2,000 drill holes, of which 360 contain coal quality analysis results. With these holes distributed across the area the deposits depositional and coal quality characteristics are reasonably well defined. Localised variation of coal seams occurs as the result of igneous intrusions, faulting, and rapid depositional changes (typically basin onlap); however, for the most part the deposit is consistent and continuous with any changes in coal seam character occurring gradually. • Since the introduction of wireline down-hole geophysical logs to the coal industry in the 1980s most

	<i>protocols.</i> <i>Discuss any adjustment to assay data.</i>	holes have been geophysically logged. These logs are used to verify and refine coal seam depths and thicknesses. - Data is logged in the field and transferred to the WHC GeoBank geological database system, which is housed on their network. Drill holes completed prior to digital storage systems have been encoded and are included in the database. Many of these historical holes have had original hardcopy logging sheets and reports scanned and converted to PDFs for storage on Whitehaven's network. - Coal quality, and other laboratory data, is also stored within Whitehaven's GeoBank database. Original laboratory reports are stored on Whitehaven's network. - Laboratory results are stored in the database without any adjustment. In situ density values are calculated from laboratory density using a standardised in situ moisture of 9.5%. Calculated in situ densities are gridded and used for estimating resources.
LOCATION OF DATA POINTS	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Coal Resource estimation.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i>	- Drill hole collar locations were surveyed by registered surveyors, historically by theodolite triangulation but more recently by RTK GPS methods. - Where available, surveyor's reports are stored on the WHC network. A comparison to known location are used to confirm locations of historic holes where surveyor's reports are not available. - Spatial data, including all drill hole collars, has been converted to Map Grid of Australia 1994 (MGA94) grid system, which is based on the Geodetic Datum of Australia 1994 (GDA94) projection. - Several topographic models of the Vickery area have been constructed including, original (undisturbed) topography, lowest mined topography and current topography. These surfaces have been constructed from the following: - Bluevale digital terrain model (DTM), dated May 2012. - Rocglen DTM, dated June 2013. - New South Wales state digital elevation model (DEM) - Contours and spot heights digitised from historical plans. - LiDAR survey, captured in June 2022 (current topography). - Drill hole collars typically compare favourably with the topographic surfaces, with the exception of where holes have been drilled in disturbed areas.
DATA SPACING AND DISTRIBUTION	<i>Data spacing for reporting of Exploration Results.</i> <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and coal quality continuity appropriate for the Coal Resource and Coal Reserve estimation procedure(s) and classification applied.</i> <i>Whether sample compositing has been applied.</i>	- Drill hole spacing and distribution varies across the VEP deposit. In the proposed open cut mine area (tenements CL316 and ML1838), the more prospective coal seams are at shallower depths and holes are spaced from <20 m to 300 m apart. Closely spaced drilling typically occurs in the historic opencut mining areas of the Bluevale, Shanon Hill, Greenwood, Red Hill pits and the Canyon (WHC) pit. Closely spaced drill holes in these areas are typically shallow and only intersect one or two coal seams with deeper holes that intersect the full sequence intermixed. - The recent drilling program 2022 (56 holes, infill drilling) targeted the areas where hole spacing was larger. Within the proposed open cut mine area (CL316, ML1838), the current spacing between drill holes intersecting the entire coal sequence varies between 50 m and 500 m. Drill holes have been planned considering the geological framework, with the more closely spaced drilling 50-200m in the

		more complex areas (around faults, intrusions and basement highs). • Cored holes with coal quality data within the proposed open cut mine area are also widely distributed and show a spacing generally between 100 m and 400 m, to a maximum of 700 m in the central area where negligible variability occurs based on the structure data and signatures in the geophysical logs. • Towards the northern and eastern areas (EL8224, EL5831, EL4699, AUTH406) with potential for underground mining, the main target seams become deeper and drill hole spacing increases, with holes generally spaced 500 m to over 1 km apart. In the central portion of EL8224 on the eastern side of the Vickery State Forest, hole spacing reached up to 2 km. • Down hole geophysical logs have been acquired for most holes since their acquisition became industry standard practice in the 1980s. • Compositing of samples occurs in Maptek's Vulcan software where seam intervals have been sampled in numerous sections. Coal quality variables are composited on a length multiplied by density basis. Samples are only composited for individual seams/plies within the drill hole from which they were sampled i.e. samples are not composited from multiple drill holes.
ORIENTATION OF DATA IN RELATION TO GEOLOGICAL STRUCTURE	• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>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.</i>	• Holes were drilled vertically into a shallow dipping stratiform deposit, which has resulted in near perpendicular intersections of the coal seams. This method of geological data collection and sampling has not introduced a material level of sampling bias.
SAMPLE/DATA SECURITY	• <i>The measures taken to ensure sample security</i>	• Recently drilled holes required drill cores to be stored securely prior to sampling. • During sampling, depths are recorded, and a sample number is allocated. This information is supplied to the analysing laboratories who apply an independent ID to each sample. • Historical sample security processes are unknown. • Sample results and data are stored on the WHC network and in their GeoBank database. Hard copy files of drill hole data are housed in a locked building. • Laboratory results are subject to a QA/QC process that is currently implemented by Whitehaven Coal, and by A&B Mylec once or twice a year.
AUDITS OR REVIEWS	• <i>The results of any audits or reviews of sampling techniques and data.</i>	• Independent audits of the drill hole database were undertaken in 2009 by the projects' previous owners, Rio Tinto, and again in 2010 by JB Mining. MBGS undertook a review of the data in 2020, with a particular focus on the VEP area. • Drill hole data has been converted to a GeoBank database by WHC, which is now the primary storage

		space for these data (historical and recent). • An internal audit of the preliminary geological model was undertaken by WHC in 2022, prior to incorporate the 2022 drill hole data. Independent consultants Palaris and RPM also reviewed the preliminary geological model in 2022. No material issues were identified, the model was considered fit for purpose.
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SECTION 2. REPORTING OF EXPLORATION RESULTS		
CRITERIA	JORC CODE 2012 EXPLANATION	COMMENTS
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 licence to operate in the area.	- The following tenements and approvals are held, in full, by Whitehaven and its subsidiaries: - Approval of the Vickery Extension Project (VEP). - Project approval 2014 (Development Consent) SSD-5000 relates to the Vickery Coal Project. - Project Approval 2020 SSD-7480 relates to the VEP and supersedes the previous approval SSD-5000. SSD-7480 has the following conditions relevant to coal extraction and processing: A maximum of 10 Mt of ROM coal may be extracted from the site in any financial year; a maximum of 3.5 Mt of ROM coal extracted from other mining operations may be received at the site in any financial year; a maximum of 13 Mt of ROM coal may be processed on the site in any financial year. - CL316 is current until June 2033. - ML1464 is current until December 2020. Renewal sought. - ML1471 is current until September 2042 - ML1718 is current until September 2036. - ML1838 is current until September 2043. - EL4699 expired in September 2018. Renewal sought. - EL5831 expired in April 2018. Renewal sought. - EL7407 is current until October 2027, MLAs sought. - EL8224 is current until January 2027. - AUTH406 expired November 2019. Renewal sought. - Parts of EL7407 and EL4699 contain Native Title interests. - EL7407 is set to expire in 2027 and WHC has lodged application for two Mining Leases covering the area they wish to obtain, MLA578 and MLA579. - The Vickery State Forest and crown roadways exist over the VEP.
EXPLORATION DONE BY OTHER PARTIES	Acknowledgement and appraisal of exploration by other parties.	- Exploration has been undertaken at the VEP by various parties from the 1970s through to the present, these include: - Sunshine Gold and successors from early 1970s - 1988 - Amax/BHP from 1976 – 1977 - Rio Tinto subsidiary Novacoal and predecessors from 1981 – 2009 - Coalworks (Vickery South) from 2009 – 2012
GEOLOGY	Deposit type, geological setting and style of mineralisation.	The Vickery deposit is an early Permian aged stratiform coal deposit containing the lower part of the Maules Creek Formation within northern New South Wales' Gunnedah Basin. Coal seams are held

		within strata that typically dips at less than 10° with the regional dip trending towards the southeast. Five major and several smaller faults bisect the VEP with the strike of the major faults trending north northwest to south southeast. Igneous intrusions occur within the Vickery deposit and affect all seams considered for resources, with the exception of the Velyama and Nagero seams. Intruded areas have been excluded from resource estimation where the seams have been heavily affected or completely replaced by intrusion. Coal seams are bituminous in rank and are expected to be able to produce a combination of semi-soft and low ash thermal products.
DRILL HOLE INFORMATION	• <i>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:</i> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level-elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>downhole length and interception depth</i> ○ <i>hole length.</i> • <i>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.</i>	• A total of 2,056 drill holes are included in the VEP dataset, of these 1,854 contain intersections of the coal seams considered for coal resources. • Locations of these drill holes, and the locations of any other relevant data points, are presented in the text figures in this report. Drill hole locations relevant to a coal seams resource classification are shown on the coal resources figures for that seam. Averages and ranges of drill hole data (thickness and coal qualities) are presented in tables of this report. • Holes have been drilled vertical from surface with minor drill deviation occurring. • Data from 82 drill holes was excluded from the construction of the VEP geological model due to various reasons, which include no lithology logging, neighbouring hole of better reliability, significant core loss, or inaccurate/incorrect collar coordinates. • WHC drilled 117 holes between April 2022 and June 2023. The exploration program allowed to increase the level of confidence in the open cut resource area (CL316 surface rights area, and ML1838) and provide additional data for mine planning. • The program was divided in two stages: Stage 1 (50 holes) including mainly open holes for seam structure and basement delineation in geological complex areas. Stage 2 (67 holes) was essentially infill drilling, including open holes for fault and intrusion delineation, Lox line drilling for improved subcrop definition, and core holes for geotechnical, gas content, product coal quality and coal washability assessments.
DATA AGGREGATION METHODS	• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i> • <i>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.</i>	• On occasion, seams and plies have been sub-sampled using either lithological logging or downhole geophysical logs to determine the sample boundaries. Where necessary these sub-samples have been composited in Vulcan on a length multiplied by density basis and may include non-coal material if it occurs within the seam.

	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
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 (e.g. 'down hole length, true width not known').	- Holes have been drilled vertically from the topography surface and have a relatively perpendicular intersection of the shallow dipping (<10°) coal seams. - Thicknesses of coal seams are vertical thicknesses and may be slightly exaggerated from the seams true thickness; however, due to the shallow dips and relatively thin nature of the coal seams any exaggeration is minor and not material.
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 limited to a plan view of drill hole collar locations and appropriate sectional views.	Maps and sections that the Competent Person considers appropriate to the coal resources are included as text figures within the body of this report. These include location, tenement location and regional geology plans, stratigraphic section, typical geological cross sections and resource plans with relevant geological, surface and data information.
BALANCED REPORTING	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high coal quality and/or widths should be practiced to avoid misleading reporting of Exploration Results.	- Coal resources have been estimated and reported using all available valid data and are considered both balanced and unbiased. - Typical thickness and quality parameters are reported in tables in this report. 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.	- Two east-west mini-sosi seismic reflection lines were run in in southern CL316 during 1986 to assist with underground mine planning. - Rio Tinto Coal Australia undertook a groundwater study of the Greenwood open cut mine area in 1986. - The following ground magnetic surveys have been acquired for the Vickery Project area: - Bluevale and Tarrawonga – 2011 by Terra Search - Vickery South – 2012 by Ultramag Geophysics - Vickery Extended – 2013 by Terra Search - Underground/Vickery South/Canyon West – 2014 by Terra Search - In 2018, Geo-Environmental Management (G.E.M.) completed the Environmental Geochemistry Assessment of Overburden, Interburden and Coal Rejects as part of the Environmental Impact Assessment (EIS) for the Vickery Extension Project. The results of this assessment indicate that the

		overburden and interburden generally have a low S content and is expected to be NAF with a low salinity risk. Therefore, the bulk of the overburden and interburden is expected to be relatively barren with no risk of generating acid or saline conditions. The presented test results indicate that the ROM pad is expected to contain some PAF material which is likely to be relatively reactive with a short geochemical lag period. The results indicate the coal rejects from the open cut are expected to be non-to-slightly saline and to be NAF. The report contains a set of recommendations for material handling, controls and monitoring. • Several geotechnical studies have been undertaken for the VEP, most recently by Blackrock Mining Solutions Pty Ltd in 2020, but previously by Pells, Sullivan and Meyninck in 2012 and ACIRL in 1985. These studies form the basis of the current mine design and safety factors. • In late 2022, Encompass Mining carried out a review of the geotechnical assumptions and stability analysis by Blackrock Mining in 2020. The review did not reveal any significant change necessary in the Vickery open cut mine design. • Core sampling for gas desorption testing to construct the gas distribution model for Vickery and fugitive emissions estimation according to the ACARP Project C20005 "Guidelines for the Implementation of NGER Method 2 or 3 for Open Cut Coal Mine Fugitive GHG Emissions Reporting". The laboratory results and gas model indicate very low gas content.
FURTHER WORK	• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	• Incorporation of Stage 2 drilling and coal product data in the geological model. It is estimated that product coal testing will be completed in November 2023. At the time of writing this report, all drillhole data from Stage 2 drilling has been reviewed. The data has been compared with the model, showing good consistency; no material variation in coal resource is anticipated once Stage 2 data is included in the model, but an increase in the level of confidence in the Vickery deposit. • Detailed geotechnical analysis and the draft version of the Vickery Geotechnical Reference Report (GRR) including hydrogeology and mine scheduling was completed in September 2023 by Encompass Mining. The report has been reviewed, considered fit for purpose, and the final version is planned to be issued in October 2023.

SECTION 3. ESTIMATION AND REPORTING OF COAL RESOURCES		
CRITERIA	JORC CODE 2012 EXPLANATION	COMMENTS
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 Coal Resource estimation purposes. - Data validation procedures used.	- Digital geological data is compiled in the GeoBank digital database that is held on Whitehaven's server. This database houses collar survey information, lithological data, coal quality results, down-hole geophysical logs and defect logging data. Upon construction of the geological model this data was exported and loaded into Maptek's Vulcan software. Once in Vulcan, several validation steps are undertaken which include: - Drill hole collar checks - Data depth validation (no overlapping depths, depths increase down the hole, etc.) - Seam sequence validation - Missing data - The resultant geological model was interrogated, and anomalies validated against original lithological logging, geophysical logs and/or laboratory 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 frequently visited the VEP site. The Competent Person spent a number of days on site supervising the recent exploration program 2022-2023.
GEOLOGICAL INTERPRETATION	- Confidence in (or conversely, the uncertainty of) the geological interpretation of the coal deposit. - Nature of the data used and any assumptions made. - The effect, if any, of alternative interpretations on Coal Resource estimation. - The use of geology in guiding and controlling Mineral Resource estimation. - The factors affecting continuity both of grade and geology.	- The VEP area has been extensively explored with drill holes and magnetic surveys covering the tenements as well as historic open cut mine workings. Whilst some minor variation is possible, it is unlikely that a geological interpretation could be reached that is materially different from what is presented in this report. - Variability in the volcanic basement and base of weathering surfaces as well as the syn-depositional nature of the faulting are the main factors that could influence coal seam character and continuity. Considering these geological factors and potential impact, the recent drilling program by Whitehaven Coal targeted these areas; results have not revealed material changes to the model and resources, but the level of confidence in the geological model and interpretations increased. - Coal seam character and quality is typically consistent and continuous with any changes occurring gradationally except where seams are impacted by faulting and igneous intrusions. These areas are well-known.
DIMENSIONS	The extent and variability of the Coal Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Coal Resource.	The VEP is approximately 10 km west-east by 9 km north-south, with the western half of the area considered for open cut resources and the eastern half, where the Vickery State Forest is located, for underground resources. The upper limit of the resource is limited by depth of weathering, which at Vickery ranges from <5 m – 65 m but is typically around 30 m and lowest mined surface of previously mined open cut areas. Open cut resources are considered to a depth of 300 m below original topography, although most of the resources are at depths less than 200 m. Underground resources are considered up to a depth of 500 m below topography.

ESTIMATION AND MODELLING TECHNIQUES	• <i>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.</i> • <i>The availability of check estimates, previous estimates and/or mine production records and whether the Coal Resource estimate takes appropriate account of such data.</i> • <i>The assumptions made regarding recovery of by-products.</i> • <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i> • <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed</i> • <i>Any assumptions behind modelling of selective mining units.</i> • <i>Any assumptions about correlations between variables.</i> • <i>Description of how the geological interpretation was used to control the resource estimates.</i> • <i>Discussion of basis for using or not using coal quality cutting or capping.</i> • <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i>	• The geological model of the VEP was constructed by the Competent Person using Maptek's Vulcan software (Version 2022) from drill hole intersections stored in the Vulcan isis database. The model is on a ply basis, i.e. with coal seams divided into their individual components and modelled as grid mesh surfaces. Minimum stone parting separation for seam splitting into plies is 0.2 m, and minimum coal ply thickness is 0.3m. • Grids are produced for each ply's structure roof, structure floor, thickness, and coal quality variables. A model was produced for the entire VEP area at a grid mesh size of 10 m. • Resources were estimated using ply thickness and in situ density grids inside classification polygons that were applied vertically (cookie cutter) on an individual ply basis. • Coal quality grids were produced on a ply basis. Samples were reviewed in detail and where they crossed coalesced plies they were applied to each ply if the ply was fully within the sample's boundaries and the sample contained less than 4 cm of non-coal material. • Laboratory density was converted to in situ density using the Preston and Sanders formula at 9.5 % in situ moisture and used to convert volumes to tonnages for the resource estimate. • Some historic samples only had apparent relative density analysed. These ARD values had been converted to laboratory density by WHC using the formula $ARD+0.03$. This is considered acceptable for the coal plies based on the relative density (RD) test results. • Geological models were validated against drill hole data using isopach maps, cross sections and drill hole postings. • Previously mined areas have been recorded by a registered surveyor. These areas have been used to develop a lowest mined surface, which was combined with the base of weathering surface to produce an upper limiting surface. This surface was applied during resource estimation to exclude all coal within previously mined areas and above base of weathering. • Coal resource estimates included in this report have been compared to the previous estimate undertaken in 2015 by John Rogis for WHC. The changes reconciled to the previous estimate and reasons for the resource variations include the changes in seam splitting and recorrelations, reclassification of portions of OC resource as UG resource in the Vickery East area, and minor change to the in-situ moisture assumption.
MOISTURE	• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the</i>	• Coal resource tonnages for the VEP are estimated at in-situ moisture of 9.5%, which is the approximate average for coal seams in the lower Maules Creek Formation in this region.

	<i>moisture content.</i>	
CUT-OFF PARAMETERS	<i>The basis of the adopted cut-off or quality parameters applied.</i>	- A minimum coal ply thickness of 0.3 m was applied for open cut mining. - For underground resources a minimum mining height of 1.0 m was applied, which may include thinner plies where they could be combined into a working section of 1.0 m thickness or greater. - Open cut resources were limited to 300 m below original surface and underground resources to 500 m below original surface. - A maximum raw ash of 40% (ad) was considered for all resource estimates, including both open cut and underground. Although, the entirety of the estimated resource is below the 40% ash cut-off.
MINING FACTORS OR ASSUMPTIONS	<i>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 Coal 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.</i>	- It is assumed that open cut resources will be mined via conventional truck and shovel fleet methods to a minimum coal ply thickness of 0.3 m. Similar mining methods in Australia have occurred to depths more than 250 m, and as such a maximum depth of 300 m has been applied to the open cut resources. - Resource estimates considered for open cut extraction take into account that all coal mined within the designated open cut pit shell have been assessed by a rigorous feasibility study process. Government approval of the VEP includes for mining by open cut methods within that pit shell. - Whilst the resources considered for underground extraction meet the criteria of coal seams currently and/or historically mined underground in Australia, no rigorous analysis of their viability has been undertaken.
METALLURGICAL FACTORS OR ASSUMPTIONS	<i>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 Coal 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.</i>	- Resource estimates for Vickery are reported on an in-situ basis; however, the Competent Person's considerations of "prospects for eventual economic extraction" take into account that all coal mined will be beneficiated at either Whitehaven's Gunnedah CHPP facility or a new plant to be constructed on site. Government approval of the VEP includes construction of new CHPP facilities on site. - Upon beneficiation coal from Vickery could produce semi-soft coking coal or low ash thermal coal products at yields suitable for "prospects for eventual economic extraction".
ENVIRONMENTAL FACTORS OR	<i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of</i>	Whitehaven originally submitted a Development Application and Environmental Impact Statement (EIS) for the Vickery Coal Project in 2013, which was approved by the NSW Government Minister for

ASSUMPTIONS	<i>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.</i>	Planning on 19 September 2014 (SSD-5000). • In 2018 a further Development Application and EIS were submitted for the Vickery Extension Project (VEP), which were approved by the NSW Government Independent Planning Committee (IPC) on 12 August 2020 (SSD-7480). This approval allows for the extraction of up to 10mtpa of ROM coal per year for 25 years and supersedes the previous approval SSD-5000. • On 15 September 2021, the Federal Government approval was received for the Vickery Extension Project from the Australian Government Minister for Environment under the requirements of the Environment Protection and Biodiversity Conservation Act 1999. • Open cut resources were not estimated in that part of CL316 which is not covered by surface rights. This part of CL316 mainly consists of the Vickery State Forest area. Current political and social pressures make eventual prospects of approval for mining in designated state forest areas highly unlikely, and as such it does not seem prudent to estimate open cut resources within this area, but only underground resources.
BULK DENSITY	• <i>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.</i> • <i>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.</i> • <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i>	• Laboratory relative density on an air-dried basis was converted to in situ density at a standardised 9.5% moisture basis using the Preston and Sanders formula. These values were applied to the resource estimation to convert volumes into tonnages. • On some historic samples, only apparent relative density (ARD) was analysed. These ARD values had been converted to laboratory density by Whitehaven using the formula $ARD + 0.03$. This is considered acceptable for the coal plies and the calculated relative density (RD) values were accepted and converted to in situ density as above.
CLASSIFICATION	• <i>The basis for the classification of the Coal Resources into varying confidence categories.</i> • <i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/coal quality estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i>	• The level of confidence in the resource estimate is gained through observing data and developing an understanding of the continuity, consistency, and predictability of the coal seams. This was achieved by studying geophysical logs, available for most holes drilled since the 1980s, and correlating seams/plies between drill holes. Confidence in the consistency of coal seam character and density was gained from the correlation, which was followed by the resource categories being allocated. For the Vickery Project deposit the resource classifications exhibit the following criteria: ◦ Measured: an abundant data spread and spacing for the continuity and consistency of the coal seam structure and quality. A high level of structural continuity and consistency displayed in geophysical logs and geological models. Ample coal quality data points to develop a relationship between geophysical logs and quality data, with a high level of

	Whether the result appropriately reflects the Competent Person's view of the deposit.	- consistency and continuity between drill holes with coal quality analyses. - Indicated: an adequate data spread and spacing for the continuity and consistency of the coal seam structure and quality. A moderate to high level of structural continuity and consistency displayed in geophysical logs and geological models. Adequate coal quality data points to develop a relationship between geophysical logs and quality data, with a moderate level of consistency and continuity between drill holes with coal quality analyses. - Inferred: a poor spread and spacing of data for the continuity and consistency of the coal seam structure and quality. A moderate level of structural continuity and consistency displayed in geophysical logs and geological models. Less than adequate coal quality data points to develop a relationship between geophysical logs and quality data, with a moderate level of consistency and continuity between drill holes with coal quality analyses. - Whilst resource categories for the VEP are not directly established from the distance separating drill holes, as a guide, generally the typical hole spacing for Measured is between 200-400 m with coal quality holes spaced 100-500 m, for Indicated spacing is between 600-800 m with coal quality holes spaced 100-1,000 m, and for Inferred spacing is between 1200-1500 with coal quality holes spaced 500-3,000 m. - Resources (tonnes) are estimated from the area, thickness, and density of the coal seams within the confidence limits (i.e.: Measured, Indicated, Inferred), which are displayed in the relevant figures. - Classification polygons were generated and applied to their corresponding coal ply on a cookie cutter basis. Polygons were stopped at the last point of observation appropriate for that classification and only minor extrapolation occurred, mainly in small areas to make resources coincident with tenement boundaries.
AUDITS OR REVIEWS	The results of any audits or reviews of Coal Resource estimates.	Coal resources reported for the VEP were compared to those previously reported in 2015 with favourable results, only 2% variation. Coal volume and resource tonnage were estimated in selected areas, which also compared favourably with estimates from the Minescape model.
DISCUSSION OF RELATIVE ACCURACY/ CONFIDENCE	- Where appropriate a statement of the relative accuracy and confidence level in the Coal 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	- The model is based on 1,972 holes with multiple seam intersections, this and the density of drill holes provided the framework for confidence in the geology of the deposit. Not all the holes reached the basement, so the number of intersections for each seam or ply is variable according to the hole final depth and holes excluded. The number of holes, spacing and distribution have been considered individually for resource classification of each coal ply. - Coal resources have been reported within polygons that contain multiple drill hole intersections. The estimate is therefore considered a global estimate. - Coal resources for Vickery have been classified into confidence categories Measured, Indicated and 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.

	<i>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.</i> • <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	
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Section 4 Estimation and Reporting of Ore Reserves

The completed Table 1 - Section 4 checklist is in response to mine planning work completed for the Vickery Reserves Report performed 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 Mineral Resource estimate used as the basis for this Coal Reserves Statement is described in the document "Coal Resource Report, Vickery Extension Project. CL316, ML1838, ML1718, ML1471, ML1464, EL7407, EL4699, EL8224 AUTH406. Gunnedah Coalfield, NSW, Australia", prepared by Mr. Jorham Contreras, March 2023. The Competent Person, Mr. Contreras, 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 Geoscientists. - 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.	A site visit to the Vickery Precinct was undertaken by the Reserves Competent Person ("CP") in 2023. The outcome of this visit was observation of the Project area to better understand location, surface features, environmental, social and existing infrastructure consideration. The CP visited the nearby WHC-owned, Maules Creek and Tarrawonga Mines to observe mining conditions. Early works activities have commenced with the establishment of a site based office and team to manage the initial activities.
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.	- The mine is not currently operational. - A draft FS for the Vickery Extension Project (VEP) has been completed by WHC as at April 2023 for an operation with target annual ROM production of 10 Mt and a total open cut mine life of 24 years
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	A 40% (ad) ash cut off has been applied to the Resource model.
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	- The Minex Pit Optimiser was used to confirm the pit limits. Cost inputs were based on previous Vickery LOM planning and existing WHC operations and studies. - The proposed mining method is a conventional truck and excavator mining method with initial waste being hauled to expit emplacements followed by in pit dumping when sufficient space is created. This

Criteria	JORC Code explanation	Commentary
	<i>method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i> ▪ <i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i> ▪ <i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i> ▪ <i>The mining dilution factors used.</i> ▪ <i>The mining recovery factors used.</i> ▪ <i>Any minimum mining widths used.</i> ▪ <i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i> ▪ <i>The infrastructure requirements of the selected mining methods.</i>	method is proven in the region and considered appropriate for future planning based upon deposit characteristics, geology and strip ratio. ▪ Pit design parameters have been guided by geotechnical assessment. 55 degree inter berm slopes within previously mined spoil and weathered Permian and 70 degree inter berm slopes in fresh Permian. 15m wide berms are applied every 20m vertically in weathered material and on the major coal seam levels in the fresh Permian. ▪ The mining factors used were: – Minimum coal mining thickness of 0.3 m; – Minimum parting mining thickness of 0.2 m; – Overall global loss of 2%; ▪ Loss and dilution at working section interface including: – Mineable coal section roof loss of 0.03 m; – Mineable coal section floor loss of 0.03 m; – Mineable coal section roof dilution of 0.075 m; – Mineable coal section floor dilution of 0.075 m; ▪ Additional loss is assumed in blocks adjacent to fault zones. ▪ The quality of diluting material is relative density of 2.35 t/bcm, and ash of 85.8% (ad); and ▪ In situ moisture assumed to be 9.5%. ROM moisture is assumed to be 9.5% (ar). ▪ Inferred Coal Resources are included in the LOM production schedule, but are not converted to Coal Reserves. A total of 12 Mt of Inferred/unclassified coal is included in the pit shell, which is approximately 6% of the total pit quantities. The majority of this coal is mined late in the Project life and the inclusion of this coal is not considered likely to have a material impact on the Project viability. ▪ There is limited existing infrastructure at the site that may be utilised to support the Project at peak rates of production. A low capital start up is proposed followed by construction of the required facilities to support the Project at peak rates of production.
Metallurgical factors or assumptions	▪ <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i> ▪ <i>Whether the metallurgical process is well-tested technology or novel in nature.</i> ▪ <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i> ▪ <i>Any assumptions or allowances made for deleterious</i>	▪ The geological Resource model supplied by WHC contained raw quality grids for each modelled ply, practical CHPP yields and product quality data. ▪ A coal flow model was developed using WHC coal processing assumptions; the result is that all of the ROM coal is planned to be washed with an average practical F1.7 yield of 69%. ▪ Coal is planned to be washed at a new CHPP facility built on the site. The CHPP design has a nameplate capacity of 1,700 t/h (12.3 Mtpa). The CHPP will consist of DMC and spirals circuits to beneficiate the raw coal.

Criteria	JORC Code explanation	Commentary
	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?	- LD holes have been drilled and results incorporated into the coal processing studies. No bulk samples have been taken in recent times however coal has been previously produced from the site. - No allowance has been made for deleterious elements. - The site has been previously operated with saleable products being produced after processing at the Gunnedah CHPP. - 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.	- The VEP EIS was submitted 13 Aug 2018 for a maximum allowable production of 10Mtpa of ROM coal. - Environmental Protection Licence (EPL 21283) was granted for the VEP on 17 May 2019. - Coarse reject material will be co-disposed within overburden. Dewatered reject material will be co-disposed in locations such that any runoff or infiltration will report to the Water Management System. The EIS commits the VEP to ensuring that reject material is not placed within 30 m of the edge of the western emplacement and is covered by at least 5m of inert material. - A water management plan has been prepared as part of the approvals process and FS. - Waste rock characterisation results and operational experience indicate that the waste does not require special placement requirements or procedures in the dumps.
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 Project will require the construction of various items of surface infrastructure and facilities to support the mining operations. Sufficient land is available at the Project to accommodate necessary facilities and infrastructure. It is anticipated that these items will generally be contained within the Mine Infrastructure Area (MIA). - The VEP FS design for the MIA includes offices, amenities, workshops, stores, fuel and lubrication farm, washdown bays, parking etc. Additional infrastructure includes; CHPP, rail spur and balloon loop, train loadout, mine access road, re-alignment of Blue Vale road, electrical reticulation and communications network. - A low capital small scale start up operation is proposed for the initial 2 years of production. This would see coal crushed on site and hauled by road to the Gunnedah CHPP for processing. The existing Gunnedah rail load out and rail network would be used to transport the start up phase coal to the Port of Newcastle. - Following completion of the VEP CHPP, rail load out and spur line, product coal will be loaded direct from the site onto trains. - Electric power to the VEP will be provided from the Essential Energy network. An existing 66kV overhead line requires minor modification, re-connection and energisation. A new 66/22kV substation will be constructed at the VEP mine.

Criteria	JORC Code explanation	Commentary
		- Water supply from the Namoi River will be the primary water source for new supply to the site, with bores available when water is not available from the river. Water access licences are in place. The primary water requirement at the site is for coal processing and dust suppression. - Options for workforce accommodation will include self-accommodation (home ownership), rental accommodation (including WHC-built housing stock) and the existing accommodation village in Boggabri.
Costs	<i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i> <i>The methodology used to estimate operating costs.</i> <i>Allowances made for the content of deleterious elements.</i> <i>The source of exchange rates used in the study.</i> <i>Derivation of transportation charges.</i> <i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i> <i>The allowances made for royalties payable, both Government and private.</i>	- Operating costs were estimated from first principals for the Vickery FS and benchmarked against the operating WHC mines in the region. RPM reviewed these costs and believe they are reasonable for use in this study. - Capital cost estimates were based on the Vickery FS capital estimate. - There is currently significant inflationary pressures on mining operations costs. This makes long term forecasting of costs more challenging. Periodic review of project costs will be required. - Exchange rate assumptions are based on the WHC view of the long term. - Cost estimates include the New South Wales state royalty costs. - No allowance made for deleterious elements. - RPM reviewed all costs and they are considered reasonable.
Revenue factors	<i>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.</i> <i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i>	- The long-term product coal prices are as per the WHC long term estimates. The long term coal prices applied in the Vickery FS are at the upper end of the range of forecasts from independent commodity forecast suppliers. - Current long-term exchange rate assumptions were provided by WHC. - The assumptions are considered reasonable for the purposes of estimating coal Reserves. The competent person notes that the Project economics are sensitive to downward trends on revenue drivers.
Market assessment	<i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i> <i>A customer and competitor analysis along with the identification of likely market windows for the product.</i> <i>Price and volume forecasts and the basis for these forecasts.</i> <i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i>	- WHC completed a market assessment for the VEP product coals. Markets are well established for WHC's nearby mine's that are producing similar products. WHC blend product coal from its mines in the Gunnedah region to meet product specifications prior to shipment through the Port of Newcastle. This allows WHC a lot of flexibility in preparing shipments. - Four products were identified for the VEP including: - SS8 –semi-soft coking coal at 7.1% (ad) ash average life of mine; - SS9 – semi-soft coking coal at 8.5% (ad) ash average life of mine; - TH8 – thermal coal at 7% (ad) ash average life of mine; and - TH9 – thermal coal at variable 9% to 11% ash (ad), averaging 10.7% ash (ad)

Criteria	JORC Code explanation	Commentary
		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 of the Project derived capital and operating cost estimates outlined in the "Costs" section of Table 1. The source of the inputs is the WHC FS and the confidence is satisfactory. The economic modelling is in real terms and RPM assumed a range of discount rates between 8% and 10% in assessing NPV. - The NPV results produced from economic modelling generated positive NPV's for all discount rates and the Project is considered economic from an NPV stand-point. - The NPV has been assessed for variations of +/- 15% in the key value drivers of revenue, operating costs, exchange rate and capital costs. In some instances, the NPV becomes negative and the Project is highly sensitive to changes in exchange rate, revenue and operating costs. - Given the high average strip ratio at the Vickery mine of 8.0 bcm / tonne ROM, the Project is sensitive to variations in the waste mining cost which makes up 44% of the total operating cost.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	- The social impact assessment (SIA) outlined the potential impacts and benefits of the VEP to the local community. - A Social Impact Management Plan (SIMP) complying with the requirements of the Development Consent has been prepared. The SIMP incorporates the recommendations from the SIA and provides the structure to deliver these recommendations.
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.	- Minor update to the disturbance limit may be required. 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. - Review of the impact of the Safeguard Mechanism required once the industry baseline relevant to the project is confirmed. - 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	Classification of coal Reserves has been derived by considering the Measured and Indicated coal Resources and the level of mine planning. Coal Reserves are classified as Proved for Measured

Criteria	JORC Code explanation	Commentary
	<i>Person's view of the deposit.</i> The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	Resources and Probable for Indicated Resources, as the level of mine planning is considered adequate to support this level of certainty in the coal Reserves estimate. - A total of 12 Mt of Inferred/Unclassified coal is included in the pit shell, which is approximately 6% of the total pit quantities. A review of this coal indicates that the proportion of Inferred and Unclassified coal in the schedule is minimal until the final years of the schedule. - 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 and reconciliation by RPM of the coal Reserves estimate 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 supported by approximately 92% of Measured Coal Resources. - The basis of the cost estimate is the 2023 FS. RPM has reviewed these forecasts and considers them reasonable. - Analysis of the coal quality has been undertaken by independent laboratories working under international standards of method and accuracy. Metallurgical studies have been completed by specialist consultants as part of the VEP FS. - 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 minable coal estimate. - Geotechnical studies have been completed. - Internal peer review and reconciliation by RPM of the Coal Reserves estimate has been completed. - Dot point 2 is not applicable for coal. - No current production data for comparison.

Note 2 – Maules Creek Reserve

To provide additional detail regarding the Maules Creek Reserve adjustment, the updated JORC Table 1 for the Coal Reserve Estimate is included overleaf.

Sections 1-3 of the Maules Creek Table 1 should be read in the context that they relate to the 2019 Maules Creek Resource Model and Resource estimate. This Resource Model has formed the basis for all subsequent Resource estimations, including 2023, due to no material changes to the Resource Model since 2019. Information in these sections relating to tenements may no longer be current, however, the current status of all Maules Creek tenements is provided below and supersedes the information in Sections 1-3 of Table 1 for Maules Creek.

Title	Company	Grant Date	Expiry Date	Last Renewal	Minerals	Status	Act Year	Title Area
ML1701	Aston Coal 2 Pty Ltd	9/10/2014	9/10/2035	9/10/2014	Coal	Current	1992	232.1ha
AUTH346	Aston Coal 2 Pty Ltd	28/2/1984	28/2/2027	30/03/2022	Coal	Current	1973	1270ha
CL375	Aston Coal 2 Pty Ltd	4/06/1991	4/06/2033	9/05/2013	Coal, Petroleum	Current	1973	4154ha
ML1719	Aston Coal 2 Pty Ltd	11/11/2015	11/11/2036	11/11/2015	Nil	Current	1992	404.3ha
EL8072	Aston Coal 2 Pty Ltd	13/03/2013	12/03/2018	Renewal Sought	Coal	Awaiting decision	1992	303ha

Maules Creek Table 1

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 (e.g. '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.	- All samples used for coal quality analysis have been recovered from cored holes. - Sample increments are determined in the field and bagged accordingly. Sample analysis intervals within each seam have been determined after examination of the geological and geophysical logs, and the sampling scheme adopted for surrounding drill holes. All coal and in-seam stone bands have been sampled.

Criteria	JORC Code explanation	Commentary
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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.).	- Cored holes are 8C core (200mm diameter), GC (150mm diameter), 4C core (100mm diameter), HQ Triple Tube core (61mm diameter), and NQ Triple Tube core (45mm diameter). - Open holes are generally open hole hammer or PCD air blast in the 90mm to 120mm diameter range. Some limited mud drilling has also occurred. - All holes have been drilled vertically.
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 sample lengths are recorded for each drill run and compared to the drill depths advised by the driller. Further checks are carried out when the field logs are compared to the down hole geophysical logs. - Core sizes are selected to ensure appropriate sample sizes are recovered for the intended analysis and to optimise recovery. Performance of drilling equipment is qualitatively monitored to ensure maximum sample recovery is achieved. - Where inadequate sample recovery occurs, redrills are carried out to ensure representative samples are recovered.

Criteria	JORC Code explanation	Commentary
		- Chip samples are laid out in 1m increments at the drill site. Where samples are not recovered, the lithology is logged as "no sample" or similar. Redrills of holes takes place when inadequate chips are recovered to determine critical information from the hole. - Chip samples from open holes are analysed to determine base of weathering or heat affected coal. Coal quality results from chip samples are only indirectly used in the model for determination of base of weathering surfaces and intruded aureoles. - Sample volume is determined by the analysing laboratory. The volume is used to assess core recovery. Volumetric recoveries are recalculated following adjustments using downhole geophysical logs made to sample length for broken core intervals. Coal quality data was incorporated into the coal quality model if core recovery is greater than 85%.
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.	- Open holes drilled by WHC have been logged and photographed at 1m intervals with samples stored in trays or clip lock bags. Chips are logged in the field and then corrected to geophysics. - Cored holes are logged in detail. Recent logging by WHC has a resolution of approximately 1cm in coal seams and approximately 10cm in interburden and parting material. Older cored holes logged by previous companies are logged in adequate detail to unambiguously determine the quantity and quality of the resource. Logging of coal intervals includes descriptions of the coal brightness profile. - Coal and non-coal strata from chip and core descriptions has been encoded in CoalLog format and entered into appropriate database systems. - Correlations of coal seams has been undertaken during the data validation and modelling stages. Downhole geophysical logs have been used to assist with correlation. The standard and level of detail is considered appropriate for mineral resource estimation. - All drilling data used to develop the geological model is quantitative. Qualitative data is only used to support the resource estimate. This includes interpreted fault locations and interpreted basement elevation. - Corrected lithological and geophysical logs are available for almost all holes in hardcopy and softcopy. - Approximately 10% of cored holes drilled since 2000 have geomechanical logs and an extensive database of geotechnical testing has been established. - Wireline logging of all holes has been attempted shortly after drilling. Gamma, density, and calliper tools were used to log each hole. Verticality, resistivity and sonic velocity has also been recorded on selected holes. Acoustic scanning has been completed on a selection of holes across the deposit. - Total aggregate length of cored and open holes available is 162,544, in 1,130 drill holes.
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or	NQ, HQ, 8C, GC & 4C coring has been used to ensure that samples are representative, and that sufficient material is available for sub-samples. Sample preparation, subsampling and analysis

Criteria	JORC Code explanation	Commentary
sample preparation	<i>all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	has been undertaken by NATA accredited commercial labs employing recognised QA procedures and following Australian Standards for coal testing. These labs are independent of WHC and its subsidiaries. - Samples have generally been taken at sub-ply level and analysed for proximate analysis, relative density, total sulphur and calorific value. Samples have then been composited into working sections for washability and clean coal composite analysis. - The majority of each of the samples is used for analysis. Samples are split using Australian Standards to sizes appropriate for the requested analyses. Analysis of coal samples is almost always destructive. Reserve samples, if available, are maintained by the lab for a finite period. These are usually discarded unless specific requests have been made. - Cored sections not used for analysis are stored in the WHC core shed located in Boggabri. The remaining core is exclusively interburden material. - Most HQ samples have been crushed to top size limit (11.2mm). Subsequent analysis consisted of raw coal proximate, SE, TS, CSN, RD. Composited samples are cut at a density of 1.60 with the floats fraction analysed for a suite of properties. - Samples recovered from larger holes (4C, GC, 8C) have undergone a detailed pre-treatment process to determine likely plant feed properties.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	- All coal analysis has been undertaken in accordance with the Australian Standard at the time. - Laboratories used to analyze core samples comply with Australian Standards for sample preparation and coal quality testing, and are certified by the National Association of Testing Authorities Australia (NATA). - The coal quality database is maintained in the LogCheck software system. The database has a valid range of data and exhibits sound regression relationships such as ash:cv and ash:rd. - All laboratories involved in the sample analysis since at least 2000 have a system in place of blind assaying and quality control. These records are maintained at the respective laboratories.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	- Coal intersections used in the geological model were verified by geophysical measurements obtained by wireline logging, carried out by an independent contractor, supported more recently by digital photographs. Coal intersection depths and seam correlations have been validated by independent reviewers/auditors and/or alternative company personnel (Database Geologist). - Observations of open mine faces are compared to the drilling data. Reconciliation of mined coal is routinely carried out against the mine planning estimations and the geological model that has been developed from the drilling data.

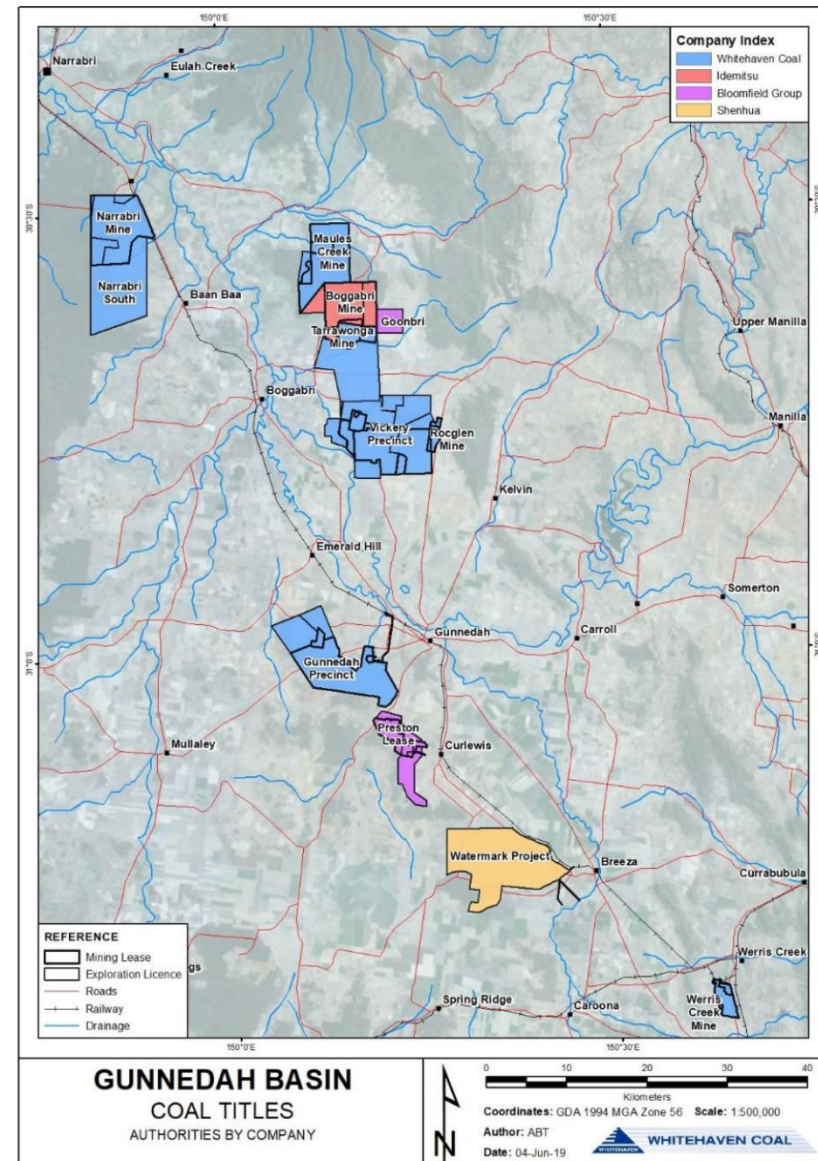
Criteria	JORC Code explanation	Commentary
	Discuss any adjustment to assay data.	- Twinned holes are not used. Pre 2009 data was verified by Novacoal (a Rio Tinto Subsidiary). 2010 and 2012 drill hole data acquisition and verification protocols were made by MBGS geologists. Boreholes drilled since 2010 have been validated by WHC geologists. - Drill hole collar, lithology and basic raw coal quality data is stored in a LogCheck database and exported to a Vulcan database for modelling. All available source field records, lab reports, core photographs, survey data etc. are stored in electronic form on the WHC network, and hard copy in borehole folders at the company's Gunnedah office. - Anomalous results are checked and reanalyzed using their reserve sample as required. - The resultant database is cross referenced to ensure it has a valid range of data and exhibits sound regression relationships such as ash-cv, ash-rd and washability –ash.
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.	- Pre 2010 borehole collars were surveyed by a Registered Surveyor, using triangulation and reported using ISG Coordinates. 2010 and 2012 borehole collars were surveyed by a Registered Surveyor, utilising GPS methods and reported using MGA coordinates. - All drill hole data and geological models are stored in Grid system is MGA 56, Datum GDA 94. - Mined out seam limits for each seam were used to develop the resource limits used in this estimate. These were current as of 31 March 2019. - Site DTM data is recovered from LiDAR surveys flown at the end of the reporting period. These are confirmed with data collected by site based registered surveyors using UAV's.
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 Maules Creek model covers an area of ~70km² and contains 1130 boreholes of which 917 are directly used in the model. Bore data has been collected over the previous 40 years with the resultant dataset reflecting the standards and exploration targets of the time of the works. - There is a bias in the dataset towards information on the Braymont seam which represents the principal open cut target and 25% of the total resource. There are also high concentrations of boreholes, often non-cored, around shallower coal occurrences likely to be amenable to shorter term open cut operations. This combined dataset exhibits a high level of variability in data distribution. - Cored holes, and coal quality data points, are generally spaced at <500m for most of the resource in and around the mining operation. This spacing increases to the north. Open holes infill the cored holes to a 100m x 200m grid in the current mining area and immediately north of the current excavation. The majority of these holes were terminated at the base of the Braymont or Braymont Lower seams. Recent drilling programmes have been undertaken to target basement and provide information on all seams below the Braymont. - Cored borehole spacing in the north and extreme south of the project is 400m-800m. - Many boreholes intersect only part of the sequence i.e. were spudded stratigraphically below one or more seams, or were not drilled deep enough to intersect lower seams. The vast majority

Criteria	JORC Code explanation	Commentary
		of non-cored and cored holes have been geophysically logged, providing roof and floor seam picks. - The data spacing and distribution is considered to be sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. This is supported by geostatistical analysis. - Where coal intersections have been sampled in multiple sections per seam, compositing of samples, on a length x RD basis, has been applied. - Product analyses have been undertaken on combinations of samples recovered from drill holes.
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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.</i>	The orientation of data in relation to geological structure is not believed to have introduced any sampling bias. Statistical analysis of the data did not identify any bias in the dataset.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	- Samples have a unique sample number that is provided on tags in the bag, outside the bag and in separate digital and hard copy sample advice. Each item of advice lists project name, borehole, top and base of sample and sample number. - Given that coal is a bulk commodity, samples are not considered to be at risk of salting. - Reserves of samples drilled since 2010 are stored and maintained at the laboratories for further testing if necessary. Core samples were either delivered to the lab by the field geologist, courier or collected by lab personnel.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	The Pre 2010 borehole database was independently audited in 2010 by JB Mining and Rio Tinto Staff in 2009. A CoalLog format LogCheck borehole database was created and validated by independent consultants and WHC geologists during 2014 to 2017. The geological model was validated using reports, tables, contour plans and cross-sections.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

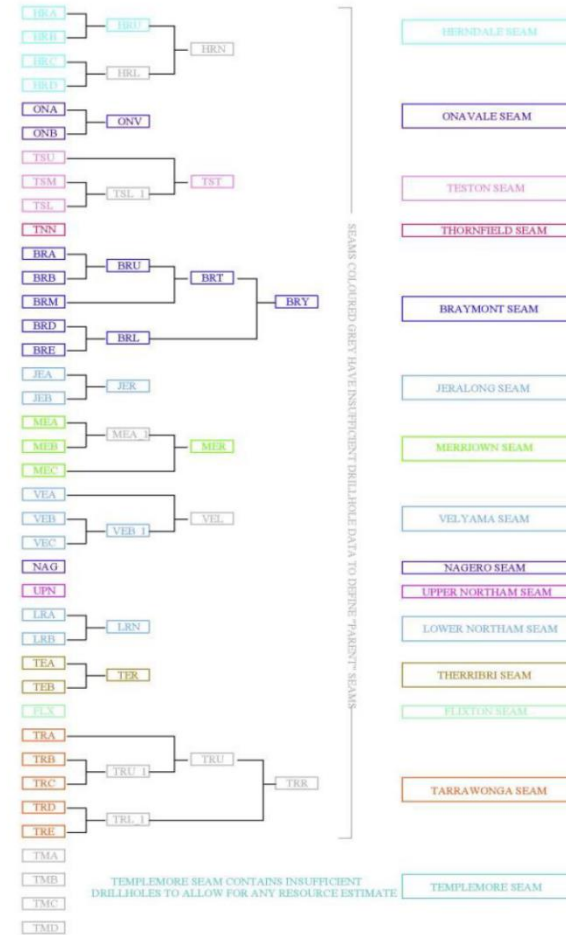
Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	- Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, 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 current Development Consent for an open cut mine at Maules Creek was granted on the 23rd October 2012. This approval is for the extraction of coal to a maximum 13 million tonnes per annum within CL 375. CL 375 has been renewed for a further 21 years until June 2033. In March 2013 MCC was granted Exploration Lease (EL) 8072 and subsequently granted Mining Lease (ML) 1701 over a portion of EL 8072 in October 2014. - CL375 is current until 2033. AUTH346 is current until 2021. EL8072 has recently expired and a renewal application has been submitted. ML1701 was recently granted and expires in 2035. All resources declared in this document are contained within CL375, AUTH346 and ML1701. - The freehold land overlying most of the Maules Creek Mine is owned by either Whitehaven Coal Limited, or the Maules Creek Joint Venture. Crown Land and State Forest also overly the Maules Creek Mine. - Land use in the local area is dominated by agricultural operations and open cut mining, with rural residential holdings mainly located to the north and west of the Project Boundary. The Maules Creek Coal Mine (MCCM) is situated on land largely occupied by the Leard State Forest, which has historically been predominantly used for forestry, recreation and more recently, mining related activities (including biodiversity offsets). Other land within the Project Boundary which is owned by MCCM has historically been predominantly used for cattle grazing. The Namoi River alluvial floodplains to the west of the Leard State Conservation Area are used for various agricultural grazing and cropping enterprises. Two other coal mines and several exploration leases exist within close proximity to the MCCM. These include, but are not limited to, the Boggabri Coal Mine, Tarrawonga Coal Mine and the Goonbri Exploration Lease located to the south and south east of the Project Boundary.



Criteria	JORC Code explanation	Commentary																																																								
		<table><tr><th colspan="8">Table A – Maules Creek Tenement Summary</th></tr><tr><th>Title</th><th>Company</th><th>Grant Date</th><th>Expiry Date</th><th>Last Renewal</th><th>Minerals</th><th>Act Year</th><th>Title Area</th></tr><tr><td>ML1701</td><td>ASTON COAL 2 PTY LTD</td><td>9/10/2014</td><td>9/10/2035</td><td>9-Oct-14</td><td>Coal</td><td>1992</td><td>232.1 HA</td></tr><tr><td>AUTH436</td><td>ASTON COAL 2 PTY LTD</td><td>28/02/1984</td><td>28/02/2021</td><td>21/11/2016</td><td>Coal</td><td>1973</td><td>1270 HA</td></tr><tr><td>CL375</td><td>ASTON COAL 2 PTY LTD</td><td>4/06/1991</td><td>4/06/2033</td><td>9-May-13</td><td>Coal, Petroleum</td><td>1973</td><td>4154 HA</td></tr><tr><td>ML1719</td><td>ASTON COAL 2 PTY LTD</td><td>11/11/2015</td><td>11/11/2036</td><td>11-Nov-15</td><td>Nil Minerals</td><td>1992</td><td>404.3 HA</td></tr><tr><td>EL8072</td><td>ASTON COAL 2 PTY LTD</td><td>12/03/2013</td><td>12/03/2018</td><td>Renewal Sought</td><td>Coal</td><td>1992</td><td>303 HA</td></tr></table>	Table A – Maules Creek Tenement Summary								Title	Company	Grant Date	Expiry Date	Last Renewal	Minerals	Act Year	Title Area	ML1701	ASTON COAL 2 PTY LTD	9/10/2014	9/10/2035	9-Oct-14	Coal	1992	232.1 HA	AUTH436	ASTON COAL 2 PTY LTD	28/02/1984	28/02/2021	21/11/2016	Coal	1973	1270 HA	CL375	ASTON COAL 2 PTY LTD	4/06/1991	4/06/2033	9-May-13	Coal, Petroleum	1973	4154 HA	ML1719	ASTON COAL 2 PTY LTD	11/11/2015	11/11/2036	11-Nov-15	Nil Minerals	1992	404.3 HA	EL8072	ASTON COAL 2 PTY LTD	12/03/2013	12/03/2018	Renewal Sought	Coal	1992	303 HA
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Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	- During the late 1940s, the NSW Geological Survey Department undertook surface geological mapping of the Maules Creek area. In 1974 - 1975 the first drilling was undertaken with the NSW Geological Survey Department completing seven boreholes in the general area. Between 1980 and 1990, Pacific Coal Pty Ltd and its successors undertook a comprehensive program of exploration drilling, geological evaluation, baseline environmental studies, mine planning and infrastructure studies in order to determine the technical and economic feasibility of developing a coal mining operation at Maules Creek. A total of 681 boreholes were drilled during this period, of which approximately 225 were cored holes. In 1996, Novacoal Australia Pty Ltd undertook an exploration program to improve the geological knowledge of the southwestern corner of CL 375. After purchasing the tenement in 2010, Aston Coal 2 undertook two exploration programs in 2010 and 2012. The exploration objectives were to gain contemporary coal quality data and coal processing information. Whitehaven Coal has recently undertaken preproduction and Life of Mine pit definition drilling. This drilling has focused on characterising the geology of a potential pit extension to the north of the current Maules Creek shell as well as gaining additional data on the principal geological features such as seam thickness, coal quality, croplines and basement location. - The 2019 exploration database includes a total of 1,130 boreholes, of which approximately 390 were either partly or fully cored. There has been 25 large diameter coal quality holes drilled in the deposit. The drilling data in the database has a total drilled depth of 162,544 metres (m). - Prior to the commencement of mining, the key exploration objectives were to gain contemporary coal quality data and coal processing information in addition to improving the geological knowledge of the southwestern corner of CL 375. Since mining has commenced, Whitehaven Coal have focussed on preproduction and Life of Mine pit definition drilling. This drilling has focused on characterising the geology of a potential pit extension to the north of the current Maules Creek shell as well as gaining additional data on the principal geological features such as seam thickness, coal quality, crop lines and basement location. Additional exploration data was sourced in early 2017 via a data swap with the Idemitsu Boggabri Coal for a combined modelling project of the corridor along the Maules Creek Boggabri lease boundary.																																																								
Geology	Deposit type, geological setting and style of mineralisation.	Maules Creek is located within the Permian sedimentary sequence of the Maules Creek Sub-basin in the Gunnedah Basin of New South Wales, Australia. The Maules Creek sub-basin unconformably overlies (onlaps) a basement surface of Early Permian Boggabri Volcanics.																																																								

Criteria	JORC Code explanation	Commentary
		▪ The Maules Creek Resource is situated on the western limb of the basin which dips to the east-south east at grades of 2 to 6 degrees. Areas of localised steepening have been identified in areas where complex conglomerate channels exist. ▪ The Maules Creek Formation contains a multi-seam resource in a sedimentary section dominated by lithic conglomerate, sandstone, siltstone and minor claystone. The formation is interpreted as being deposited primarily in a braided fluvial system. The coals are generally thicker and closer together on the western side of the basin. To the east and southeast the coal seams are split by increasingly thick sections of clastic rocks, mainly conglomerates. Within the basin the coal bearing horizons, and the sediments between them, form an essentially 'layer cake' stratigraphy, with some gentle post depositional folding and several phases of relatively minor tectonic dislocation. Localised variations in dip angle and dip direction occur, largely due to differential compaction of strata over interseam sedimentary wedges. ▪ The lower coal seams at the Maules Creek Mine onlap the basement in the west. An east west trending basement ridge exists toward the central part of the tenement with the lower coal seams abutting and subcropping against this ridge. The maximum depth from surface to the Templemore Seam within the project area is in the vicinity of 400m along the eastern boundary of CL375. ▪ The complex seam splitting that characterizes the Maules Creek Deposit has resulted in the recognition of up to 16 coal seams which are further sub-divided into 63 plies. The principal coal seams, in descending order are Herndale, Onavale, Teston, Thornfield, Braymont, Bollol Creek, Jerralong, Merriown, Velyama, Nagero, Northam, Therabri, Flixton, Tarrawonga and, Templemore.

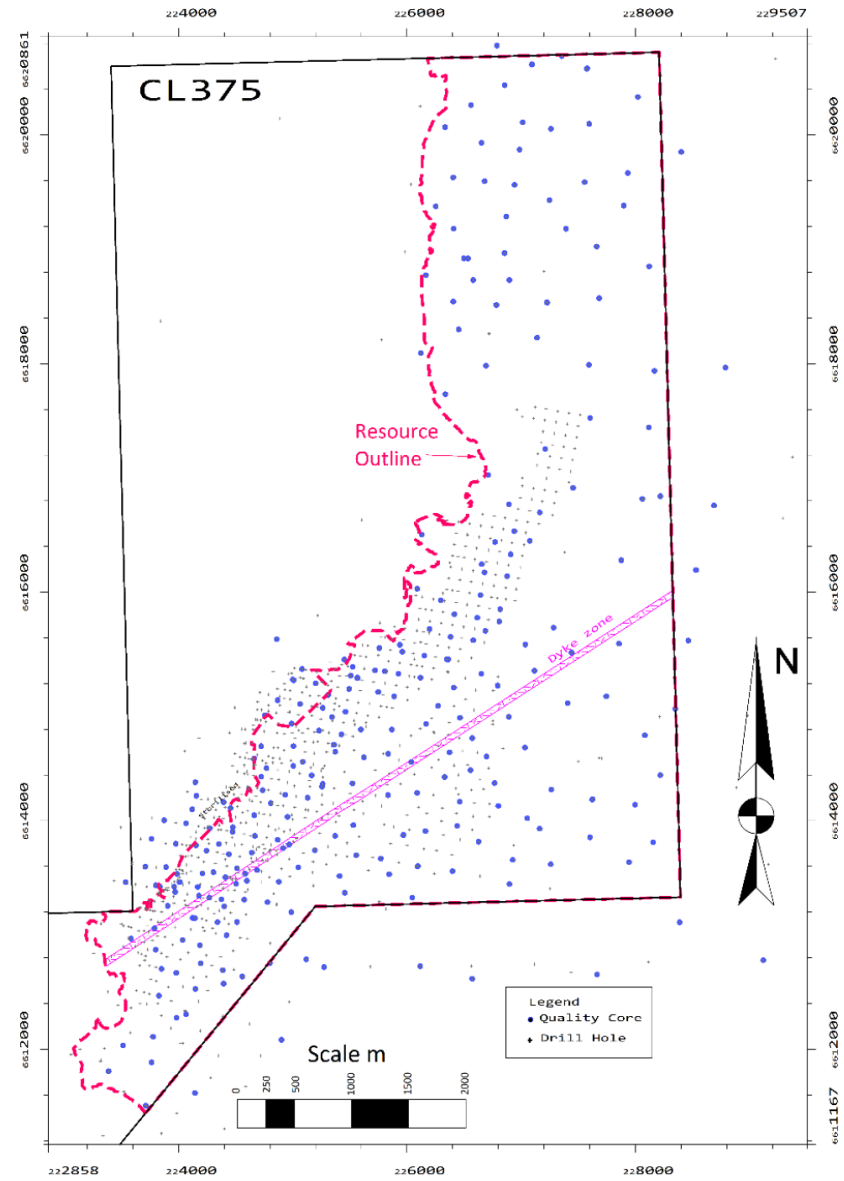
CL375 - MAULES CREEK
GRAPHICAL STRATIGRAPHIC COLUMN
(FOR ALL SEAMS/PLYS HAVING VALID POINTS OF OBSERVATION)



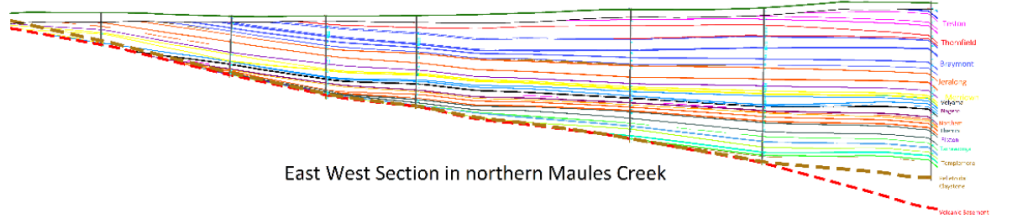
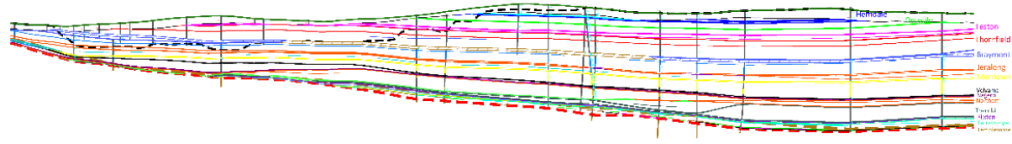
Prepared by JB Mining Services - Oct. 2009

FIGURE 1

Criteria	JORC Code explanation	Commentary
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; and - 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.	Due to the amount of data available for the project area, it is impractical to tabulate drill hole collar locations and downhole data. A drill hole location plan showing the structure and coal quality holes is attached. Appropriate summaries are provided in the text in full.



Criteria	JORC Code explanation	Commentary
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.	Coal intersections that have been sampled in multiple sections per seam have been composited so the coal quality values are representative of the respective coal seam. Density is aggregated by volume. All other parameters are aggregated by mass as determined by volume and RD. Clean coal results are aggregated by the sum product of yield and mass. These approaches are industry standards. Coal quality is reported for the full seam in this report. Grade cutoffs have not been applied to exploration results in the database.
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').	- Seams dip gently at around 2-6°. All thicknesses in the geological model are apparent thickness. Given the deposits shallow seam dip, the differential between apparent and true thickness in a vertical borehole is not considered material to the resource estimate. - All boreholes have been drilled vertically. Verticality data on boreholes has been routinely collected since 2010. Down hole deviation has been applied to the boreholes in the model. Available verticality records have been inspected and the data has been found to be in a range where there omission from the digital dataset is not considered material.
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.	- Appropriate figures are embedded. Also attached to this table are: - the Nagero seam structure floor contours and faults; and - the Braymont seam group resource outlines (compiled) as an example of the typical resource outlines of the 63 seams/plies.

Criteria	JORC Code explanation	Commentary
		West East  East West Section in northern Maules Creek West East  East West Section in southern Maules Creek MAULES CREEK
<i>Balanced reporting</i>	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.	- There is no preferential reporting of results. - Appropriate summaries of the data used in this resource estimate are provided throughout the report in full. Some anomalous data has been excluded from the dataset used to develop the geological model. This is due to unreliable and inconsistent results of laboratory analysis. These samples represent ~1% of the dataset and considered immaterial for this assessment.
<i>Other substantive exploration data</i>	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, groundwater, localised ground magnetic and geochemical studies have been completed and reported elsewhere. No material potentially deleterious or contaminating substances have been identified.

Criteria	JORC Code explanation	Commentary
<i>Further work</i>	▪ <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> ▪ <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	▪ The lateral extents of the deposit are well defined. Inferred resources can be upgraded to Indicated and Measured resources with further drilling. ▪ Pre-production work as well as deeper drilling in the north is ongoing.

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
<i>Database integrity</i>	- 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.	- Borehole collar locations and RL's were checked against surveyors' reports, field records (handheld GPS) and the DTM. - Lithological logs and coal intersection depths were reconciled with wireline logs. - Coal quality data were cross-checked against lab reports and sample depths were correlated with the lithological database. - All survey, lithological and quality data are compiled in a Logcheck database.
<i>Site visits</i>	- 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 on 6 June 2019.
<i>Geological interpretation</i>	- 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.	- The database has been manually and electronically interrogated to produce Vulcan database (.isis) files representing x,y coordinates and data values for structural parameters such as depth to coal seam roof and floor, and raw coal quality parameters. The computer generated models of the Maules Creek deposit were generated using Maptek's Vulcan Software V10. - Resources have been estimated within the Maules Creek leases using Vulcan software within vertical sided polygons. The model was produced from geological data obtained from drilling and pit observations. Resources are excluded from a 50m wide zone around a dyke exposed in the open cut. 50m is the maximum known width of the dyke. - The structure of the deposit is well understood and an alternative interpretation is highly unlikely. The main factor affecting coal seam continuity is the interplay of seam dip, depth of weathering, surface topography and the variable nature of the volcanic basement which determines seam subcrops. Most seams show good continuity of grade, although deteriorations of quality towards the crop are common. This is due to the intercolation of the lower coal seams and Pellet Claystone. Resource confidence has been reduced to account for this feature. Seam specific influences include the consistent, predictable development of a stone band within a seam to form a seam split, some regional trends of deterioration and also locally developed stone lenses which are mainly responsible for the outliers in the ash contours.
<i>Dimensions</i>	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 Maules Creek deposit is located within an irregular shaped area 11km north south and 7km east west. The deposit continues into the neighboring Boggabri Mine to the south-east. - All open cut resources at Maules Creek are less than 500m depth from the surface. A minimum coal thickness of 0.2m was applied to all seams. A 45% maximum ash was also applied to all resources. Resources beneath recently constructed expit pit and inpit spoil dumps were also

Criteria	JORC Code explanation	Commentary
		excluded due to the likelihood that these resources will not be recoverable in the future via open cut 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 geological model was based on a dataset developed by WHC. The model was developed by JB Mining in consultation with WHC. Maptek's Vulcan software was used to generate the models. This software is an accepted tool for modelling and estimation of coal resources in the coal mining industry. - Resources were estimated using the RSVUTE tool. Checks were made using alternative reserving tools to ensure the accuracy of the primary method of estimation. - Interpolation parameters used to generate the model are consistent with industry standards. The relatively simple stratigraphic setting allows for simplistic modelling of the deposit using the selected tools. - Resources have been compared to previous estimates and show good alignment after adjustments have been made for mining during the period as well as minor adjustments to account for improved understanding of the deposit. - Confidence of the quantity and quality of the resources within the Pelletoidal Claystone unit has been downgraded to Inferred to account for the relative uncertainty in this unit. - Appropriate ash and thickness limits have been applied to the resource estimate. - The results of the resource estimate have been interrogated to ensure accuracy and appropriateness of the confidence classification as well as the total resource estimate. - All open resources at Maules Creek are less than 500m from the surface. The open cut potential is demonstrated by the strip ratio plot shown in the report in full. - There are no material concentrations of deleterious elements of economic significance. There is no assumption of selective mining. Full coal thickness is modelled for all seams. - The resource model is cut by either the base of weathering grid or the basement. There is a high degree of repeatability in the resource estimates prepared by different parties since 2009. The geological model is validated by generating and inspecting reports, tables, cross sections, contour plans and comparisons with posted drill hole values.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	- The basis of the tonnage estimate is in- situ moisture (Mis) calculated for each seam based on raw coal proximate analyses (ACARP project C10042 formula).. On average the In-situ moisture is in the order of 10.3% - The calculated insitu moisture is approximately equivalent to the open cut Run of Mine Moisture.

Criteria	JORC Code explanation	Commentary
		All moisture conversions for density use the Preston and Sanders method.
<i>Cut-off parameters</i>	The basis of the adopted cut-off grade(s) or quality parameters applied.	Resources are limited to coal tenement boundaries; subcrop against base of weathering and basement; a minimum coal thickness of 0.2 m and a 45% maximum ash cut –off (applied to all seams). In addition A 20:1 cumulative waste to coal tonnes ratio cutoff has been applied.
<i>Mining factors or assumptions</i>	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.	- All coal resources are considered to be amenable to open cut methods. This is supported by the In-situ vertical ratio of waste to coal being below 10:1 for almost all of the deposit. - A minimum coal thickness of 0.2m and a 45% maximum ash was applied to all resources. This approach approximates existing practical recovery limits for thin seam open cut mining. - Resources beneath recently constructed expit pit and inpit spoil dumps are excluded due to the likelihood that these resources will not be recoverable in the future via open cut method
<i>Metallurgical factors or assumptions</i>	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.	The seams that make up the resources reported herein have been subject to mining and production of both metallurgical and steaming coal at the mining operation. Cumulative floats data throughout the deposit demonstrates the raw coals amenability to beneficiation to produce coal types suitable for domestic and seaborne markets. Reconciliation of estimations with coal production demonstrate accuracy of the forecasting methods. Large areas of the deposit are of a suitable raw quality (bypass) to also meet such specifications.
<i>Environmental factors or assumptions</i>	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	- Project approval, infrastructure, a mining operations plan and the necessary environmental licences are in place. The operation currently has designated out of pit spoil and tailings emplacement facilities. Feasibility and Life of Mine planning studies have developed a sequenced approach to the utilization of the resources over the life of the operation. This planning process is ongoing and iterative. - The operations spoil is typical of the Gunnedah coalfields and is not considered to be potentially acid forming.

Criteria	JORC Code explanation	Commentary
	<i>environmental assumptions made.</i>	
<i>Bulk density</i>	- 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.	- Air dried relative density, air-dried moisture, and in-situ moisture were used to derive in-situ density for each drill hole sample that had been analysed for all of these parameters. - The method used to estimate in-situ density was developed Preston-Sanders (1993).
<i>Classification</i>	- The basis for the classification of the Mineral Resources into varying confidence categories. - Whether appropriate account has been taken of all relevant factors (i.e. 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 spatial distribution of both structural and coal quality points of observation (POB) were used as a guide to determine the confidence classification for the resource. The geostatistical assessment discussed previously in this report supports the use of the applied spacing. - The radius of influence for Measured Resources is 250m from a quality POB, 500m for Indicated Resources and 2000m for Inferred resources. - Where seams have been deposited within the Pellet Claystone unit, the resource confidence was downgraded to inferred to reflect the relative uncertainty in the quantity and quality estimates.
<i>Audits or reviews</i>	The results of any audits or reviews of Mineral Resource estimates.	The geological model and resource estimate was made by JB Mining Services. Both the model and resources estimate, as well as the resource report, have been peer reviewed by WHC geologists that are familiar with the Maules Creek deposit.
<i>Discussion of relative accuracy/ confidence</i>	- 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	- Resources have been classified and reported based on their relative confidence. The confidence criteria has been reported in the text in full. The confidence criteria is supported by geostatistical analysis performed as part of this assessment. - The structural character of the deposit as a whole is well understood in relation to the location and character of the principal geological features. - The extent of igneous intrusions and coal washouts may negatively affect the coal resource tonnage for each affected coal seam. However, the frequency, and density of drill holes that have intersected igneous material are both very low. Minor faults with small throws are present throughout the deposit but their affect on the resource quantity are negligible. - The basement forms the limiting surface to coal deposition and accordingly inaccuracies in its modelled location may impact negatively on coal resources.

Criteria	JORC Code explanation	Commentary
	<i>economic evaluation. Documentation should include assumptions made and the procedures used.</i> ▪ <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	

Section 4 Estimation and Reporting of Ore Reserves

The completed Table 1 - Section 4 checklist is in response to mine planning work completed for the Maules Creek Reserves Report performed 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 Mineral Resource model used as the basis for this coal Reserves Statement is described in the document "CL 375 Maules Creek Resource Statement as at 1st April 2019", July 2019, prepared by Mr. Mal Blaik. The coal Resources has been updated by depletion by the Competent Person Mr. Darryl Stevenson as described in the report "Maules Creek Resource Depletion Report" June 2023. The Competent Person, Mr. Stevenson, 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 coal 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.	A site visit to the Maules Creek Coal Mine (MCCM) was undertaken by the coal Reserves Competent Person ("CP") in August 2023 and confirms that the mine is operational and infrastructure construction is complete.
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.	- MCCM is an operating mine and the Modifying Factors have been informed by operational experience. As such, the level of confidence in the data and assumptions exceed those of a Prefeasibility Study. WHC last completed a Life of Mine (LOM) plan for the mine in 2022. - The LOM plan includes the integration of the northern extension into Authorisation 346.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	A 45% (ad) ash cut off has been applied to the Resource model. No additional cut off has been applied based on ROM ash.

Criteria	JORC Code explanation	Commentary
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.	▪ WHC has previously completed Margin Ranking of the deposit. This along with pit design and LOM planning have been used as the basis of determining the pit shell. ▪ The mining method is a conventional truck and excavator mining method. Waste is hauled to both out of pit and in pit dumps but will transition to in-pit dumping as capacity becomes available. This mining method is proven at the mine and considered appropriate for future planning based upon geology, deposit characterisation and strip ratio. ▪ WHC has received geotechnical advice regarding the stable slope design criteria for MCCM. ▪ The coal Reserves CP confirmed the pit limits through break even strip ratio analysis and economic modelling using current costs and revenue factors. ▪ The mining factors used were: - Minimum coal mining thickness of 0.30 m; - Minimum parting mining thickness of 0.20 m; - Loss and dilution criteria: ▪ Mineable coal section combined roof and floor loss of 0.10 m; and ▪ Mineable coal section combined roof and floor dilution of 0.15 m. - The quality of diluting material is relative density of 2.3 t/bcm, and ash of 85% (ad); and - ROM moisture is assumed to be 8.2%. ▪ Approximately 20 Mt of Inferred coal is contained within the Maules Creek pit shell and represents 5% of the coal in this pit. This coal is included in mining studies and RPM anticipate that exclusion would not impact on the outcomes of the study. ▪ All necessary infrastructure is in place, fit for purpose and operational.

Criteria	JORC Code explanation	Commentary
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 MCCM CPP is currently operating and processing MCCM coal. The metallurgical process is well tested and appropriate for the mine. - Processing logic based on washability data and summarised below: - For select seams, bypass is assumed when the coal thickness is greater than 1.0m and the ROM ash is less than 20% (ad). Classified as SSCC if CSN is greater than 2 and ROM ash less than 6% (ad), otherwise a thermal product is produced. - SSCC product includes all seams that can be washed to achieve an ash of less than 8.0% (ad) and contains CSN greater than 3. - Remaining coal is washed to achieve a thermal product specification. - Yield projections are based on updated simulations completed by A&B Mylec in 2022. - Iron and Calcium are present in higher concentrations in certain seams at MCCM but it is expected that these can be blended down in final products. As such, 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.	- MCCM has the necessary environmental approvals in place for the current approved mine plan. - Approval is required for the extension to the north into Authorisation 346. There remains sufficient time to achieve approvals, however if not achieved then a portion of the coal Reserves will be at risk. - Waste rock characterisation results and operational experience indicates that the waste does not require special placement requirements or procedures in the dumps. A small proportion of the potential coal reject material has been classified as Potentially Acid Forming and needs to be placed at a depth of greater than 5m in the overburden emplacement.
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.	- Construction of required infrastructure is completed and the site is fully operational. The infrastructure and layout is suitable for the mine. - Further minor upgrades may be completed if the operation expands above the approved 13 Mtpa production rate.
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.	- All major infrastructure is in place at MCCM. Sustaining Capex for this infrastructure is required and allowed for over the life of mine. - Equipment procurement and replacement capital costs have been estimated based on LOM planning and are included in economic modelling.

Criteria	JORC Code explanation	Commentary
	- 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 operating costs were based on the 2023 Maules Creek budget estimates provided by WHC and include allowances for royalties, commissions, mining costs, ship loading and administration. Costs have been reviewed by the Competent Person and are deemed reasonable for the estimation of coal Reserves. - Long-term exchange rate assumptions were provided by WHC. - Transport charges based on actual contracted prices. - RPM reviewed all costs and they are considered reasonable as they are based on actual site costs and are comparable to similar operations in NSW.
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 coal prices provided by WHC in July 2023. The long term coal prices applied in the Maules Creek Economic model are at the upper end of the range of forecasts from independent commodity forecast suppliers. These assumptions are considered reasonable for the purposes of estimating coal Reserves. - Product Coal Benchmark specifications were provided by WHC including the logic for premiums and discounts and methodology for estimating coal price for coal 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 was completed for the mine as part of the Feasibility Study. WHC blend product coal from its mines in the Gunnedah region to meet product specifications prior to shipment through the Port of Newcastle. This allows WHC additional flexibility in preparing shipments and to maximise revenue across its mines. WHC typically produce two main products: - Thermal coal at approximately 8-15% ash (adb); and - SSCC at approximately 5.5 – 6.5% ash (adb). - Marketable Reserve estimate has been updated to reflect the mines strategy of producing a lower ash and higher calorific value thermal coal specification. This is achieved through reduced coal bypass. - The planned Maules Creek product coal fits within the typical WHC product specification - 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 of the MCCM are derived capital and operating cost estimates outlined in the "Costs" section of this Table 1. The source of the inputs is real and the confidence satisfactory. The economic modelling is in real terms and RPM assumed a range of discount rates between 6% and 10% in assessing NPV. - The NPV results produced from economic modelling generated positive and acceptable NPV's for all discount rates and the mine is considered economic from an NPV stand-point.

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		The NPV has been assessed for variations of +/- 20% in the key value drivers of revenue, operating costs, exchange rate and capital costs. In all cases a positive NPV was estimated for the mine.
Social	<i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i>	- A comprehensive stakeholder consultation program was undertaken for the MCCM during the three to four year period leading up to the granting of the State and Commonwealth environmental approvals in late 2012/early 2013. Since then, WHC's consultation program has been ongoing and has evolved as the mine has moved through the pre-construction, construction and operations phases. - WHC has consulted extensively with local landholders and residents, as well as the Registered Aboriginal Parties and other members of the Aboriginal community in regard to local community and cultural heritage management issues. - The Maules Creek Community Consultative Committee ("MCCCC") has been established, as required by Condition 7 of Schedule 5 of PA 10_0138.
Other	<i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i> <i>Any identified material naturally occurring risks.</i> <i>The status of material legal agreements and marketing arrangements.</i> <i>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.</i>	- 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 2022 JORC pit shell extends outside some of the current approval's limits. An Authorisation exists over the Northern portion of the JORC pit shell and WHC owns all the land in this area. 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. - Impacts of the Safeguard Mechanism on long term project costs was not available at the time of reporting. Combustion of diesel is likely to be the primary contributor to greenhouse gas emissions at the site. - As part of the conditions of approval for the MCCM the Independent Planning Commission (IPC) (previously the Planning and Assessment Commission) determined that a wildlife corridor be maintained between the Maules Creek and Boggabri mines. MCCM and Boggabri are working together to develop an integrated solution to achieve the required wildlife corridor that will allow the coal contained in the current corridor and classified as part of the coal Reserve to be recovered.
Classification	<i>The basis for the classification of the Ore Reserves into varying confidence categories.</i> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> <i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i>	- Classification of coal Reserves has been derived by considering the Measured and Indicated coal Resources and the level of mine planning. - For the MCCM, Measured coal Resources are classified as Proved coal Reserves and Indicated coal Resources classified as Probable coal Reserves, as the mine is currently operating and the level of mine planning is considered adequate to support this level of certainty in the coal Reserves estimate. - The Inferred coal Resources have been excluded from the coal Reserve estimates.