Whitehaven

ASX Announcement

15 December 2025

Blackwater Mine – Updated Coal Resources and Reserves

Whitehaven (ASX:WHC) is pleased to release an updated **Resources and Reserves Statement for the Blackwater Mine** in Queensland, which includes:

- Blackwater's Total Recoverable Reserves upgraded to 365Mt, from 191Mt
- Blackwater's Coal Resources upgraded to 1,919Mt, from 1,817Mt.

This update reflects improved geological confidence gained from the inclusion of 4,267 structural and 211 quality drillholes, refined economic assumptions, and the inclusion of additional prospective mining areas that support continued long-term production.

Commenting on Blackwater's updated Resources and Reserves, Paul Flynn, CEO & Managing Director said:

"This Resource and Reserves update for Blackwater reflects the steady progress we are making to integrate and advance our Queensland operations acquired from BMA.

"On the back of high-confidence modelling and progress in approvals, Blackwater's Recoverable Reserves has increased by 91% to 365M tonnes and total Coal Resource has increased by 6% to 1,919M tonnes.

"This uplift to Resources and Reserves at Blackwater unlocks future mining areas and reinforces its position as a long-life asset and the strong potential for growth and optionality at the Blackwater Mine."

Updated Resources and Reserves Estimates[1] for Blackwater Mine (Mt)

	Blackwater Mine Coal Reserves Dec 2025						Blackwater Mine Coal Resources Dec 2025			
	Recoverable Coal Reserves			Marketable Coal Reserves			Coal Resources			
Mining Method	Proved	Probable	Total	Proved	Probable	Total	Measured	Indicated	Inferred	Total
OC	195	170	365	162	136	298	436	507	722	1665
UG	0	0	0	0	0	0	0	0	254	254
Total	195	170	365	162	136	298	436	507	976	1919
Comparison with previous JORC Release (Aug 2025)										
OC	*+95*	*+79*	*+174*	*+74*	*+56*	*+129*	*+148*	*-21*	*-57*	*+70*
UG	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*+32*	*+32*

Note: Coal Resources are inclusive of Coal Reserves, tonnages are rounded for the purposes of reporting.

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[1] Estimates are not precise calculations and are rounded for the purposes of reporting.

Reserves Update

Coal Reserves have been estimated for the Blackwater Mine according to the face positions on 1 April 2025. The Reserves stated are included in, and not additional to, the JORC Resources reported for the Blackwater Mine.

This update to the Blackwater Mine Reserves includes an increase in both Recoverable and Marketable Coal Reserves and is the result of model refinement, economic re-evaluation, and the inclusion of previously excluded mining areas.

The Recoverable Reserves have increased from 191Mt to 365Mt, reflecting:

1. **Resource reclassification (+25 Mt).** Additional drilling results have improved confidence in active mining areas, resulting in Inferred Resources being upgraded to Indicated and Measured classifications. The reclassified Resources were directly converted to the appropriate Reserve category. Figures 1 to 4 illustrate the drilling density that supported this upgrade.
2. **Revised macroeconomic and cost assumptions (+43 Mt).** This update incorporates Whitehaven's latest cost and pricing forecasts (which are commercially sensitive due to Blackwater being an existing mining operation). Economic modelling confirmed positive cash margins across all declared Reserves.
3. **Inclusion of Blackwater North Extension (+70 Mt).** SA7 and SA10 areas within ML 1759 (Figure 1) have been included in Recoverable Reserves following progress of the Environmental Authority (EA) Amendment and EPBC referral processes.
4. **Inclusion of SA2 in ML 1860 (+36 Mt).** SA2 in ML 1860 has been incorporated into the longer-term mine plan (Figure 3) as the competent person considers that the environmental and heritage assessments have identified no material barriers to gaining future approvals to mine this area.

Marketable Reserves increased from 169Mt (as at August 2025) to 298Mt**,** driven by the upgrade in Recoverable Reserves. The updated Marketable Reserves estimate considers mine processing data, confirming alignment between modelled and achieved yields.

The Marketable Reserves product suite is consistent with current production at site and continues to consist primarily of metallurgical coal, with a minor secondary thermal coal stream. These products are produced under established plant operating regimes.

Updated Marketable Coal Reserves[1] for Blackwater Mine (Mt)

Product	Proved	Probable	Total
Metallurgical	154	130	283
Thermal	8	7	15

Product Type and Target Ranges

Product	Ash (%ad)	CSN	TS (%)	VM (%)	GCV (Kcal/kg)
Metallurgical	8.3-9.8	>3.0	<0.47	25.0-27.1	
Thermal	12.4			23.5-24.5	>6533

A summary of the material assumptions for estimating the Blackwater Mine Coal Reserves is provided below.

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[1] Estimates are not precise calculations and are rounded for the purposes of reporting.

Summary of Material Assumptions for Blackwater Coal Reserves (ASX Listing Rule 5.9)

Material assumptions and outcomes of the PFS/FS used to estimate the Ore Reserves	The Ore Reserves for Blackwater are underpinned by a mature, long-established mining operation that has been in continuous production since 1968. As such, the Reserve estimate does not rely on a pre-feasibility (PFS) or feasibility study (FS), but instead draws on extensive operational data, proven mining performance, CHPP recoveries, established hydrological and geotechnical models, and more than 50 years of cost and productivity history. The Life-of-Mine (LoM) schedule is continually refined through operational planning and annual optimisation work, ensuring economic limits, sequencing & strip progression reflect current conditions.
Criteria used for classification and confidence in modifying factors	Coal Reserve classification follows the JORC Code, with Proved Reserves derived exclusively from Measured Resources and Probable Reserves from Indicated Resources. No Measured Resources have been converted to Probable. Classification confidence is supported by long-term operational reconciliation, a mature geological model, reliable washability performance, and well-established modifying factors including geotechnical parameters, slope design, hydrological models, loss and dilution factors, and Selective Mining Unit (SMU) dimensions. Inferred Resources and unclassified material are not included in the Reserve estimate.
Mining method and mining assumptions (including dilution and recovery factors)	Blackwater uses open-cut strip mining with draglines, truck–shovel fleets, and progressive backfilling. Draglines typically remove 25–60 m interburden sections, and excavators/shovels mine 5–18 m passes, in line with SMU dimensions. Dilution and recovery factors are based on historical mining performance and LoM planning: average coal recovery is ~89.9%, with average dilution of ~11%. Bench geometries, strip widths (60–70 m), dragline operating parameters, and geotechnical slope designs are incorporated into the mining model. Permanent access corridors, water management constraints, and infrastructure offsets are reflected in the mine design. The LoM schedule reflects the inclusion of SA7, SA10 and SA2 areas where approval pathways are progressing. Based on progress and formal Risk Assessment, it is the opinion of the Competent Person that there are no identified material barriers to obtaining future approvals within the declared Reserves footprint.
Processing method & assumptions (incl. recovery factors and deleterious elements)	Coal is crushed, deslimed, and processed through dual-module CHPP circuits involving Dense Medium Cyclones, spirals, microflotation and centrifugal dewatering. Processing assumptions are underpinned by >50 years of operating history and robust empirical regressions between feed ash and yield. Product coal is blended and stockpiled prior to rail load-out. Recovery factors reflect historical CHPP performance and are applied through wash models in the LoM plan. No changes to the CHPP flowsheet are required for the expanded Reserve footprint including SA7, SA10 and SA2.
Basis of the cut-off grades or quality parameters	Cut-off criteria applied includes: • minimum mineable seam thickness of 0.3 m for open cut • maximum included parting thickness of 0.3 m • in-situ ash limit of 40% (coal above this limit is classified as waste) • density-based washability parameters consistent with product specifications • economic strip ratio thresholds derived from LoM optimisation. These cut-offs are consistent with Blackwater's mining method, CHPP performance and product strategy.
Estimation methodology	Ore Reserves are estimated by importing the geological resource model into specialist mine planning tools such as Spry and Deswik, where all relevant modifying factors are applied to convert in-situ Resources into mining models. Within these mine planning tools, dilution, coal loss, cut-off parameters, geotechnical constraints, hydrological considerations, SMU dimensions, equipment productivity and infrastructure limitations are applied at appropriate block or mining-unit scales. Mining blocks are aggregated and evaluated against washability models to determine recoverable tonnes and qualities. These mine planning packages are then used to undertake sequencing and LoM optimisation, defining economic mining extents and strip boundaries based on updated operational, cost and product assumptions. The optimised LoM schedule incorporates the updated economic inputs and the inclusion of SA7, SA10 and SA2, defining the economic mining extents and Reserve boundaries. This process ensures that the resulting Ore Reserves reflect practical operating conditions, demonstrated modifying factors and current economic parameters.
Material modifying factors (environmental, approvals, government factors, infrastructure requirements)	Blackwater operates under existing Environmental Authorities (EAs), PRCP obligations, water licences and CHMPs. Mining lease renewals and current Surface Area permissions are in good standing. SA7 and SA10 Northern Surface Area applications and SA2 Surface Area application are currently under assessment; based on completed environmental and heritage work and formal Risk Assessment, it is the opinion of the Competent Person that there are no material impediments expected to obtaining future approvals, and these areas have been incorporated into LoM plan. The operation is supported by extensive existing infrastructure, including haul roads, draglines, shovels, water pipelines, CHPP capacity, raw and product stockpiles, and a rail load-out connected to RG Tanna Coal Terminal. It is the opinion of the Competent Person that no material environmental, regulatory or social constraints have been identified that would prevent extraction of the declared Reserves.

Resources Update

The Blackwater Mine Coal Resources classification is consistent with the Australian Guidelines for the Estimation and Classification of Coal Resources (2014) and has been reported in accordance with the JORC Code (2012). The Blackwater Mine's total Coal Resources have increased to 1,919Mt, an increase of 102Mt relative to the August 2025 estimate. Measured Resources increased by 148Mt due to the incorporation of 4,267 structural and 211 coal quality drillholes and refined seam correlations and the associated improvement in confidence associated with the additional drill holes. A summary of the material assumptions for estimating the Blackwater Mine Coal Resources is provided below, addressing the requirements of ASX Listing Rule 5.8. Figures 1 to 4 show the location of the additional drill holes used to upgrade the Resource.

Summary of Material Assumptions for Blackwater Coal Resources (ASX Listing Rule 5.8)

Geology and geological interpretation	The Blackwater deposit lies within the southern Bowen Basin. Stratigraphically, the deposit is within the Late Permian Rangal Coal Measures comprising interbedded coal, mudstone, siltstone and sandstone overlying the Burngrove Formation and unconformably overlain by Triassic Rewan Group sediments. Three key economic seams – Top, Middle and Lower – are well-developed, laterally continuous for ~80 km along strike, and dip gently eastwards at 3–5 degrees. Geological interpretation is supported by drillholes, 2D/3D seismic data, downhole geophysical logging, highwall mapping and ongoing mine reconciliation, providing high confidence in continuity, structure and coal quality.
Sampling and sub sampling techniques	Drill core is the sole source of data for Resource estimation, with samples taken at seam, ply and lithological boundaries (≤0.5 m), photographed, sealed and stored prior to analysis. Depth adjustments are made using downhole geophysics to ensure representative intervals, and ply samples are composited to parent seams where appropriate. Raw quality and washability analyses are conducted on intervals meeting minimum mass requirements, with clean coal analysis completed on modelled composites. Additional sampling includes geotechnical core from adjacent rock units, gas desorption testing, and LOX sampling from rotary air blast chips to define weathering depth. All sampling follows WHC procedures consistent with industry standards.
Drilling Techniques	Drilling has utilised rotary air blast holes for stratigraphy and LOX sampling, and conventional or wireline coring (HQ3 and PQ3) for coal quality, geotechnical and gas sampling. Core diameters of 100–200 mm are used for quality analysis. All drilling follows standardised operational procedures, with geophysical logging routinely collected since the 1990s to support seam correlation and quality control.
Classification criteria including drill spacing	Classification is based on Points of Observation that include geophysical logs, core and quality data with ≥95% recovery. Geostatistical Drillhole Spacing Analysis (DHSA) is used to quantify uncertainty in raw ash and thickness, supporting classification thresholds of <10% error for Measured, 10–20% for Indicated and 20–50% for Inferred. Corresponding drill spacing limits are 600 m, 1000 m and 2600 m respectively. The Competent Person reviews and adjusts classification polygons for geological uncertainty.
Sample analysis methods	All coal quality analyses are conducted in duplicate under Australian and international standards, and results must meet prescribed precision limits for repeatability and reproducibility. Laboratories undertake extensive QA/QC including blind sample programs, round robins, z-score assessment, calibration checks, and compliance with NATA accreditation. Analytical validation includes regression checks such as ash vs RD, ash vs CV and washability mass balance checks.
Estimation methodology	Vulcan is the primary software used to estimate Coal Resources, with grid-based structural, quality and washability models generated using industry standard Inverse Distance Weighting (IDW) interpolation (power 1–2) suitable for low-variability coal deposits. Structural modelling incorporates seam splitting, thickness and reference surface generation, fault integration, and masking of intrusions or non-resource areas. Washability models use standardised methods to calculate cumulative ash and yield across density cut points. Model validation is supported by exploratory data analysis, including histograms, scatter plots and outlier assessment, and depth-related trends are applied where appropriate.
Cut-off grades and basis for selection	Cut-off parameters include minimum seam thicknesses of 0.3 m for open cut and 2.0 m for underground, a 0.3 m parting limit for inclusion, and an in-situ raw ash cut-off of 40%. Dyke zones are excluded using a nominal 10 m buffer. Coal Resources are only estimated where yields exceed 50%.
Mining, metallurgical and other modifying factors considered to date	Reasonable prospects for economic extraction are supported by LoM pit limits, economic strip ratio constraints, geotechnical designs, hydrological modelling, and SMU considerations, informed by Blackwater's operating history since 1968. The mine employs open-cut strip-mining using draglines and truck–shovel fleets, with in-situ density determined using the Preston & Sanders method. Metallurgical assumptions are derived from well-understood washability behaviour, long-term ash–yields and proven CHPP performance. Environmental requirements are managed under existing Environmental Authorities, PRCP obligations and established operational controls. Blackwater benefits from extensive existing infrastructure, water supply, CHPP capacity, haul roads, rail load-out and logistics systems all of which further supports the assessment of reasonable prospects for economic extraction.

Competent Person Statement – Coal Reserves

The information in this report that relates to Coal Reserves for the Blackwater Mine is based on, and fairly represents, information compiled and reviewed by Nina Wilson, who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM(CP)309911) and a full-time employee of Whitehaven Coal Limited.

Nina Wilson has sufficient experience relevant to the style of mineralisation, type of deposit, and modifying factors under consideration to qualify as a Competent Person as defined in the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 Edition).*

Nina Wilson consents to the inclusion of the information in this report in the form and context in which it appears.

Competent Person Statement – Coal Resources

The information in this report that relates to Coal Resources for the Blackwater Mine is based on, and fairly represents, information compiled and reviewed by Maurice Passmore, who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM 230550) and a full-time employee of Whitehaven Coal Limited.

Maurice Passmore has sufficient experience relevant to the style of mineralisation, type of deposit, and geological interpretation under consideration to qualify as a Competent Person as defined in the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 Edition).*

Maurice Passmore consents to the inclusion of the information in this report in the form and context in which it appears.

The appended JORC Code (2012) – Table 1 sets out all the information material to understanding the estimate of the Project Resources and Reserves.

This announcement is authorised for release to the market by the CEO and Managing Director of Whitehaven Coal Limited.

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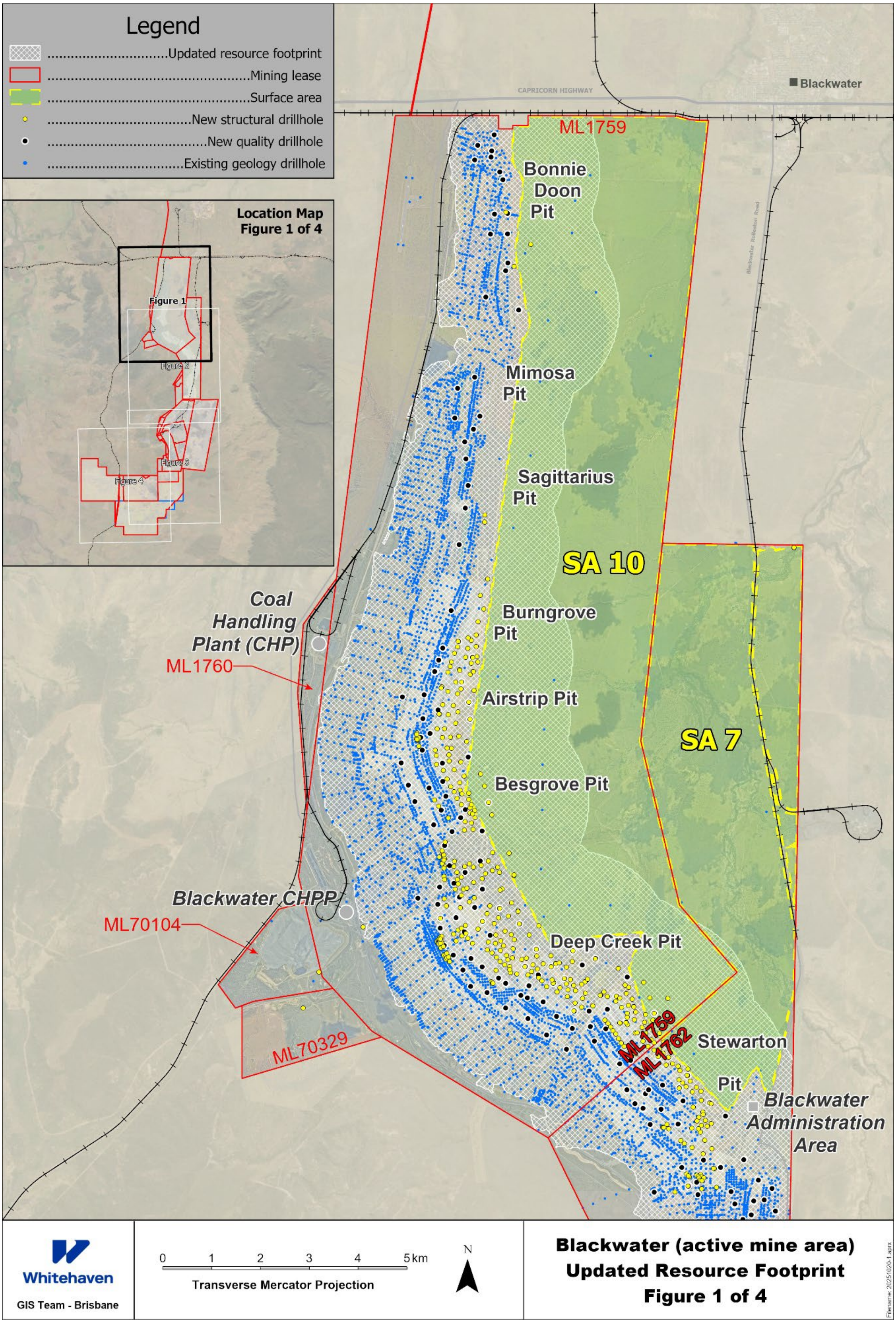

Figure 1 Extent of the current Resource model update and the additional Drillholes
Northern Area

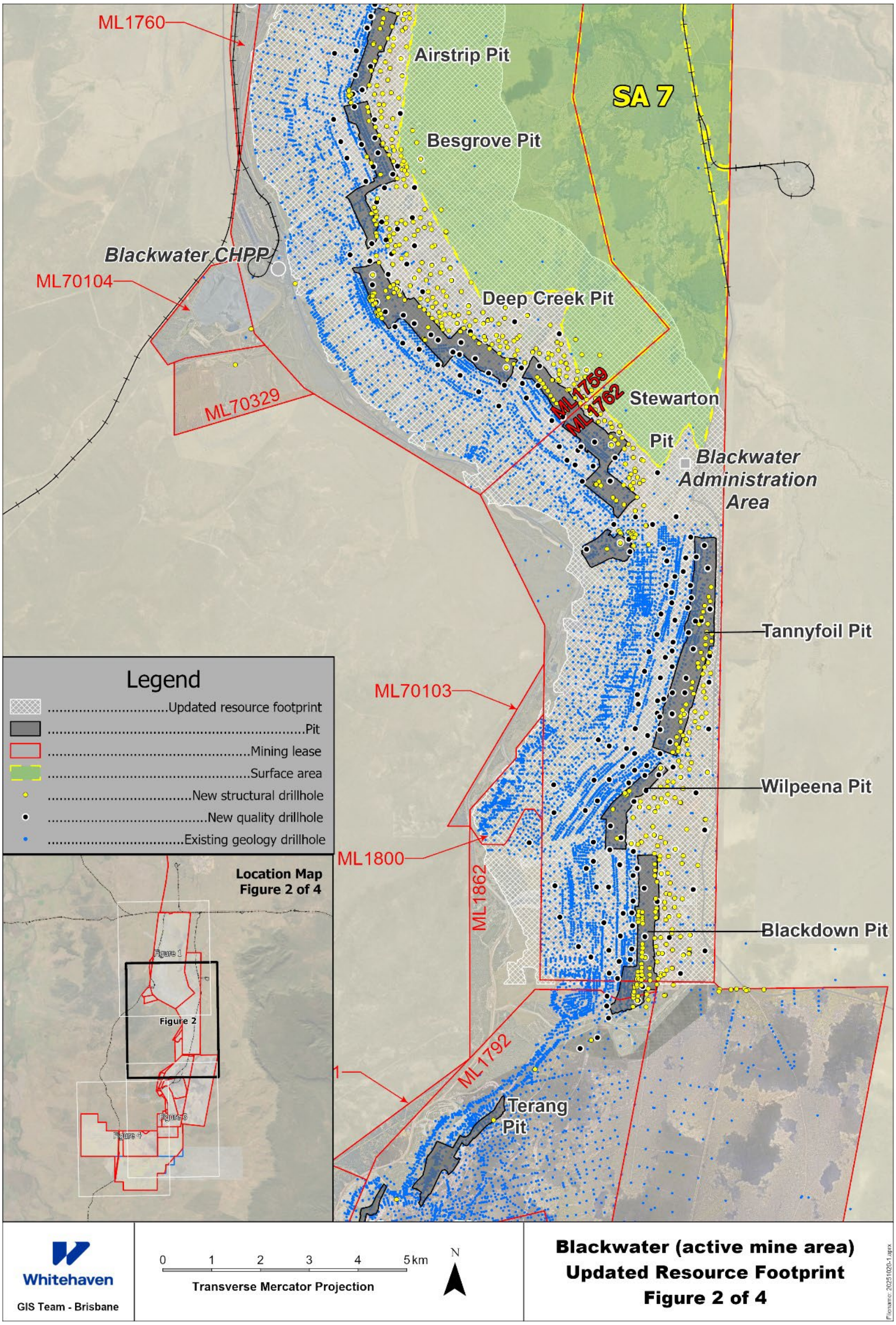

Figure 2 Extent of the current Resource model update and the additional Drillholes
Central Area

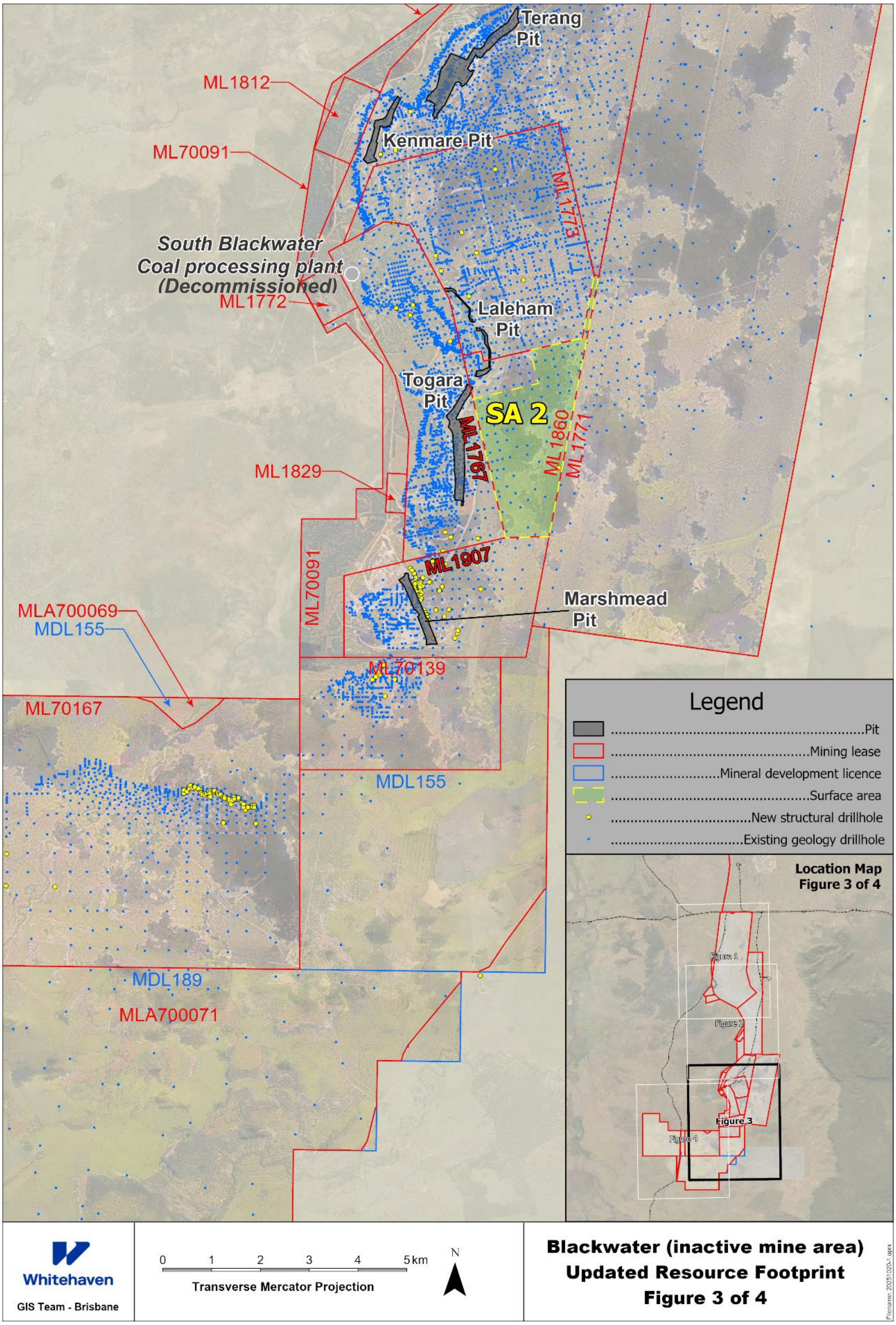

Figure 3 Extent of the current Resource model update and the additional Drillholes
Southern Inactive Area

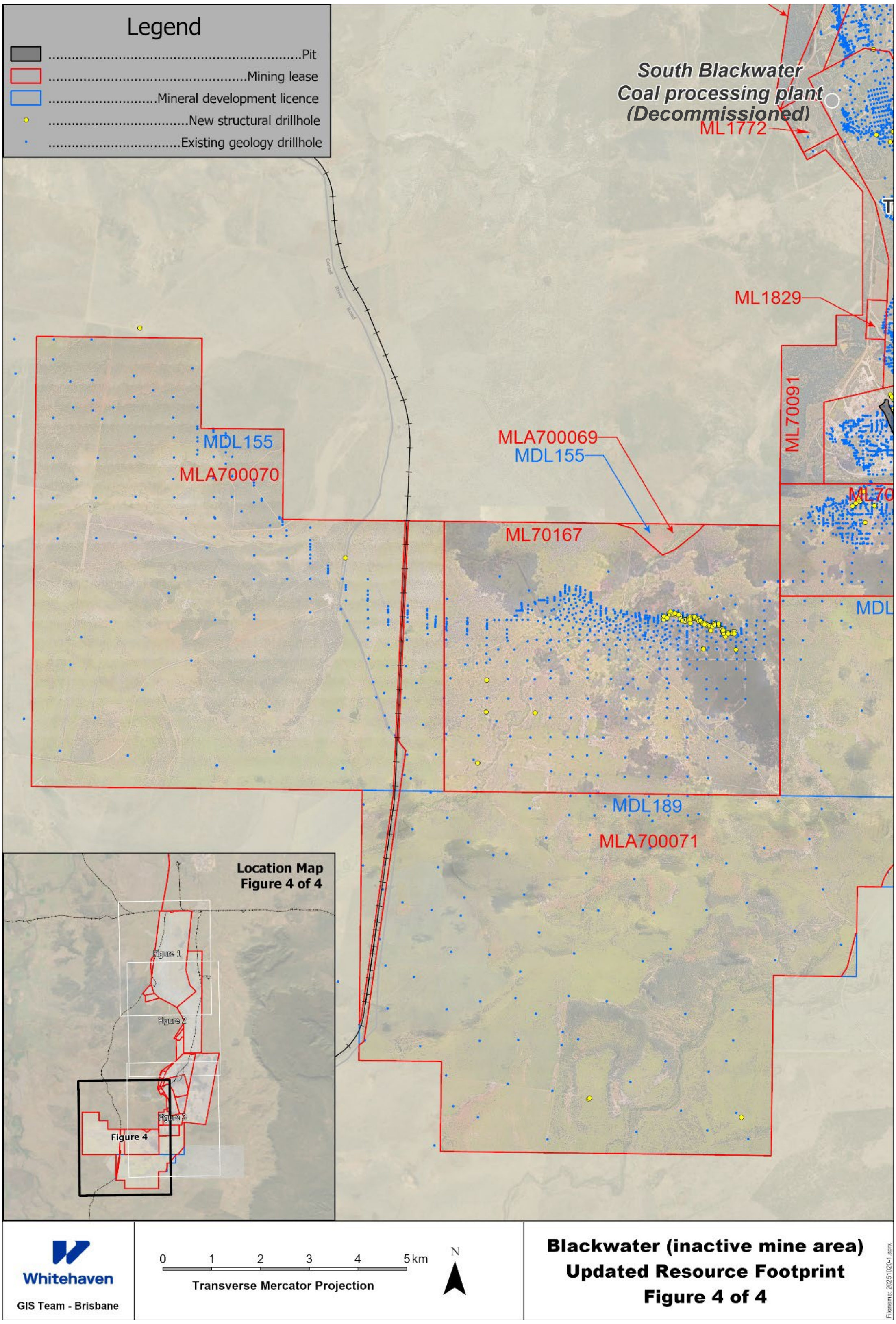

Figure 4 Extent of the current Resource model update and the additional Drillholes
Blackwater South Project Area

APPENDIX A – Blackwater JORC Coal Resource and Reserves Estimate Table 1

The following table provides a summary of important assessment and reporting criteria used for the Open Cut Coal Mine and Adjacent Exploration Areas in accordance with the Table 1 Checklist of Assessment and Reporting Criteria, in The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code) 2012 Edition. Criteria in preceding sections apply, where applicable, to the succeeding sections.

Section 1 – Sampling Techniques and Data

Criteria	Explanation
Sampling Techniques	Drill sampling has been the only source of analysis for the purposes of resource evaluation and estimation at Blackwater. Core samples were selected at seam, ply, and lithological boundaries with a maximum thickness of 0.5 m. Core samples were photographed, bagged, sealed, and labelled before awaiting analysis in cold storage. To ensure representivity of the samples taken, depth adjusting has been completed using downhole geophysics and, in some circumstances, composites have been constructed for analysis to match the modelled horizons as interpreted from geophysical logs. Downhole geophysical measurements are taken for key physical characteristics but only used qualitatively to correlate stratigraphic and structural features. Excepting the interpretation of downhole seam thicknesses, no direct grade-equivalent measurements were made from geophysical data. Raw quality and washability analysis was performed over the sample intervals where minimum sample mass was attained. This reflects the population of key attributes such as ash, volatile matter, and sulphur contents. Clean coal analysis was performed on the modelled composite intervals. Both ply and composite seam samples are present in the dataset. Ply samples can be composited to parent seams to improve representivity across seam intervals and ensure consistency with classification practice at South Blackwater (SBW). Geotechnical samples were taken from non-coal rock mass units in contact with coal seams, where possible. For gas testing, initial field desorption measurements were taken using gas canisters and desorption apparatus, and upon completion of field testing, gas samples were then sent to a specialised gas testing laboratory for further gas content analysis. Limit of oxidation (LOX) samples were the only borehole coal quality analysis performed on non-cored intervals. Rotary air blast chips have been recovered at the surface in 0.3-0.5 m interval samples. The results were used to inform the depth to base of weathering horizon. All borehole sampling has been completed using internal procedures which reflect industry standards for Coal Deposits.
Drilling techniques	Exploration drilling has been conducted using standardised procedures for all drilling styles within the following techniques and purposes: • Rotary air blast drilling was used for structure / stratigraphy definition; limit of oxidation (LOX) sampling; groundwater monitoring; and pre-collaring core holes. • Conventional coring has been used to produce 100-200 mm core diameters for coal quality and washability sampling. • Wireline coring has been used at HQ3 size for geotechnical and gas sampling, whereas PQ3 size has been used to supplement coal quality and washability sampling.

Criteria	Explanation
Drill sample recovery	Recovered core was reconciled to the geophysical seam interval to establish a linear core recovery percentage. Before the acquisition of downhole geophysics became a ubiquitous practice, core loss was calculated per run of core by reconciling the recovered core against the drilled interval measured by the drilling contractor. Core photography at 0.5 m intervals has also been commonly used to evaluate the condition of sampled intervals. Where recovery has not exceeded 90% the analysis has only been included in the resource estimation at the discretion of the Competent Person (CP). There is no known relationship between sample recovery and grade (coal brightness or coking properties). Sample bias due to preferential loss / gain of fine or coarse material has been effectively controlled by the assessment of the mechanical state of samples used.
Logging	Lithological logging of exploration boreholes was undertaken in accordance with standardised procedures and guidelines. Cored intervals were logged to the nearest centimetre and coal intervals were depth corrected to match interpreted lithological boundaries identified from geophysical logs. Geotechnical logging of continuous HQ3 core also includes the detailed observation and interpretation of defects and discontinuities with respect to orientation, aperture, and persistence. Since the mid 1990’s all exploration boreholes have been geophysically logged by a combination of borehole sondes including, but not limited to: calliper, natural gamma, density, verticality, as well as sonic and resistivity below the borehole water level. Geotechnical core logging is also supplemented by the structural interpretation of acoustic and optical televiewer logs. Coal Quality core samples from the relevant horizons have been directly incorporated into the resource estimation. These intervals have all been lithology logged. The Competent Person considers the logging to be of sufficient quality to support the Coal Resource estimate.
Sub-sampling techniques and preparation	Quality analysis has been performed on the whole core to ensure that minimum sample mass requirements have been met. Non-core samples were never taken for the purpose of resource estimation. Samples have been crushed and air-dried before a portion was taken for raw analysis and washability analysis. The remaining sample portions were then physically composited, where required, for clean coal analysis to be completed according to specific product recipes. This does not constitute sub-sampling for the purposes of quality control. In the opinion of the CP the industry standard sample selection, preparation, and minimum mass requirements are suitable to support Coal Resource estimation given the “grain size” of the material being sampled.
Quality of assay data and laboratory tests	All coal quality laboratory tests were performed in duplicate using national and international standards and the average of the two individual testings has been reported. Each standard contains a precision statement for repeatability (r), the difference between duplicates, same operator same day, and reproducibility (R), the maximum difference between two different laboratories. If the duplicate analysis was beyond the “r” and / or “R” limits, then the results were rejected and the sample was re-analysed, in duplicate, again. Preliminary analytical results from the laboratory were checked by the resource geologist or Competent Person to ensure that they are acceptable with respect to the following criteria: • Raw and product composite analysis results: ○ Proximate analysis data sum to 100%; and ○ All content results are within acceptable percentage ranges. • Mathematical checks by regression:

Criteria	Explanation
	○ Ash Vs Calculated Relative Density (from the float/sink density cut point); ○ Ash Vs RD; ○ Ash Vs CV (where appropriate); and ○ Ash fusion Temp Vs Basicity Index. • Washability analysis results: ○ Inverse Mid-Point RD Vs Ash; ○ Fractional mass % add to 100; ○ Product composite analysis results: ○ Maximum Dilation Vs Max Fluidity; ○ Hydrogen Vs Carbon; ○ Ash Vs CV; and ○ Ash Fusion Temp Vs Basicity Index. Laboratories internal quality control was managed, primarily using charts that plot the difference between duplicates for a standard reference material each time it was analysed. The standard reference material was analysed as an unknown within a standard batch of jobs. QC charts were maintained for each test method in the laboratory and were reviewed during the laboratory audits undertaken by NATA and in-house Geometallurgy representatives. To further test the QC performance of the external laboratories used for coal quality analysis; blind samples and round robins were routinely requested to be undertaken. Blind samples were sent monthly, and the round robins were undertaken six monthly. Z-scores were used to assess each result reported by the laboratories and blind samples and round robin results were saved to a centralised document repository. If any results were found to be outside of the acceptable limits, a corrective action was required to be completed. A facility's proficiency testing results, and any corrective actions that followed an investigation, were reviewed during the laboratory audits. Additionally, NATA reviewed corrective action registers during surveillance and reassessment visits. To ensure all equipment utilised by the different laboratories have provided consistent and reliable results, calibration checks were routinely completed. The NATA accreditation and reassessment audits assess the laboratories against the following standards: • General Equipment – Calibration and Checks; and • Reference Equipment – Calibration and Checks. These documents specify the calibration interval, checking intervals, general comments, and details on any reference standards.
Verification of sampling and assaying	Due to the nature of coal deposits, only coal seam intersections could be considered significant. Because of the stratigraphic continuity of coal seams, they can readily be verified by other geoscientists from the data collected during exploration. Geophysical downhole logs including density, natural gamma, and televiewer logs are routinely used by the Competent Person to validate resource correlations during the structure modelling process. Twinned coal quality holes have never been planned or used for the purposes of verification due to the relatively low variability of coal seam properties when appropriately correlated. Where local-scale quality variations have been observed they were commonly tested with infill quality drilling to support stratigraphic trends or identify potential outlier values.

Criteria	Explanation
	Field data and laboratory data were transmitted digitally to the database. The relational database housing the geological information has been stored in SQL server architecture where borehole data is stored in different tables, such as, collar, survey, lithology, sample, quality, geotechnical, gas, and wireline geophysical log data. Additionally, core photos, geophysical survey, and televiewer data have been stored on a dedicated centralised server. Collar, downhole survey, lithology, sample, and analysis tables are linked by project and site ID (BH number) primary key fields within in-built data integrity rules. All boreholes require collar details before additional data can be loaded and for coal quality data, samples must exist in the sample table before coal quality data can be loaded. The progress of exploration data from planning to finalisation of the borehole was tracked in the database via the status attributes described below: • In Progress – Coring was underway, and all coal quality core was in the process of being measured, photographed, and recorded at the drill site. • Drilled – Coring has been completed and all core collected was dispatched to the laboratory cold storage. Downhole geophysics were then collected to enable sampling, core recovery validation, and depth correction. • Logged – The core has been lithology logged and samples have been selected and photographed. • Adjusted – The seam and lithology intervals have been depth adjusted using downhole geophysical logs and all data was submitted for review by resource geologist or CP. • Validated – Borehole data has been validated and accepted by the resource geologist, at which point the data became available for structure modelling. Requests for analysis (RFA) for each sample and composite interval were then completed and sent to analysing Lab and Geometallurgy team for review. Additional checks were performed by the laboratory when the RFA was received to ensure that each sample has sufficient mass to satisfy analysis requirements and reported sample dimensions. • Finalised – Lab analysis has been received and reviewed by the project geologist. Data was then made available for coal quality and washability modelling. All exploration data was rigorously validated prior to the borehole status being finalised. Moisture and density are the only data adjusted for the resource estimates using ACARP (Australian Coal Association Research Program) industry standard techniques to convert to an in-situ basis.
Location of data points	The surface location and elevation of each borehole was recorded by a surveyor registered under the *Surveyors Act 2003* (Qld). The borehole locations are tied to the state control survey network and heights are related to the Australian height datum. Survey accuracy meets the requirements of the Petroleum and Gas (Production and Safety) Regulation 2004, and data was stored using Australian Map Grid ‘66, Zone 55, based on the Australian Geodetic Datum ’66. Borehole collars and geophysical survey locations are surveyed using differential GPS (Global Positioning System) with accuracy of sub decimetre for easting, northing and elevation measures. There is lesser degree of confidence in the survey accuracy of legacy borehole collars due to the limitations of methods and survey control used at the time. These boreholes have been typically re-drilled to modern standards where required to support the resource estimation. Exploration sites were mapped on the Australian Mapping Grid (AMG), which is the standard Universal Transverse Mercator (UTM) Grid coordinate system derived from the Australian Geodetic Datum (AGD) and used for Australian national mapping (1966-1994). The unit of measure is the international metre. Blackwater Mine has a digital elevation model (DEM) created from the latest available aerial survey in combination with regular LIDAR surveys updates. The accuracy of the DEM is typically +/- 100 mm and for LiDAR +/- 50 mm. The spatial team has provided resource geologists with latest data for topographic modelling.

Criteria	Explanation
	For downhole verticality survey (deviation) the sonde manufacturer's stated accuracies are: Magnetic deviation sonde: • Dip = +/- 0.5 degrees • Azimuth = +/- 2 degrees • Gyroscopic deviation sonde: • Dip = +/- 1 degrees • Azimuth = +/- 2 degrees
Data spacing and distribution	While no Exploration Results have been publicly reported, the drillhole data spacings used provide points of observation (POB) which are sufficiently numbered and distributed to establish and classify Coal Resources and Coal Reserves ahead of active mining. Drillhole spacing analysis, for the purpose of resource classification, is a specific geostatistical study using composited analysis intervals to represent the horizons of interest. The spacings established for POBs were greatly supplemented by structure / stratigraphic drillholes which support only the volumetric estimation of the resource.
Orientation of data in relation to geological structure	Coal quality boreholes were drilled vertically which, when combined with the generally consistent and shallow dips of the strata, has resulted in an effectively unbiased sampling of the coal horizons. Televiewer logs were routinely acquired for coal quality boreholes, allowing stratigraphic dip and seam thickness to be independently assessed to further support near perpendicular sampling of coal strata.
Sample security	All sampling has been completed following strict technical guidelines and procedures. Sample numbers were recorded directly into the database and sample submission forms generated at the point of sampling. Upon receipt of each sample the laboratory has captured the details into the sample receival log and sent the updated log to the project geologist to advise stakeholders that samples had been received, and instructions were to be generated. At the completion of testing, the laboratory LIMS database generated analysis files which were transmitted digitally to the project geologist for review and approval by the resource geologist or CP, before data was uploaded to the database.
Audits or reviews	All geologists conducting logging and sampling were assessed as competent against the relevant technical guidelines and procedures prior to completing these tasks unsupervised. Informal peer reviews and audits were routinely completed against these guidelines. In addition, the voracity of all data was assessed by the resource geologist prior to use in geological models. The project geologist conducted technical audits on each external laboratory according to a predefined schedule. These audits reviewed all facets of the laboratory's operation to ensure methods, equipment, personnel, QC, calibration, result validation and reporting were fit for purpose. Should the contract laboratory not have met performance expectations, written notification of the failure would have been provided. This notification would normally take the form of a Corrective Action Request (CAR) or a customer complaint notice. All sub-contractors are immediately re-assessed in the event of a CAR being raised.

Section 2 – Reporting of Exploration Results

Criteria	Explanation
Mineral tenement and land tenure status	Whitehaven Coal Limited (Company) through its subsidiaries is the authorised holder of all mineral tenements and manages Mining Leases (ML), Mineral Development Licenses (MDL) for the purposes of coal mining, exploration and the associated infrastructure requirements to support Blackwater operations. See Table 1 below for mineral tenement details. Mineral tenements for which renewal applications have been lodged and remain pending are awaiting ministerial approval and remain in full effect until renewal is granted. All granted mineral tenements are in good standing and it is the opinion of the Competent Person that there are no expected impediments to renewal. Mineral tenements for which grant applications have been lodged and remain pending are awaiting ministerial approval. Blackwater operations have Cultural Heritage Management Plans (CHMP) in place. A CHMP will be negotiated for any undeveloped projects with the relevant Traditional Owners as and when required. Mining activities are listed under Schedule 1 of the Environmental Protection Regulation as an Environmentally Relevant Activity (ERA), requiring an Environmental Authority (EA) under the provisions of the *Environmental Protection Act 1994* (Qld) (EP Act) and granted by the Department of Environment and Science (DES). EAs cover mining activities on areas of Mining Leases for which Surface Area rights are awarded and listed on the EA (all granted leases at the date of issue). EAs include conditions to minimise environmental harm potentially caused by authorised mining activities. These conditions are set out in the EA schedules and originate from the Environmental Impact Study phase of Mining Lease approval and have been altered over time as legislation requires. Further conditions of the EA involve annual reporting and a Financial Assurance held by the Administering Authority equal to the value of rehabilitating the Mining Leases until the Administering Authority is satisfied no claim on the assurance is likely. The EP Act requires proposed mining, disturbance and rehabilitation activities are reported in a Progressive Rehabilitation and Closure Plan (PRCP), which must describe measures undertaken to ensure EA conditions are met. Sites are currently transitioning from the previous Plan of Operations to PRCPs. Operating consents are held in the form of Surface Area rights and environmental approvals (Environmental Authority). Expectation to comply with environmental requirements will be met with current strip-mining practices where waste material is capped and rehabilitated as per the EA requirements.

Table 1 Blackwater tenure

Tenement	*Registered Holders*	*Status*	*Local name*	*Mineral or Prescribed Purpose*	*Grant Application Date*	*Expiry Date*	*Renewable (conditional)*	*Total Area (ha)*	*Surface Area (ha)*
MDL 155	South Blackwater Coal Pty Limited (SBC) (30%) Whitehaven Blackwater Pty Ltd (WB) (70%)	Granted (renewal pending)	Humboldt	Coal	13/10/1994	31/10/2024	Yes	8,606.70	NA
MDL 189	SBC (30%) WB (70%)	Granted	South Blackwater	Coal	29/04/1996	30/04/2027	Yes	6,882.10	NA

Criteria	Explanation

TOTAL (ha)								**15,488.80**	**NA**
ML 1759	WB (100%)	Granted	Blackwater	Coal, Gaseous Hydrocarbons	2/12/1965	31/12/2029	Yes	13,525.00	13,522.30
ML 1760	WB (100%)	Granted	Blackwater	Coal, Gaseous Hydrocarbons	1/01/1967	31/12/2029	Yes	160.6	160.6
ML 1761	WB (100%)	Granted	Mackenzie River	Coal, Gaseous Hydrocarbons	1/02/1967	31/01/2030	Yes	3.24	3.24
ML 1762	WB (100%)	Granted	South Blackwater	Coal, Gaseous Hydrocarbons	1/05/1969	31/07/2032	Yes	7,247.60	6,951.28
ML 1767	SBC (30%) WB (70%)	Granted	South Blackwater	Coal	19/06/1969	31/08/2033	Yes	1,139.70	1,139.70
ML 1771	SBC (30%) WB (70%)	Granted (renewal pending)	Sirius Creek	Coal, Gaseous Hydrocarbons	12/10/1978	31/10/2020	Yes	7,208.67	7,208.67
ML 1772	SBC (30%) WB (70%)	Granted	South Blackwater	Tailings, settling dam, water management	25/03/1976	31/08/2033	Yes	77.63	77.63
ML 1773	SBC (30%) WB (70%)	Granted	Laleham	Coal, Gaseous Hydrocarbons	25/09/1975	31/08/2033	Yes	1,488.00	1,487.77
ML 1792	SBC (30%) WB (70%)	Granted	Terang	Coal, Gaseous Hydrocarbons	15/01/1976	31/01/2038	Yes	2,406.00	2,405.75
ML 1800	WB (100%)	Granted (renewal pending)	Wilpeena	Coal, Gaseous Hydrocarbons	10/05/1979	31/05/2021	Yes	200.27	200.2657
ML 1812	SBC (30%) WB (70%)	Granted	Terang No 2	Coal	28/09/1978	30/09/2041	Yes	128	128
ML 1829	SBC (30%) WB (70%)	Granted (renewal pending)	Togara	Coal	22/03/1979	31/03/2021	Yes	32	32
ML 1860	SBC (30%) WB (70%)	Granted (renewal pending)	Togara No 2	Coal, Gaseous Hydrocarbons	25/03/1982	31/03/2024	Yes	666.6	666.6
ML 1862	SBC (30%) WB (70%)	Granted (renewal pending)	Mimosa	Coal	25/03/1982	31/03/2024	Yes	628.7	628.7
ML 1907	SBC (30%) WB (70%)	Granted	Marshmead	Coal, Gaseous Hydrocarbons	1/08/1991	31/08/2033	Yes	844.4	844.4
ML 70091	SBC (30%) WB (70%)	Granted	Western	Environmental dam, transport, conveyor, vehicular,	23/06/1994	31/08/2033	Yes	809.3	809.3

Criteria	Explanation

ML 70103	WB (100%)	Granted	Wilpeena West	Coal	17/08/1995	31/05/2041	Yes	134.7	134.7
ML 70104	WB (100%)	Granted (renewal pending)	Sugarloaf	Tailings, settling dam	4/07/1996	31/07/2022	Yes	274.1	274.1
ML 70139	SBC (30%) WB (70%)	Granted (renewal pending)	South Marshmead	Coal	24/10/2002	31/10/2023	Yes	946.3	946.3
ML 70167	SBC (30%) WB (70%)	Granted (renewal pending)	Humboldt	Coal	31/01/2002	31/01/2023	Yes	3,754.10	3,754.10
ML 70329	WB (100%)	Granted	Comet	Road access, right of way, mine waste, spoil dumps, tailings, settling dam, transport - vehicular - haul road, water management	9/08/2007	31/08/2037	Yes	324.6	324.6
TOTAL (ha)								**41,999.51**	**41,700.00**
ML 700069	SBC (30%) WB (70%)	Application	Kennedy North	Coal	29/11/2021	TBD	TBD	57.26	57.26
ML 700070	SBC (30%) WB (70%)	Application	Comet Downs	Coal	29/11/2021	TBD	TBD	5,913.6	5,913.6
ML 700071	SBC (30%) WB (70%)	Application	Ganadero	Coal	26/11/2021	TBD	TBD	9,182.3	9,182.3
TOTAL (ha)								**15,153.16**	**15,153.16**

*Note: The sale of a 20% interest in the tenements to NS Blackwater Pty Limited and a 10% interest in the tenements to JFE Steel Australia (BW) Pty Ltd completed on 31 March 2025. Subject to the parties receiving all required government approvals, interests in the tenements will be transferred such that the registered holders of all tenements will be reflected as follows:

- Whitehaven Blackwater Pty Ltd (70%)
- NS Blackwater Pty Limited (20%)
- JFE Steel Australia (BW) Pty Ltd (10%)

Criteria	Explanation
Exploration done by other parties	Multiple exploration drilling programmes have been undertaken by other parties. In recent years, the overall drilling program has been relatively consistent in terms of the total annual drilling to support ongoing mining activities. All drilling has been completed by either BHP or Utah (prior to 1984). The Queensland Government has also completed exploration across the Company property.
Geology	**Regional Geology** The Blackwater deposit is located in the southern part of the Permo-Triassic Bowen Basin containing principally fluviatile and some marine sediments. The Bowen Basin extends for more than 250 kilometres north to south and up to 200 kilometres east to west and is related to a group of Permo-Triassic basins in eastern Australia. The Bowen Basin's axis orientation is NNW-SSE, roughly parallel to the Palaeozoic continental margin. The basin is situated between stable Devonian to Carboniferous rocks of the Clermont Block to the west and a Devonian to early Permian Island arc system, the Eungella-Cracow Mobile belt, to the east (Korsch, Totterdell and Nicoll, 2009). Tectonically, the basin can be divided into NNW-SSE trending platforms or shelves separated by sedimentary troughs. Figure 1 below illustrates the Springsure Shelf, Denison Trough, Collinsville Shelf/Comet Ridge, Taroom Trough, Connors and Auburn Arches (interrupted by the Gogango Overfolded Zone) and the Marlborough Trough. Development of the basin in the Early Permian occurred as a series of half-grabens that subsequently became areas of regional crustal sag. Coals accumulated throughout almost all of the Permian and Triassic, initially around the basin margins and in isolated sites, and throughout the entire basin during the Late Permian (Brakel, 1989). Regionally, the Permo-Triassic sediments of the Bowen Basin are overlain by a veneer of unconsolidated Quaternary alluvium and colluvium, poorly consolidated Tertiary (Cenozoic) sediments and, in places, remnants of Tertiary basalt flows. The basin has suffered extensional and compression events oriented in northeast-southwest direction. Variations in depositional patterns and deformation styles that occur along strike suggest the possibility of north-east trending deep seated crustal transfer faults, referred to as a 'transfer corridor' by Hammond (1987). This structural evolution of the basin occurred in five phases: 1. Late Carboniferous to Early Permian tensional basin development (rifting). 2. Late Permian thermal relaxation and slow subsidence resulting in widespread accumulation of coal bearing sequences. 3. Late Triassic compression, resulting in folding and reverse faulting. 4. Cretaceous to Tertiary normal faulting due to extension associated with the opening of the Coral Sea. 5. Tertiary hot spots resulting in thermal doming and collapse. Widespread intrusion\ extrusion of basalt dykes, sills and flows. **Local Geology** Blackwater lies on the western limb of the Bowen Basin. The local stratigraphy is shown in Figure 2 below. The significant Late Permian coal bearing units are (in ascending order) the German Creek Formation, Fair Hill Formation, and Rangal Coal Measures. These are overlain unconformably by sandstones, mudstones and siltstones of the Triassic Rewan Group, and clay, sand and basalts of the Cenozoic. The coal deposits are also affected by intrusion of basic to acidic sills and dykes.

<table>
<tr><th>Criteria</th><th>Explanation</th></tr>
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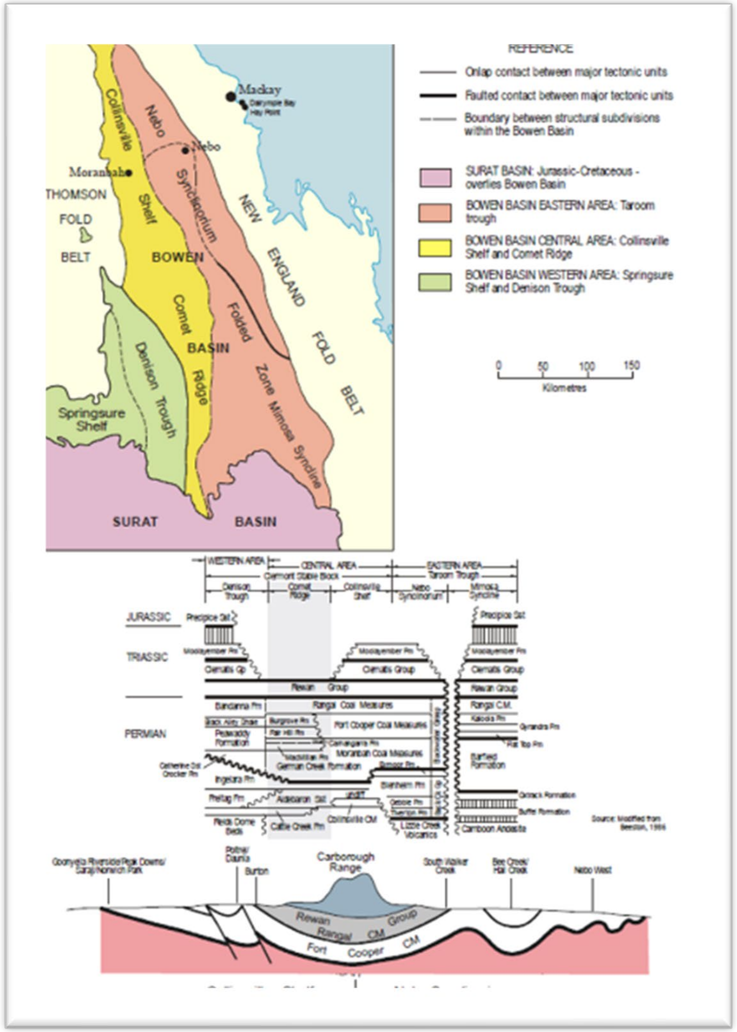

Figure 1 Tectonic troughs, shelves and stratigraphy of the Bowen Basin

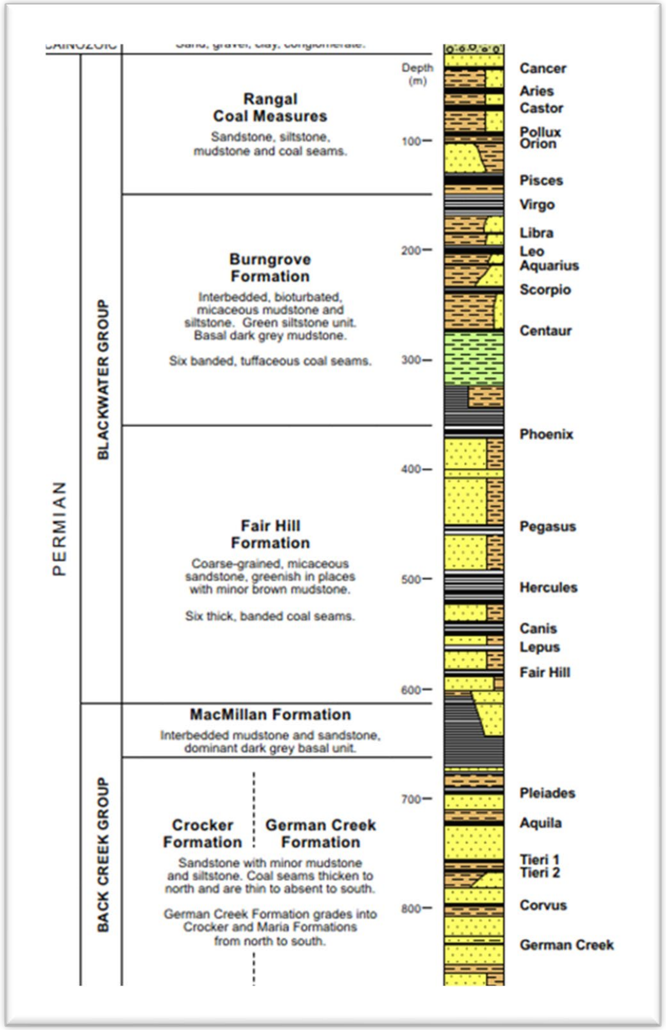

Figure 2 Generalised stratigraphy of Blackwater

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</table>

Criteria	Explanation
	Blackwater Mine is located on the eastern flanks of the Comet Ridge, which is a major regional anticline. **Stratigraphy** The major stratigraphic units are the Late Permian Rangal Coal Measures and Burngrove Formation. The Rangal Coal Measures were deposited over the Burngrove Formation and subsequently covered by either Early Triassic sediments (Rewan Formation) or Cenozoic volcanic and sedimentary rocks of up to 60 metres thickness (Macpherson & Gupta, 2013). Three major coal seam packages extend for an approximately 80 kilometres strike length north/south along the deposit. The major coal seams extend down-dip for at least 2 kilometres. **Structure** There are two major structural trends at Blackwater; NNW- SSE and east-west. Several stages of tensional and compressional deformation have manifested complex, normal, and reverse faulting with throws less than 10 metres to over 30 metres, in some structures. **Coal seams** The economic coal seams are contained within the Rangal Coal Measures. The coal measures consist of coal, mudstone, siltstone, claystone, and sandstone and include three major low-ash coal horizons, which split and coalesce along strike as shown in Figure 3 below. The three primary seams are the Top, Middle and Lower Seams. The equivalent seams in South Blackwater are Ares, Castor and Argo Seams. The Argo Seam is split into Pollux and Orion over much of the southern Blackwater area. The Top Seam is typically between 0.5–3.5 metres thick. The Middle Seam is generally between 1–3 metres thick. The Lower Seam has a thickness of between 2–6 metres. The strata at Blackwater Mine strikes north/south and dip towards the east at an average of 3–5 degrees. Steeper dips are found associated with faulting.

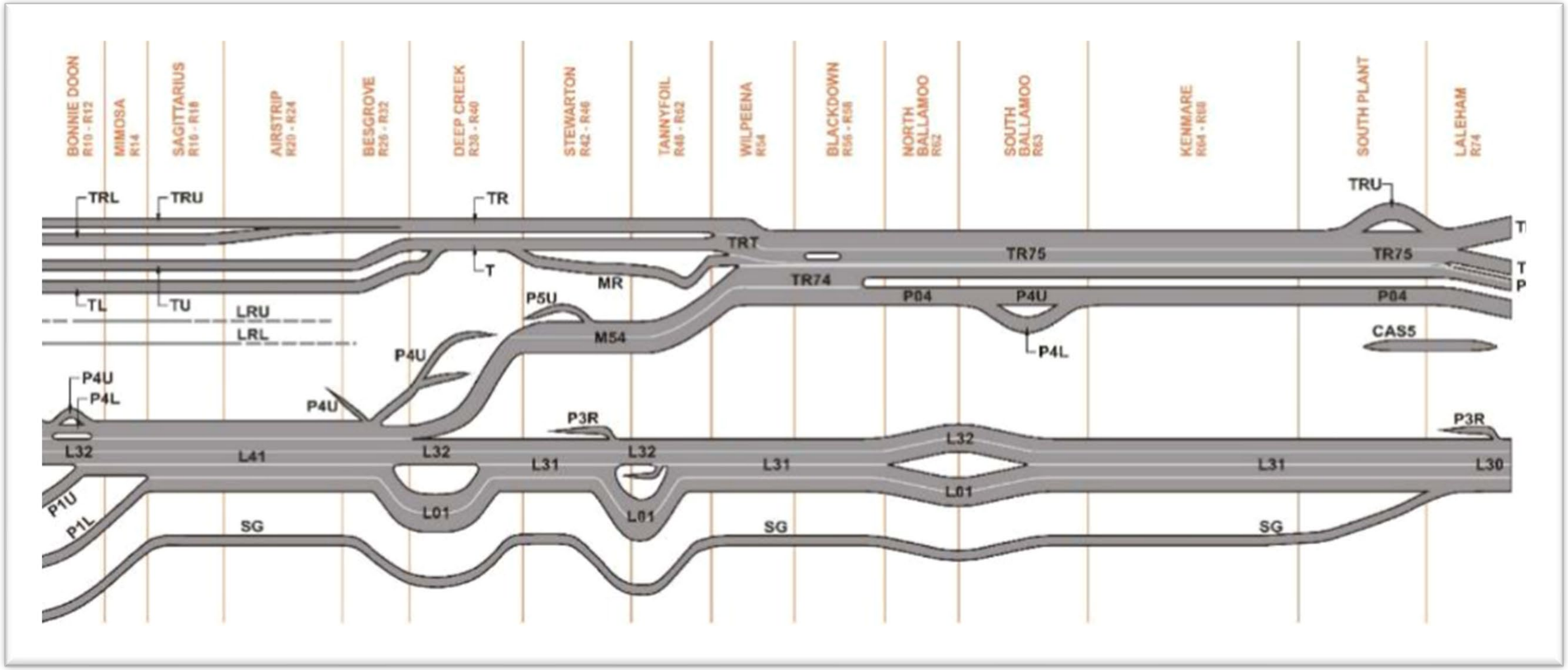
Criteria	Explanation
	 **Figure 3 Blackwater seam stratigraphy**
Drillhole information	The Blackwater deposit has been extensively drilled over an extended period of time and mining operations have been ongoing since 1970. The maturity of understanding of the deposit is high. No Exploration Results form part of this release for Mineral Resources and Ore Reserves and summary drillhole information is not considered material with over 22,000 drillholes supporting the resources and reserves.

Table 2 Summary of drilling with Validated and Finalised status attributes

Financial Year	Number of Drillholes				Drilling Metres			
	Cored	Open-Hole	Other	Total	Cored	Open-Hole	Other	Total
FY24	4,075	16,883	1,065	**22,023**	336,002	1,436,105	71,328	**1,843,435**
FY25	4,077	16,999	1,065	**22,141**	336,259	1,452,316	71,328	**1,859,903**

Criteria	Explanation
Data aggregation methods	As Exploration Results are not included in this report, data aggregation and borehole intercepts are also excluded. Coal quality samples are either modelled as plies or composited to seam using appropriate sample weightings depending on the quality being composited. Metal equivalent reporting is not relevant for coal deposits.
Relationship between mineralisation widths and intercept depths	Majority of boreholes are vertical and aligned to the general flat dip of the stratigraphy, including the coal seams. Downhole geophysics including verticality have been run since the 1990's. Verticality is used to analyse deviation of the drillholes in the modelling software to provide accurate horizontal and vertical location of lithological contacts.
Diagrams	Exploration Results are not included in this release, no diagrams or tables of intercepts are included.
Balanced reporting	Exploration Results are not included in this release.
Other substantive exploration data	Exploration, other than drilling, comprises airborne and ground-based geophysical surveys along with 2D and 3D seismic surveys. The work is used to improve understanding of seam continuity and to define structure that may be inefficient to resolve with exploration drilling alone. However, exploration drilling and sampling remains the primary method used for resource characterisation and resource estimation. The following geophysical survey methods have been used to target specific areas of the deposit. Magnetic surveys were undertaken to map the magnetic intensity of the geology and was used to identify intrusions and structures. Seismic surveys were used for defining sub-surface structures and to optimise exploration drilling for underground, and open-cut mines. Electromagnetic surveys were undertaken to map the conductivity of the subsurface in 3D. The surveys were useful to map sub-surface hydrology, structures, oxidation limits and heat affected coal that has been impacted by intrusive bodies. Magnetic surveys have been conducted using both ground-based and airborne (rotary and fixed wing) techniques. Airborne magnetic surveys collect magnetic and radiometric data. A Targeted Airborne Magnetic Survey was conducted at Blackwater (May 2010). Details of surveys completed are tabled below. **Table 3 Geophysical survey details for Blackwater**
Further Work	Ongoing structural and coal quality infill drilling is planned and aligned with the 5-year plan and mine schedule to address geological risk and uncertainty in the plan.

Table 3 Geophysical survey details for Blackwater

Airborne magnetic (km2)	Ground magnetic (km2)	2D seismic (km)	3D seismic (km2)
211		215	29

Section 3 – Estimation and Reporting of Mineral Resources

Criteria	Explanation
Database integrity	During the modelling process, seam intervals and quality data are checked for anomalies and outliers by graphical methods (plan and section views, contouring) and statistical analysis. Where data is deemed unreliable after checking, it is excluded from the model. The Plexer database is live, and models represent a validated snapshot of drilling and sampling information available at the time of estimation. Data validation procedures are covered in section 1 - Verification of sampling and assaying.
Site visits	Site visits have been made by the Competent Person in the last fiscal year to understand geology (structure and coal quality) with the progression of mining and identify opportunities for improvement. There are regular feedback sessions and collaboration meetings with mine geologists, geotechnical engineers, planning geologists and mining engineers. This aids in the understanding of geology deviations and their impacts. Risk assessments are required to mitigate any impacts, for planning adjustments, and drive continuous improvement.
Geological interpretation	There is a high degree of confidence in the geological interpretation for the Blackwater deposit. The interpretations are completed using multiple data sets including, drillholes, seismic (2D/3D) where available, downhole and surface geophysical data, mine geology data involving high wall mapping, top and floor of coal infill and blast hole data. These data sets are cumulatively fed into the geological model process from life of mine plan to short term plan and are continuously reconciled and updated as information becomes available. Each data stream has a robust QA/QC process and has confidence attributed, supporting the interpretation spatially. Uncertainty of key parameters are mapped in SMU (selective mining unit) scale using conditional simulations to understand different geological domains for a given seam/parameter. The goal is to de-risk the production plan by optimising infill data collection and improve stability in short term planning through increased understanding of confidences locally. Multiple factors affect the structure and grade of the coal deposits, which are not limited to post and syn-tectonic events, leading to regional and local extensional and compressional structures and discontinuities, along with its effect on depositional environment and diagenesis of coal. These factors, cumulative or in isolation, result in different seam/parameters trends. For example, high and low ash pockets, varying phosphorous concentrations and calcite mineralisation along faults. These features are proactively recorded and mapped to understand local geological domains and its effect on mine production and are also geostatistically correlated.
Dimensions	The strata at Blackwater Mine strike north/south and dip towards the east at an average of 3–5 degrees. The Coal Resources extend 80 km along strike and up to 6 km east within the tenement boundaries. The Coal Resources exist from the base of Tertiary unconformity to around 220 m depth.
Estimation and modelling techniques	Modelling was carried out using Vulcan™ geological modelling software package to create grid models using a series of modelling scripts. These scripts reference specific parameter files to accommodate minor variations in modelling requirements. A number of different grid models are produced when creating resource estimations and typically have grid cell sizes between 25 m x 25 m and 100 m x 100 m.

<table>
<tr><th>Criteria</th><th>Explanation</th></tr>
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<p>These include:</p>

Structural Model – topography, horizons, seams, plies, work sections.
Coal Quality Model – Coal seam quality parameters.
Coal Washability Model – prepared using an in-house standardisation tool to calculate cumulative ash and yield values at specified densities sized, fractional results. The addition of partings and aggregation is applied as per seam correlations. These are then interpolated into 2D grid models within Vulcan™.
No by-products exist at Blackwater Mine and as such no assumptions have been made.

<p>Table 4 Raw Coal Properties</p>
<table>
<tr><th>Field Name</th><th>Parameter Description</th></tr>
<tr><td>RAWCRD</td><td>Relative Density (lab)</td></tr>
<tr><td>INSIRD</td><td>Relative Density (in-situ)</td></tr>
<tr><td>ADMOIS</td><td>Moisture (inherent)</td></tr>
<tr><td>INMOIS</td><td>Moisture (in-situ)</td></tr>
<tr><td>MOHOCP</td><td>Moisture Holding Capacity (is)</td></tr>
<tr><td>ASHADB</td><td>Ash</td></tr>
<tr><td>CSN</td><td>CSN</td></tr>
<tr><td>VMADB</td><td>Volatile Matter (ad)</td></tr>
<tr><td>VMDAF</td><td>Volatile Matter (daf)</td></tr>
<tr><td>TTSADB</td><td>Sulphur Content (ad)</td></tr>
<tr><td>PHSADB</td><td>Phosphorus (ad)</td></tr>
<tr><td>TOTALK</td><td>Total Alkali % Ash in ash</td></tr>
<tr><td>BI</td><td>Basicity index</td></tr>
<tr><td>MBI</td><td>Modified Basicity Index</td></tr>
<tr><td>HGI</td><td>Hardgrove Grindability</td></tr>
<tr><td>SEADB</td><td>Specific Energy, Kcal/Kg (ad)</td></tr>
<tr><td>RINIT</td><td>Initial Deformation Temp. (Reducing)</td></tr>
<tr><td>RSPHER</td><td>Spherical Temp. (Reducing)</td></tr>
<tr><td>RHEMSP</td><td>Hemispherical Temp. (Reducing)</td></tr>
<tr><td>RFLOW</td><td>Flow Temperature (Reducing)</td></tr>
<tr><td>CHLADB</td><td>Chlorine</td></tr>
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Criteria	Explanation

SIO2	SiO2
AL2O3	**Al2O3**
FE2O3	Fe2O3
TIO2	TiO2
CAO	CaO
MGO	MgO
NA2O	Na2O
K2O	K2O
P2O5	P2O5
MN3O4	Mn3O4
FLUORI	Fluorine

Table 5 Clean Coal Properties

Field Name	Parameter Description
ADMOIS	Moisture (inherent)
ASHADB	Ash
CSN	CSN
VMADB	Volatile Matter (ad)
VMDAF	Volatile Matter (daf)
TTSADB	Sulphur Content (ad)
PHSADB	Phosphorus (ad)
LGFLDD	Log fluidity
TDL	Dilatation (Total)
TOTALK	Total Alkali % Ash in ash
BI	Basicity index
MBI	Modified Basicity Index
REFLEC	Reflectance (ROMAX)
CSR	CSR
TOTVIT	Vitrinite (Total)
FLTYLD	Yield (ad)
SEADB	Specific Energy, Kcal/Kg (ad)

Criteria	Explanation

RINIT	Initial Deformation Temperature (Reducing)
RSPHER	Spherical Temperature (Reducing)
RHEMSP	Hemispherical Temperature (Reducing)
RFLOW	Flow Temperature (Reducing)
FLUORI	Fluorine
SIO2	SiO2
AL2O3	Al2O3
FE2O3	Fe2O3
TIO2	TiO2
CAO	CaO
MGO	MgO
NA2O	Na2O
K2O	K2O
P2O5	P2O5
MN3O4	Mn3O4
SLAGX	Slagging Index

The general overview of the procedure for structural modelling is as follows:

- Create topography grid(s)
- Generate ‘base of weathering’, ‘base of Tertiary’ mapfiles and grids
- Generate structure mapfiles for all daughter seams
- Define seam-splitting relationships
- Create / update seam mask limits (also for intrusions)
- Run FixDHD to generate 'fixed' mapfiles
- Analyse mapfiles statistics, investigate and correct anomalies
- Generate thickness grids for all daughter seams
- Generate and validate reference surface grids incorporating fault and survey information
- Generate and validate parent seam models
- Clip seam grids to base of weathering
- Validate structure grids.

Criteria	Explanation
	Quality models are generated in Vulcan^{TM} modelling software using the Inverse Distance Weighting (IDW) algorithm with a low power (typically 1 to 2). IDW is the current coal industry standard method for grid-based quality modelling. Quality parameters of coal in the Bowen Basin generally show low spatial variability (strong spatial continuity) and, as such, inverse distance is appropriate. Blackwater resource estimates are generated in Vulcan™ using validated structural models and associated coal quality and washability data. Ply and composite samples are both utilised, with parent-seam compositing applied to improve representivity and consistency across domains. Each model represents a validated snapshot of the live database, with reporting aligned to current corporate practice. Exploratory data analysis, scatter plots, histograms and descriptive statistics are used to understand the spatial variability of coal quality parameters, domaining and outlier values. Models of the rank related parameters, VM and Ro Max (measure of maximum vitrinite reflectance) are trended (Order 1) as their values are related to increases with increasing depth. It is suggested that Log Fluidity values be viewed as indicative only as values decrease with increasing sample oxidisation.
Moisture	Resource tonnes are reported on an in-situ basis. To calculate in-situ tonnages, thickness is multiplied by resource area and by in-situ density. The Preston and Sanders method is used to adjust air dried density to bed moisture density, to provide in-situ tonnages. The calculation process for in-situ moisture (Mis) as estimated from Moisture Holding Capacity (MHC) models, using formula 5.2 proposed in ACARP study C10041.
Cut-off parameters	General cut-off parameters include: • A 10 m (approximate) exclusion zone was applied around dykes indicated by magnetic surveys. Delineated sill areas are also excluded. • Minimum mineable seam thickness of 0.3 m for open cut resources, unless indicated otherwise by economic assessment. • Minimum coal thickness for underground longwall mining of 2 m. **Table 6 Resource factors considered in determining reasonable prospects for eventual economic extraction**

Resource limit (open cut)	Resource limit (underground)	Cut-off parameters	Metallurgical factors
LoM study	Lease boundary, resource estimation guidelines	Minimum seam thickness 0.3 m OC, 2.0 m UG Maximum parting thickness 0.3 m	Raw ash 40% Yield 50%

Criteria	Explanation
Mining factors or assumptions	The following assumptions and constraints were applied for open cut resource determination: • The open cut limit is determined from either the Life of Mine (LoM) Plan or by calculating a break-even vertical strip ratio limit using general economic assumption. • The up-dip limit of resources was either the mined-out areas or if unmined, the fully fresh lox line or a nominal fresh coal thickness line.

Criteria	Explanation
	- Narrow corridors and permanent bridges down dip of the current face positions are considered a resource as they could be mined by extending the adjacent strip. Underground resources at Blackwater have only been estimated outside the LoM extents and within the defined Resource limits of the L31 parent seam in the Kennedy Model area. Mid-burden thicknesses are considered to ensure extraction of multiple seams that are close together are conceptually feasible.
Metallurgical factors or assumptions	- Resources are only estimated for seams with product yields of at least 50 per cent (there may be instances where seams of lower yield may be carried by other seams. These exceptions are included in the estimation documentation). - A maximum raw ash content of 40 per cent was applied.
Environmental factors or assumptions	The environmental factors in relation to active mining areas are all considered in the Ore Reserves section of this report. No specific environment considerations have been included in the estimation of Mineral Resources.
Bulk density	Resource tonnes are reported on an in-situ basis. To calculate in-situ tonnages, thickness is multiplied by resource area and by in-situ density. The Preston and Sanders method is used to adjust air dried density to bed moisture density to provide in-situ tonnages. The calculation process for in-situ moisture and in-situ density is: $M_{is} = 1.1431\ \mathrm{MHC}high + 0.348$ Modelled Relative Density (RD(ad)) values are those from laboratory testing on an air-dried basis or values calculated from a site specific raw ash / RD regression. The Preston and Sanders formula is then used to estimate in-situ relative density from inherent moisture (M(ad)) and in-situ moisture (M(is)) as follows: $RD_{is} = \frac{RD_{ad}x(100 - M_{ad})}{((100 + RD_{ad})x(M_{is} - M_{ad})) - M_{is}}$ The calculated in-situ density is then used to calculate in-situ coal tonnes.
Classification	A basic overview of techniques is demonstrated below: - Model area established. - Create resource polygons: o Generate points of observation o Generate resource polygons using drillhole spacing analysis - Generate property polygons.

Criteria	Explanation
	- Utilise Vulcan^{TM} to compute the resource within the individual polygons. - Results are tabulated / filtered according to categories. Coal Resources are reported by the following subdivisions: - Lease; - Mining method (open cut or underground); - Resource status (i.e. whether Inclusive or Exclusive of Reserves); - Product Type (optional – agreed with site / marketing). - Classification by resource category **Points of observation** The Coal Guidelines define points of observation as "*sections of coal-bearing strata, at known locations, which provide information about the coal by observation, measurement and/or testing. They allow the presence of coal to be unambiguously determined*". Because both tonnage and coal quality must be known to the same level of confidence, standard practice requires valid points of observation to have the following attributes: - Geophysical logging; - Cored and with sample analyses pertinent to the coal product being quoted as resource; - At least 95 per cent linear core recovery for the target seam. Exceptions to the attributes above are only after an appropriate technical assessment conducted by the relevant modelling geologist. Supportive data, such as seismic surveys, also provide evidence of continuity. Where the coal requires, or is likely to require washing, the analyses should include washed yield data. The recent update to the coal guidelines has sub-divided points of observation further: "*Points of Observation may be classed by Quantity or Coal Quality. Each class should be clearly tabulated and presented in plans on a seam-by-seam basis*". The Competent Person may vary from the above Point of Observation definition but must state the basis for such variation. **Resource classification** The classification of Coal Resources into Measured, Indicated or Inferred confidence categories is based on the distance from valid points of observation. The preference is that the distances from points of observation used to classify the resource, should be based on a geostatistical analysis of the coal quality. The initial classification polygons created based on the points of observation are reviewed by the Competent Person and adjusted where appropriate, to consider other potential sources of geological uncertainty, e.g., structure, intrusions and seam splits. **Confidence classification using geostatistics** The Company uses geostatistics in resource confidence classification where the appropriate geostatistical data and studies allow. Coal Seams and their quality variables have different continuity and variability across the deposit. Drillhole spacing analysis (DHSA), using the global estimation variance method, helps in understanding the variations in estimation precision (uncertainty) across the deposit for different seam / variable / domain configurations. The DHSA technique

<table>
<tr><th>Criteria</th><th>Explanation</th></tr>
<tr><td></td><td>
<p>provides quantitative measures of the precision with which quality and volume variables can be estimated. The methodology for estimation involves the following steps:</p>

Exploratory data analysis and variography are completed for the available sampling data (and where appropriate, domaining may also be applied to achieve stationarity);
The continuity and variability of a specific area and variable are characterized by the variogram model. DHSA uses the variogram model to determine the estimation variance for a single block/cell size;
The annual area mined (or uncovered) is required as an input into the DHSA process. This gives the size of the area for the global estimate.

<p>The practice for coal Resource classification is to derive global estimation precision for the variable thickness and raw ash over a five-year period and to apply the resource categories tabled below.</p>
<p>Table 7 Resource classification categories</p>
<table>
<tr><th>Classification</th><th>Precision @ 95% confidence interval</th></tr>
<tr><td>Measured</td><td><10%</td></tr>
<tr><td>Indicated</td><td>>10% and <20%</td></tr>
<tr><td>Inferred</td><td>>20% and <50%</td></tr>
</table>
<p>Drillhole spacings used in resource classification as compiled for all seams, and the criteria used to determine them, are listed in the table below .</p>
<p>Table 8 Drillhole spacings used in Resource classification</p>
<table>
<tr><th rowspan="2">Seam</th><th rowspan="2">Method</th><th colspan="3">Maximum drillhole spacing (metres)</th></tr>
<tr><th>Measured</th><th>Indicated</th><th>Inferred</th></tr>
<tr><td>Blackwater</td><td>DHSA</td><td>600</td><td>1000</td><td>2600</td></tr>
</table>
</td></tr>
<tr><td>Audits or reviews</td><td>Resource estimates are reviewed annually. The review endorsed the estimates, as being completed suitable for public reporting. Prior to reporting, any outstanding issues identified in any reviews are addressed.</td></tr>
</table>

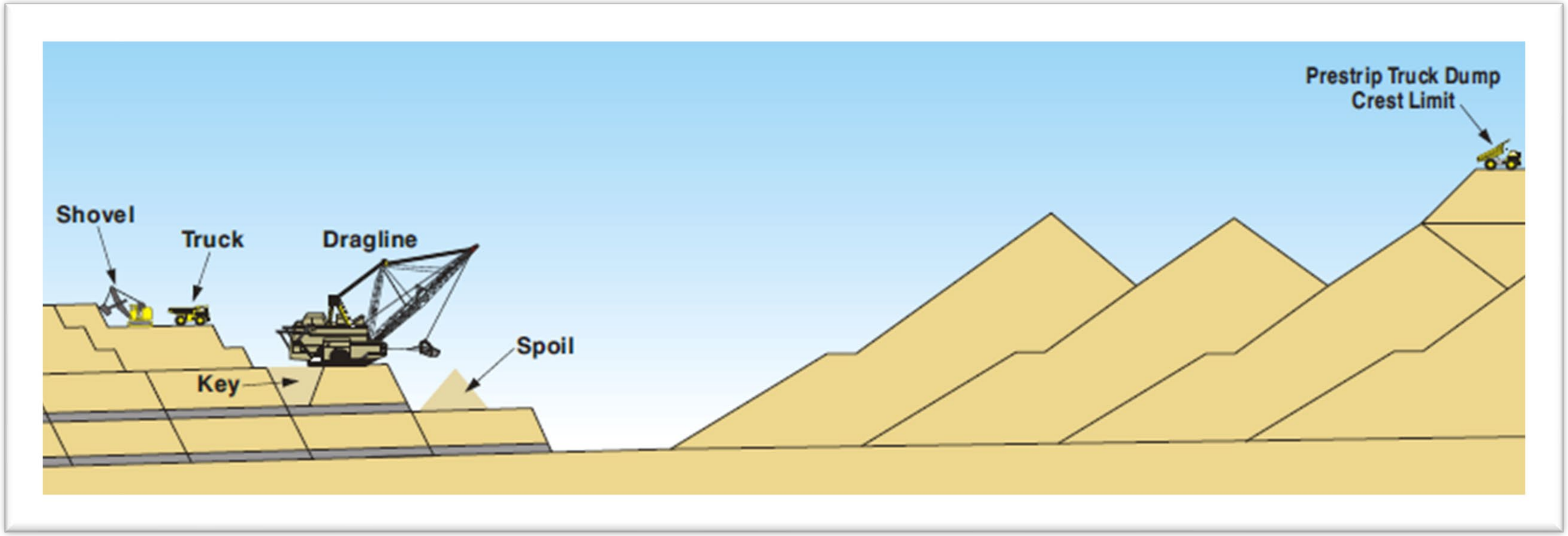
Criteria	Explanation
Discussion of relative accuracy/confidence	The Coal Resource is a subset of Inventory Coal where there are reasonable prospects for eventual economic extraction. Company practice interprets reasonable prospects for economic extraction to mean realistic prospects of a coal seam being mined and marketed within a timeframe of up to 50 years from the time of assessment. The Company utilises The Australian Guidelines for Estimation and Classification of Coal Resources (2014) to guide its Competent Persons in the resource estimation process. The Company's practice for Coal Resource classification is to derive global estimation precision of the estimates for thickness and raw ash variables over a five-year period and to apply the following resource categories for classification: • Measured is up to +/- 10 % error @ 95 % confidence; • Indicated is from +/- 10 % to +/- 20 % error @ 95 % confidence; and • Inferred is from +/- 20 % to +/- 50 % error @ 95 % confidence. Details as to the quality / quantity of coal on deposit relate to global estimates. Tonnages and quality variability is investigated on the active operations via short term exploration activities. Reconciliation of mine production data is completed to confirm global accuracy of the resource estimates.

Section 4 – Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section)

Criteria	Explanation
Sampling Techniques	Drill sampling has been the only source of analysis for the purposes of resource evaluation and estimation at Blackwater. Core samples were selected at seam, ply, and lithological boundaries with a maximum thickness of 0.5 m. Core samples were photographed, bagged, sealed, and labelled before awaiting analysis in cold storage. To ensure the samples taken are representative, depth adjusting has been completed using downhole geophysics and, in some circumstances, composites have been constructed for analysis to match the modelled horizons as interpreted from geophysical logs. Downhole geophysical measurements are taken for key physical characteristics but only used qualitatively to correlate stratigraphic and structural features. Excepting the interpretation of downhole seam thicknesses, no direct grade-equivalent measurements were made from geophysical data. Raw quality and washability analysis was performed over the sample intervals where minimum sample mass was attained. This reflects the population of key attributes such as ash, volatile matter, and sulphur contents. Clean coal analysis was performed on the modelled composite intervals. Geotechnical samples were taken from non-coal rock mass units in contact with coal seams, where possible. For gas testing, initial field desorption measurements were taken using gas canisters and desorption apparatus, and upon completion of field testing, gas samples were then sent to a specialised gas testing laboratory for further gas content analysis. Limit of oxidation (LOX) samples were the only borehole coal quality analysis performed on non-cored intervals. Rotary air blast chips have been recovered at the surface in 0.3-0.5 m interval samples. The results were used to inform the depth to base of weathering horizon. All borehole sampling has been completed using internal procedures which reflect industry standards for Coal Deposits.
Site visits	The Competent Person makes regular site visits to engage the site leadership team on LoM plans and strategic mine planning decisions. Visits include pit inspections of areas relevant to recent and future LoM plans.
Study status	Blackwater Mine is currently in operation and has been actively mining coal since 1967. The mine plan that supports the Coal Reserve estimation is technically achievable and economically viable once all relevant and material modifying factors have been applied. Future capital projects associated with the Blackwater operations are equivalent to Pre-Feasibility study level in-order to contribute to the reserves.
Cut-off parameters	The cut-off ratio used for reporting Coal Reserves is determined by the deposit characteristics and the maximum strip ratio which can be sustained by the product generated to market specification. Blackwater Mine has a range of products options aligned to the site's resource quality. Product quality specification limits are prescribed annually in the site's optimisation model. The optimisation model creates a mining schedule which targets the highest value product which can be attained for each parcel of coal mined. An economic analysis is completed on the nominated mine plan to establish an economic cut-off point from which the Coal Reserves are able to be reported. All Coal Reserves reported are located within the economic threshold.

Criteria	Explanation
	The coal mining seam thickness cut-off for Blackwater Mine is 0.3 m, it is the minimum seam thickness included in the reserves. Anything less than minimum thickness will be considered waste. Waste parting cut-off thickness is 0.3 m, it is the maximum thickness that will be included in the reserves. Partings thicker than the cut-off will be designated as waste and removed according to the mine plan. Coal mining also utilises a cut-off in-situ ash limit of 40%. Any in-situ coal which is greater than 40% in-situ ash will be considered waste.
Mining factors or assumptions	**Mining Method** Open-cut strip mining is the nominated mining method employed across Blackwater Mine. Initial mining operations commence on the sub-crop of the seam using electric rope shovels and hydraulic excavators. The pre-strip fleet will Load rear dump trucks (RDTs) to remove waste above the dragline horizon. A fleet of electric walking draglines serve as the primary overburden removal tools and uncover coal in strips orientated along the strike of seams. RDTs dump pre-strip waste onto previously dumped dragline spoil. Mining progresses along strike and down-dip to the lease boundary or to a depth of maximum economic strip ratio. At this point a transition to underground mining may commence. Allowances in design are made for permanent access corridors, major transport corridors and major creek corridors between pits. Previously mined out strips (voids) are progressively backfilled through dragline spoil and/or pre-strip truck dumps. The shape and physical boundaries are aligned to internal closure planning guidance and the final void will be left behind as per legislative guidance. Figure 4 below illustrates the open-cut mining method, including dragline dig and spoil operation, truck and shovel operations and truck dump profile.

Criteria	Explanation
	 **Figure 4 Illustration of open cut mining method** The open-cut mining process undertakes the following activity sequence: • land clearing and topsoil removal • overburden/ interburden drilling and blasting • shovel/ excavator and truck stripping • dragline/ dozer stripping • excavator and truck parting removal • pit preparation and dewatering • coal drilling and blasting • coal loading and hauling • coal crushing and processing • reclamation (in pit) and train loading (at CHPP). Pre-strip dumps are designed in 20 m dumps tiers (lifts) with 10 m to 20 m wide benches in between. Under special circumstances (increased material competency), geotechnical approval can be given for 40 m and 60 m dump tiers.

Criteria	Explanation
	Additional Parameters Relevant to Mine Design

Geotechnical Models

Mine plans incorporate slope designs that are of a suitable level of study for the intended purpose and prevailing risk. The geotechnical design process:

- utilises appropriate quality, quantity and spatial distribution of data for the required level of design study
- employs analysis methods that are industry recognised as appropriate for the potential ground control failure mechanisms present
- utilises design acceptance criteria that are compatible with the business safety and economic objectives and required level of design study
- identifies key uncertainties and sensitivities within the design
- identifies any additional risk mitigation measures that are necessary to achieve the required performance (e.g., water management, monitoring plans, high consequence geotechnical management plans).

All geotechnical designs are reviewed and endorsed by a Registered Practising Engineer of Queensland and the site ground control risk owner.

The geotechnical department provides the technical stewardship of the pit design. Blackwater Mine has geotechnical strip records that provide a history of mined strips. This includes a validation process to confirm any required changes to design based on geotechnical issues or improvement opportunities. The geotechnical function also provides geotechnical pit layouts for every pit, which set out the design parameters.

Table 9: Blackwater geotechnical parameters

Strip Width (m)	Highwall angle (degrees)	Low-wall angle (degrees)	Highwall berm width (m)
60-70	45-70	37	10-30

Hydrological Models

Blackwater actively seeks to manage water in a way that supports positive water stewardship and sustainable operations. To support these objectives, hydrological models are used to accurately understand existing water interactions and develop robust plans to support future water management requirements. Within Blackwater, three primary hydrological models are utilised:

- water balance models
- flood models
- groundwater models.

Water balance models are utilised to understand water use across the mine site, simulate environmental and physical processes and quantify water in areas where direct measurement is not possible. These models provide the ability to forecast water demand and uses at a mine site level, assess water-storage requirements and manage the risks associated with climate variability.

Criteria	Explanation
	Flood models are utilised to simulate the processes of rainfall, runoff and their interactions with areas of interest. Flood modelling is used to ensure that the operations feature appropriate levels of flood immunity and support planning of water infrastructure such as culverts, drains and levees. Groundwater models are developed to assess potential changes to local and/or regional groundwater systems. This enables Blackwater to manage potential impacts to the water resource and to support regulatory requirements. To develop and maintain the models above, the water planning department executes standardised procedures which outline key steps such as data capture, model update, calibration and reporting. Together these models support the water management plans, engineering design and operational activities which enable the sustainable extraction of the Coal Reserves. <u>Production Rates</u> LoM plans are generated annually as part of a Corporate Alignment process. These mine plans underpin the Coal Reserves estimates. Key inputs that could drive changes in the annual production rate and reserve life are: • active strike length • waste stripping and coal extraction capacities • processing plant capacities • supply chain constraints • overall product or market strategy The average annual production may vary throughout the plan based on the input assumptions and may not reflect a mathematical average throughout the total reserve life. LoM plans are optimised and economically evaluated to produce production rates, stripping profiles, coal exposure and coal production profiles. <u>Mining Dimensions, Dilution, and Recovery Factors</u> Selective mining unit (SMU) dimensions vary depending on equipment type and size. Excavators and shovels typically dig 5–18 m passes. Draglines typically dig the full interburden waste between two coal seams, which can vary between 25–60 metres. Strips are typically 60 metres in width. The mining process incurs a loss of in-situ coal and the addition of out-of-seam dilution to ROM coal. Loss and dilution assumptions applied to the mining model are derived from the LoM mining recoveries and calibrated based on actual mining performance. Coal loss and dilution factors are applied to different coal thicknesses from the low-wall edge, coal roof and coal floor. Quarterly and annual reconciliation of Coal Reserves are completed to assess how well the estimates are performing for the reporting periods. Blackwater historic reconciliation demonstrates how well the estimates compared to actual performance during report periods. The average recovery factor for Blackwater is 89.9% when calculated as a ratio of ROM clean coal component tonnage to in-situ coal tonnage. The average dilution factor for Blackwater is 11% when calculated as a ratio of ROM waste component to ROM coal tonnes. <u>Equipment and Personnel</u> Material is primarily moved by Blackwater owned production mining fleets. Additional material movement capacity is achieved using external contractors. The equipment available for use is adequate to support the LoM plans based on their demonstrated historical performance along with realised efficiencies over a number of years.

Criteria	Explanation
	Major mining equipment is maintained in on-site maintenance facilities with specialised work performed by facilities located in regional centres. The large draglines undergo a maintenance regime designed to ensure life-of-mine operation. Mine models have considered required dimensions in pit and strip designs relative to SMU size with mining models built to reflect the use of this equipment. Sustaining capital allocation for equipment rebuilds and replacement is considered in the economic analysis of the production plan. The table below provides the production mining fleet used at Blackwater Mine. The mining width applied in pit and pushback designs and SMU size, for mining models, reflect the use of this equipment.

Table 10 Mining fleet used at Blackwater as at 31 March 2025

Process	Fleet Type	Equipment	Number of Units
Material Movement	Draglines	Medium (8200)	2
		Small (8050/ BE1370)	5
	Electric Shovel	Large (30-50 cu.m)	2
	Excavator _*Overburden and Coal Fleets_ _*Including Contract Fleets_	Very large (40-50 cu.m)	3
		Large (30-40 cu.m)	5
		Medium (20-30 cu.m)	2
		Small (<20 cu.m)	5
	Haul Trucks	KOM930E Eqv.	64
	Dozers	Push Dozers (D11)	11
	Wheel loaders		2
	Surface Drills	Small (<270 mm)	7
Processing Facilities	CHPP		2

<u>Inferred Resource for mining limit definition</u>

Blackwater Mine Coal Reserves were estimated within the economic footprint of the LoM plan. The mine plan was determined by assigning revenues to all resource categories including Measured, Indicated and Inferred Coal Resources. Within the reserve economic limit, only Measured and Indicated categories were included in the Coal Reserves.

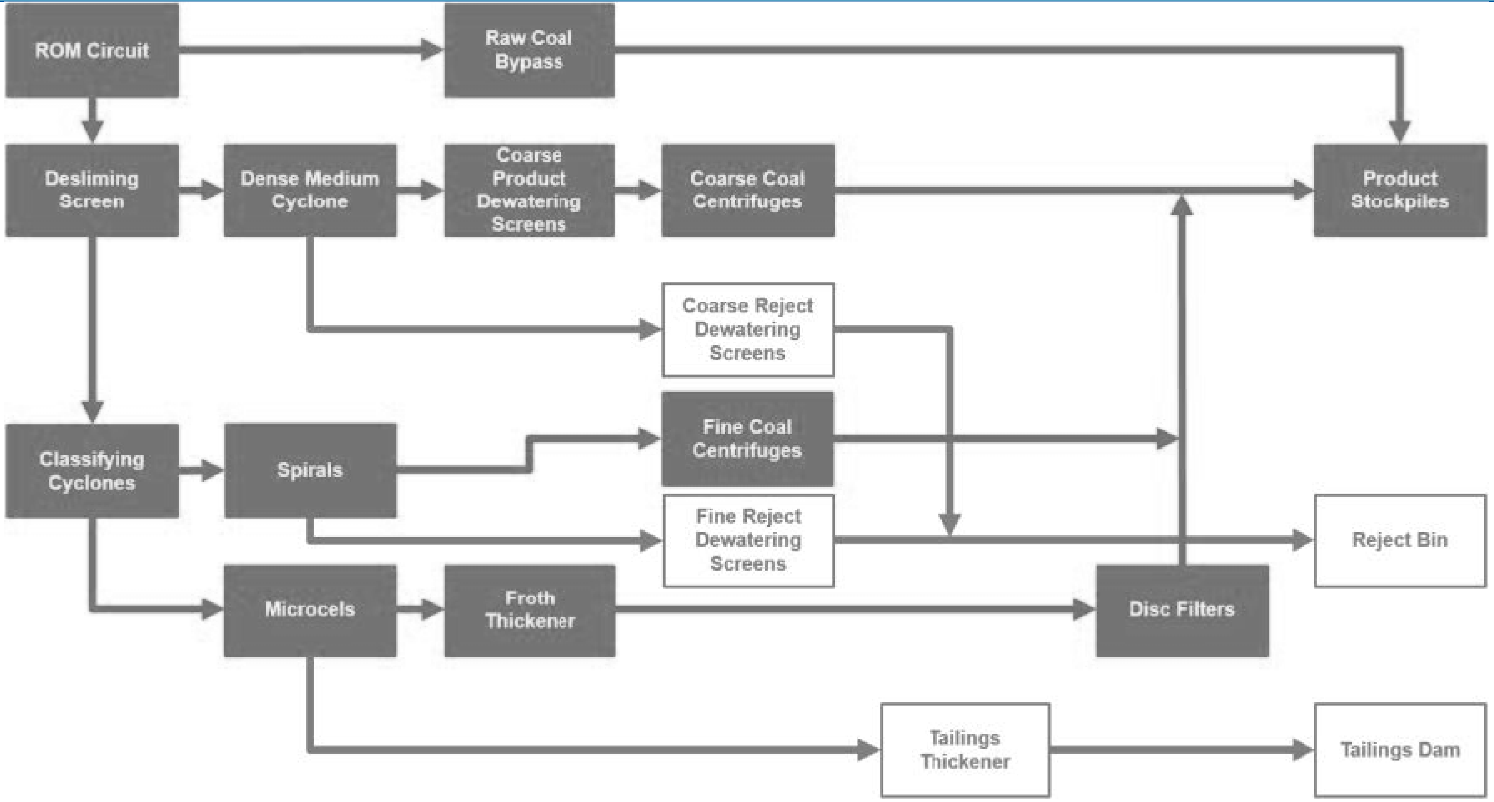
Criteria	Explanation
	The use of Inferred Resources for economic valuation is common practice for mine optimisation. The results of a sensitivity analysis indicate the use of Inferred Resources to be immaterial for the first 10 years. Beyond 10 years, the use of Inferred Resources is permitted where the only impediment to resource category upgrade is drillhole spacing, which would be progressively remedied by future business-as-usual exploration cycles. Inferred Resources within the economic footprint of the LoM plan (as at 31 March 2025) is 24Mt in the first 10 years. Converting resource models to mining models Approved resource models are used by the mine planning department to convert Coal Resources to Coal Reserves by the application of modifying factors. The resource models are converted to mining models (pit designs) and mining blocks. The in-situ mining blocks are interrogated against the geological models to attribute each block with quantities and qualities. In situ mining blocks are then processed through an aggregation process to generate ROM mining blocks. Through the aggregation process some coal blocks may be converted to waste based on cut-off criteria. Aggregation cut-offs (minimum recoverable coal seam thickness and maximum included parting band thickness) are detailed in Section 4 Estimation and Reporting of Ore Reserves – Cut-off parameters. Additional aggregation parameters at Blackwater include: • raw qualities (minimum in-situ constraints); • loss and dilution (based on seam and mining method); • drill and blast (bench thickness constraints); • system limits (mining method domain constraints); and • system method (assigning material movement properties). The definition process allocates a mining method to the blocks based on the intended stripping method (pre-strip, dragline and dozer). Mining solids are grouped by material type, location and depth into logical mining units: strips, to reflect the nominated mining method and execution sequence. The grouped strips are available for mine schedules and sequence optimisation. Mining Model/ Pit Optimisation Pit optimisations are completed to determine the optimal strip orientation and economic extents to guide the pit design process. Optimisation work includes both in-house studies and studies completed by external parties. Study work evaluates a range of possibilities including pit extents, strip orientation, dragline systems, seam recoveries, haulage optimisations and other parts of the design process. Pit optimisations are periodically updated when there is a material change to the input resource model or price assumptions. Changes from updated optimisations are incorporated into mining models where practicable. Mine planning engineers then use optimisation results to select the most economic and practical pit limits. Detailed mine designs are completed as an extension of optimisation work and add additional constraints as necessary. This may include domain boundaries such as offsets to lease limits and links to infrastructure.

<table>
<tr><th>Criteria</th><th>Explanation</th></tr>
<tr><td></td><td>
<p>Open-cut design is based on pit geometries which align with the selected mining method and adhere to geotechnical slope stability recommendations. Typical open-cut parameters for Blackwater tabled below. These design parameters are subject to change based on specific geotechnical recommendations and optimisation outcomes.</p>
<p>Table 11 Blackwater open-cut design parameters</p>
<table>
<tr><th rowspan="2">Mining Method[(1)]</th><th colspan="4">Pre-strip</th><th colspan="3">Dragline/ CDX[(1)]</th></tr>
<tr><th>Strip width (m)</th><th>Bench depth (m)</th><th>Berm width (m)</th><th>Dumps (m)</th><th>Strip width (m)</th><th>Dig depth[(2)] (m)</th><th>Spoil parameters[(3)] (m)</th></tr>
<tr><td>TS Dragline</td><td>60-70</td><td>15</td><td>10-30</td><td>20 (lifts)
10 (berms)</td><td>60-70</td><td>60</td><td>45 (dig depth)
40-42 (dump height)</td></tr>
</table>

TS – truck and shovel/excavator operations, CDX – cast, doze, excavate operations
Dig depth will vary based on geology
Dump height is at the nominated geotechnical angle of repose

<p>Blackwater pits have been in operation for several years with early mining activity occurring in the lowest strip ratio locations first. Mining activity has since progressed into deeper areas with steadily increasing strip ratios. The ability to continue mining successive strips is partially driven by the coal price and each pit's economic threshold. This is subject to change depending on the long-term price forecast.</p>
<p>The economic cut-off for each strip is considered along with relevant optimisation studies and, where practical, the mining models are updated accordingly. Changes made to the mining models are done in cooperation with a range of stakeholders (e.g. geotechnical, mine planning, operational and other functional teams).</p>
</td></tr>
<tr><td>Metallurgical factors or assumptions</td><td>
<p>Blackwater coal is delivered to the processing plant via haul trucks where it is either stockpiled or fed directly into the hoppers for ROM processing. Coal is then processed through a series of wash circuits to prepare coal for beneficiation. The wash circuits use density separation to separate waste material (rock) and ash from the coal. The heavier separated material gets discharged as coarse rejects, while the lighter separated material gets discharged as fine rejects. Some coal may bypass directly to the product coal stockpile. Product coal is stockpiled in preparation for train load out.</p>
<p>Large quantities of historical data have allowed development of empirical regressions between feed ash and yields, enabling reliable forecasts on processing performance. Coal recoveries are also a function of the mining process with loss and dilution occurring as seams are exposed and recovered from pits.</p>
<p>The application of wash model attributes and loss and dilution assumptions are applied to mining models and evaluated in the LoM plan.</p>
<p><u>Blackwater CHPP</u></p>
<p>Blackwater has a ROM coal system that crushes coal and feeds it to the raw coal stockpile via a circular stacker. The raw coal stockpile is reclaimed with a circular reclaimer providing some blending to feed the coal in a controlled manner into the CHPP via a single conveyor. The CHPP feed rate is a maximum of 2,100 tph.</p>
</td></tr>
</table>

Criteria	Explanation
	The plant is configured as two large modules fed by a single feed belt. Process water is added to turn the raw coal into a slurry which is fed onto two deslime screens. This screen separates the feed into -50 mm to +1.4 mm and -1.4 mm streams. The -1.4 mm is further split using hydro-cyclones onto -2.5 mm to +0.25 mm and -0.25 mm fine feed fractions. The coarse feed is processed using two large 1.3 m diameter Dense Medium Cyclones. Coarse product is rinsed of magnetite using two product drain and rinse screens and then dewatered through four coarse coal centrifuges. Coarse reject is rinsed of magnetite through two reject drain and rinse screens. The mid-size feed is processed in a bank of spirals. The low-density spirals product is de-slimed through a bank of hydro-cyclones and then dewatered with four fine coal centrifuges. The high-density spirals reject is dewatered with two high frequency dewatering screens. The fine feed of -0.25 mm is processed in six Eriez micro cell flotation cells configured as six primary cells. The dewatered coarse coal product, mid-size product and fine coal product is stacked together on the product stockpile. The coarse and mid-size reject is conveyed to the reject bin where it is fed into trucks and disposed of in-pit. The fine reject goes to the tailings thickener where the solids are concentrated and pumped to the in-pit tailings storage facility. The product stockpile is configured into two halves with portal mobile reclaimers that work together to feed the train load out which loads trains at a rate of around 5,000 tph. Blackwater also operates a Coal Handling Plant (CHP) circuit designed for low-complexity processing of ROM coal. Coal is fed from the ROM pad through a scalping screen to remove oversize before passing through rotary breakers for size reduction and basic liberation. The crushed coal is then transferred directly to product via conveyors, without further beneficiation. The CHP stream functions as a simple bypass process, and crushing-related losses are considered negligible for the purposes of Reserve reporting. The CHP feed rate is a maximum of 1,000 tph. An image detailing the general flow of the wash circuit at Blackwater CHPP is pictured below:

Criteria	Explanation
	 **Figure 5 General flow of the wash circuit at Blackwater CHPP**

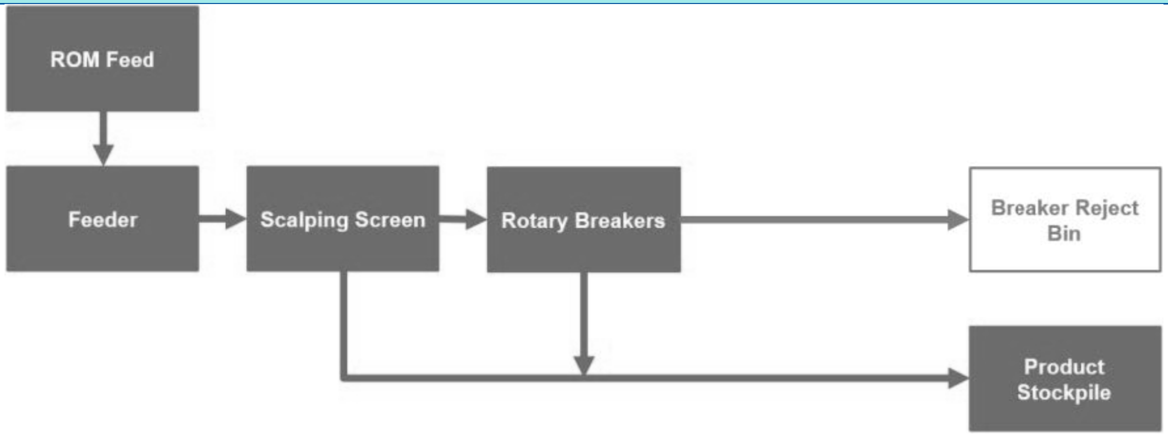
<table>
<tr><th>Criteria</th><th>Explanation</th></tr>
<tr><td></td><td>


Figure 6 General flow of the ROM circuit at Blackwater CHP

Product quality specifications are derived from the intrinsic qualities of the deposit and reflect alignment with market requirements and contractual specifications. Product coal is allocated to a product type when it falls between the ranges detailed in the table below. These specifications are periodically reviewed and may be updated following product strategy assessments and optimisation studies.

Table 12 Blackwater Product Specifications

<table>
<tr><th>Product Type</th><th>Ash [%ad]</th><th>CSN</th><th>Vit [%]</th><th>Phos [%]</th><th>TS [%]</th><th>VM [%]</th><th>GCV</th><th>BI</th></tr>
<tr><td>**Hard Coking Coal**</td><td>8.4 – 9.0</td><td>6.0 – 10.0</td><td>47.1 – 58.8</td><td>0 – 0.067</td><td>0 – 0.47</td><td>26.4 – 27.1</td><td></td><td>< 0.25</td></tr>
<tr><td>**Semi-soft Coking Coal**</td><td>8.3 – 9.8</td><td>2.0 – 6.0</td><td>42.2 – 58.7</td><td>0 – 0.077</td><td>0 – 0.51</td><td>25.0 – 25.6</td><td></td><td>< 0.25</td></tr>
<tr><td>**Thermal Coal**</td><td>0 – 12.4</td><td></td><td></td><td></td><td></td><td>23.5 – 24.5</td><td>>6,533</td><td></td></tr>
</table>
</td></tr>
</table>

Environmental	Blackwater is an operating mine with all necessary environmental approvals currently in place. Any future environmental approval requirements will be obtained by the Company as required. Blackwater's approach to environmental management is governed through rigorous standards that specify the mandatory minimum performance requirements for risk management. These standards are aligned with ISO management system requirements, including ISO14001 for Environmental Management Systems, and provide a framework for managing environmental risks, including realising opportunities to achieve our environmental objectives. The ***Environment Protection and Biodiversity Conservation Act 1999*** (Cth) is the main governing legislation regulating matters of national environmental significance. For all new or changed projects with a potential to have an impact of environmental significance, the approval process is followed under this legislation. Where required by various environmental approvals, Company will secure environmental offset areas, managed through Environmental Offset Management Plans. Coal mining activities are listed under Schedule 3 of the Environmental Protection Regulation 2019 (Qld) as an ERA. These activities require an EA under the EP Act and are granted by the Department of Environment, Tourism, Science and Innovation. All operations hold an existing EA and each contain a list of granted mining leases and authority to mine. The Company regularly monitors changes to the external legal environment to assess and implement compliance requirements.
Infrastructure	Blackwater is an operating mine with all necessary infrastructure currently in place. Roads Blackwater Mine operation and tenements are easily accessed via public highways and roads with connections to Brisbane, Mackay, Gladstone (each in Queensland, Australia) and the surrounding regional towns. The closest major cities are Mackay and Gladstone, each approximately 200 kilometres east and situated on the Pacific coast. A regional airport located in Emerald provides air service to the mine location and is accessible from the mine sites via public roadways. Rail Blackwater products are sold into the seaborne metallurgical coal market with the mine serviced by a rail system owned and operated by Aurizon Network. Individual trains haul 8,000 to 10,600 tonnes from the mine site to port facilities. Above Rail haulage is provided by Company's Rail, Aurizon Operations and Pacific National. Blackwater mine delivers product coal to the RG Tanna Coal Terminal (RGTCT) at the Port of Gladstone. Port facilities RGTCT is a multi-user facility owned by the Ports Corporation of Queensland and commenced operations in 1979. RGTCT has been progressively expanded to handle increasing quantities and includes purpose-built rail in-loading facilities, on-shore stockpile areas and off-shore loading berths. Ships are loaded at one of four loading berths using three ship loaders with a capacity to load 6,000 t⁄h each. Bulk carriers of varying capacities up to 220,000 dwt can be accommodated at the facility. Power, water and pipelines The Blackwater operation is supported by well-established and extensive infrastructure, ensuring reliable and continuous operations. The site's infrastructure is considered appropriate and sufficient for the current and planned operational requirements. Electrical power is sourced from the Queensland state grid, provided by government-owned entities through an established regional network. A dedicated on-site distribution system, including substations and transmission lines, manages the power supply throughout the operational areas. Water is sourced from a combination of rainfall, site runoff, on-site storage facilities, pipeline imports, and recycled water. The availability of these sources can fluctuate with seasonal climatic conditions. The primary water demands are for coal processing and dust suppression. For FY25, water usage for dust suppression

<table>
<tr><td></td><td>was 1.4 gigalitres (GL), and the Coal Handling and Preparation Plant (CHPP) had a gross usage of 2.9 GL. To supplement on-site sources, 1.6 GL of raw water was imported via the Bedford East (BDE) and Bedford West (BDW) pipeline systems. These pipelines also service non-mine users, including local stock and domestic consumption. The total on-site water inventory at the Blackwater site is approximately 22 GL.

Sufficient land is held under tenure for current and future operational requirements, and the existing infrastructure is deemed adequate to support the current and planned mining activities.</td></tr>
<tr><td>Costs</td><td>Coal Reserves are estimated using forward looking revenue and cost forecasts.

The operating costs were estimated from using historical equipment productivities and hourly operating costs. These costs were calibrated against recent actuals and budget forecasts. Sustaining and additional capital costs are based on LoM optimised base plan.

Royalty payments are made to the Queensland Government for coal sold, disposed of or used during a period. Royalties are calculated per mining operation at a percentage of the sales price per tonne of coal as per the Queensland Government Royalty brackets. This percentage is applied to the value of coal (sales revenue minus allowable deductions) to determine royalties payable in a period.

Final mine closure costs have been excluded from the mine life estimate but included in the Net Present Value (NPV) calculations for the LoM optimised mine plans. Closure costs are excluded from mine life calculations to allow determination of the appropriate life-of-mine date.</td></tr>
<tr><td>Revenue factors</td><td>The commodity price of coal varies depending on market supply and demand. Global demand for coal has shifted for a variety of reasons with significant swings in prices observed as a result. Coal products possess a number of physical and chemical properties with each influencing the value in use and the ultimate sale price into markets.

The Company utilises a standard process for generation of commodity prices and foreign exchange rates used in the evaluation of the LoM plan. Commodity price assumptions take into account various product quality premiums and discounts in relation to the generally traded coal index prices and quality specifications.

Blackwater coal products are benchmarked against one of two separate commodity indices. The Company’s Marketing team tracks the nominal, calendar month average index prices. Specification for each commodity is detailed in the table below.

Table 13 Commodity indices and relativities for Blackwater coal production
<table>
<tr><th>Product Type</th><th>Index</th><th>Relativity to Index</th><th>Source</th></tr>
<tr><td>Hard Coking Coal</td><td>PLV HCC FOB Qld</td><td>85%</td><td>WHC, Commodity Insights</td></tr>
<tr><td>Semi-Soft Coking Coal</td><td>PLV HCC FOB Qld</td><td>75%</td><td>WHC, Commodity Insights</td></tr>
<tr><td>Thermal Coal</td><td>gC 6,000 NAR Newcastle</td><td>90%</td><td>WHC, Commodity Insights</td></tr>
</table>

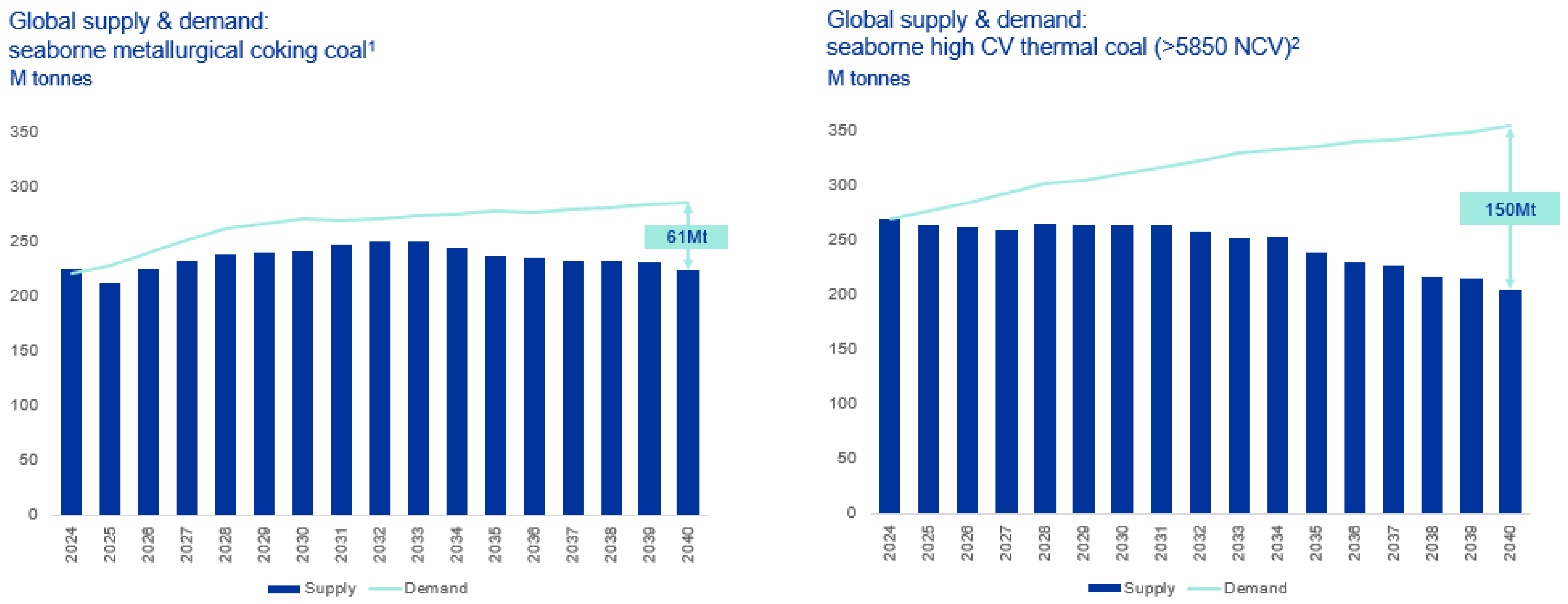
The ultimate value of Blackwater’s coal products is determined by evaluating each coal’s technical worth to the entire ironmaking process. Coal qualities can change perceptibly over short distances at Blackwater Mine. To combat changing qualities, coal can be blended with other coals sourced from different locations (within the Blackwater Mine) to create complimentary blends to meet target specifications.</td></tr>
</table>

Quality adjustment factors are used to interpret changes of any product coal relative to the commodity index. Blackwater uses relativities to allow for the changing coal qualities observed at the mine site. Indexed commodities are benchmarked using product relativities with the majority of coal produced in the LoM plan at Blackwater Mine using the PLV HCC benchmark.

Market assessment

The Company develops and secures (from independent third parties) forward-looking views of product demand and supply to inform the commodity price assumptions (including specific consideration to the product quality) utilised in the economic evaluation of the LoM plan and associated reserve estimations. The assessment includes reference to historic market dynamics, historical product price realisation compared to index process, expected future supply/demand equilibrium and other macro-economic factors.

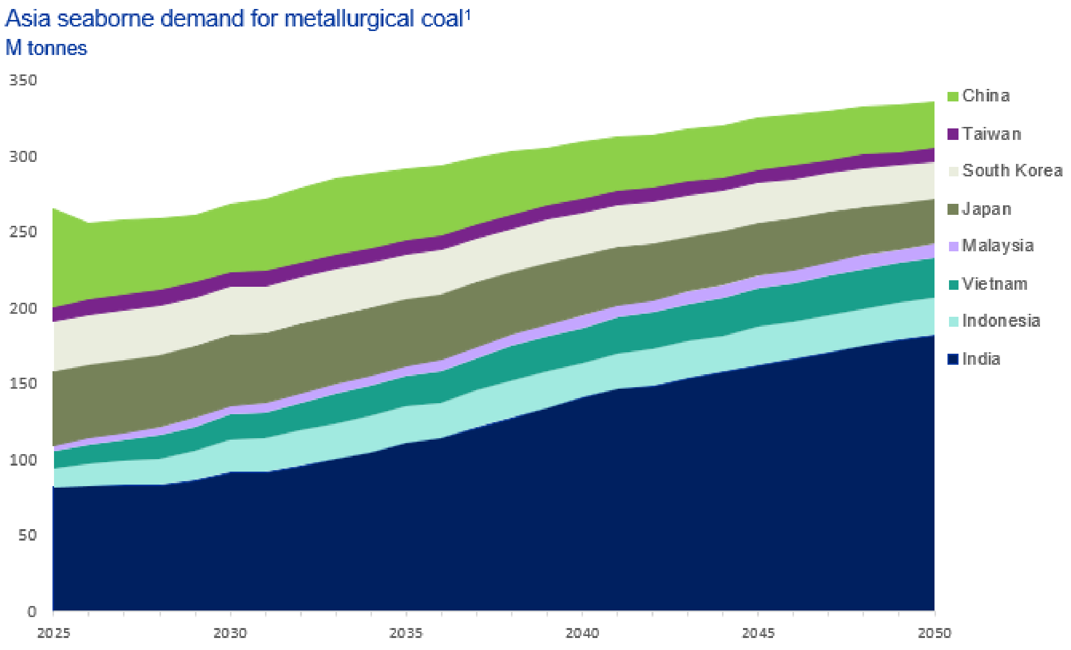
The Company utilises supply and demand forecasts by Commodity Insights to inform its assumptions. Global supply and demand for seaborne metallurgical coking coal and for seaborne high CV thermal coal are shown below. Structural supply gaps are expected for both of these markets.



Source:
1. Commodity Insights July 2025 metallurgical coking coal outlook including Hard, Semi Hard and Semi Soft Coking coal
2. Commodity Insights July 2025 high CV thermal coal base case assumption global seaborne supply and demand

These supply and demand forecast include planned / end of mine closures

Figure 7 and Figure 8 Global Supply and Demand in Seaborne metallurgical coking coal and high CV thermal coal markets

	Demand forecasts by Wood Mackenzie for seaborne metallurgical coal (coking coal and PCI) indicate: - Metallurgical coal trade flows will continue to diversify as developing markets in India and SE Asia (which have no domestic supply source) offset a softening Chinese seaborne import demand. - India is expected to represent ~48% of metallurgical coal seaborne demand by 2050 as its blast-furnace capacity increases and urbanisation continues. Wood Mackenzie's Asia seaborne demand for metallurgical coal out to 2050 is shown below.  Source: 1. Wood Mackenzie July 2025 seaborne metallurgical coal **Figure 9 Asia seaborne demand for metallurgical coal[1]**
Economic	The coal resources scheduled in the LoM plan must be economically mineable to be compliant for reserves inclusion. The economic valuation of the LoM plan is performed where positive cash flow determines the economic footprint of the life-of-mine plan. Economic valuation of the LoM plan consists of an analysis that considers estimated annual cash flows, operating costs, capital expenditure, and royalties and taxes for the full production schedule. The analysis reflects the full Blackwater production system and supply chain to mine, process, and transport coal to point of sale. Optimisation software called Blasor was used to create a mining schedule which consumes mining blocks in an optimised strip sequence to deliver the highest possible economic value (ie, highest possible NPV). Blasor is based on the industry standard Lerch-Grossman (LG) algorithm. Completed optimisations adhere to all design constraints outlined in the mine model (e.g., geotechnical and intensity limitations). The main criteria used in strip sequence optimisation is as follows: - Maximising economic return by sequencing the high value areas early and delaying the low value areas as much as practical.

- Mining strips to support consistent delivery of coal quantity and quality.
- Adhere to optimised mine model specification and overall site strategy.
- The shape and size of mined strips allow for mining method and access to all levels of the active face.
- Strips sequenced in a manner which support development of new mining areas and rehabilitation of existing pits.

This LoM plan has been reviewed and deemed valid still and used as a base for this year's depletion.

An example of a strip optimisation from two pits at Blackwater with high value strips (in green) consumed before low value strips (in purple) is shown below.

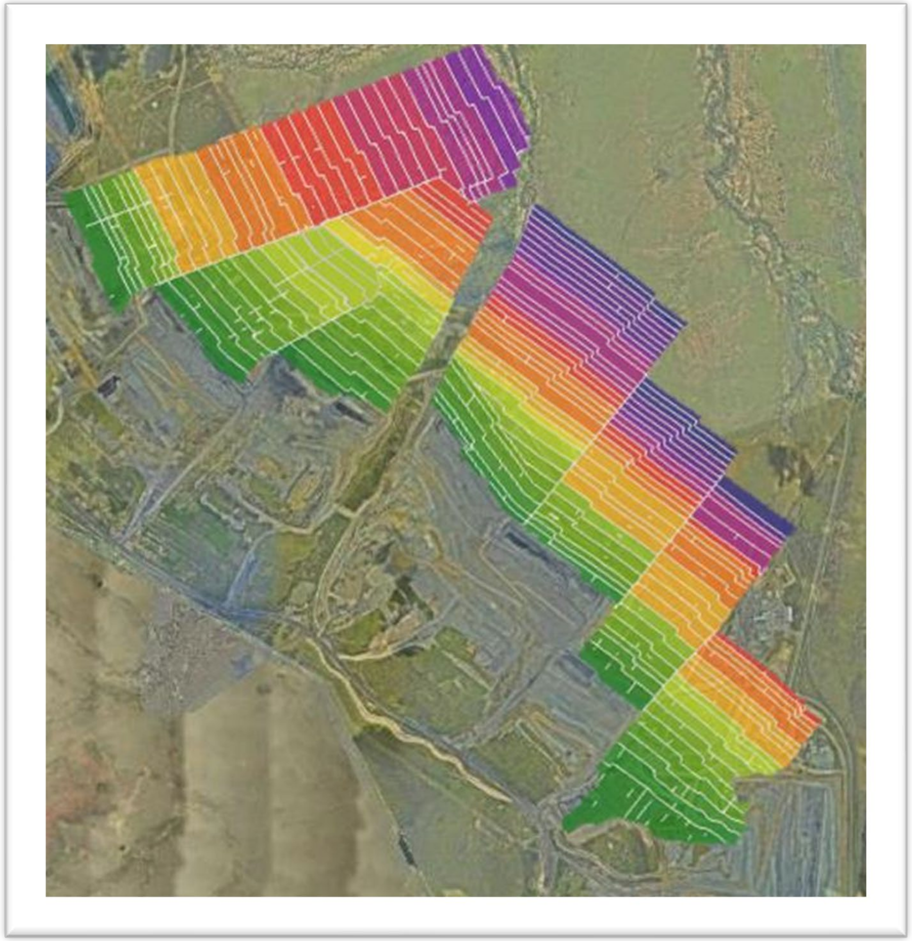
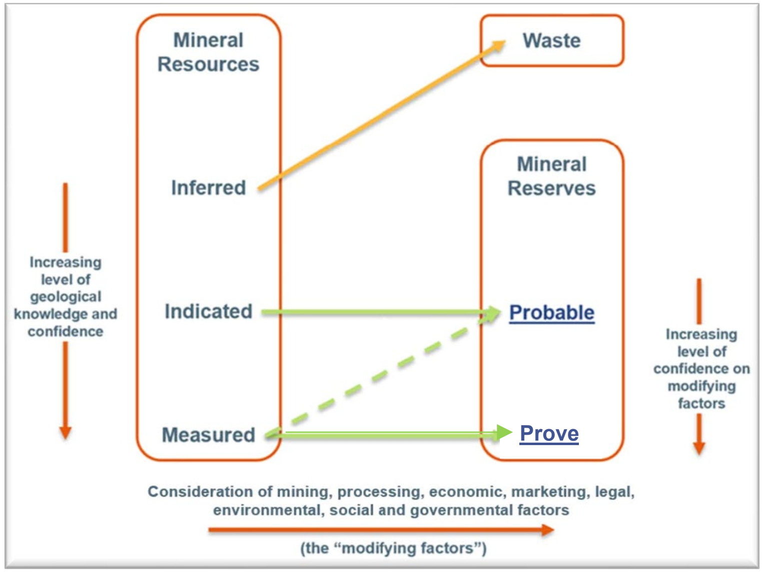


Figure 10 Example of Blackwater strip optimisation

Social	Cultural heritage and environmental agreements are described in Section 2 Reporting of Exploration Results – Mineral tenement and land tenure status. There are no native title issues relating to surface areas held by the Company and a new Surface Area Application on mining leases where native title may exist, will necessitate process under the *Native Title Act 1993* (Cth).
Other	There are no identified naturally occurring material risks that will have a material impact on the reported reserve. The status of Mineral Tenements is outlined in Section 2 Reporting of Exploration Results – Mineral tenement and land tenure status.
Classification	Coal Resource classification is assigned to the mining models at a ply level by interrogating mining blocks against the resource category polygons supplied with the resource models (Section 3 Estimation and Reporting of Mineral Resources – Classification). Resource classifications are assigned based on the proportion of each mining block within the resource classification polygons (i.e., Measured, Indicated and Inferred). Blackwater Mine has a standard approach to Coal Reserve classification where Proved Coal Reserves are derived from Measured Coal Resources. Probable Coal Reserves are derived from Indicated Coal Resources after the application of all relevant modifying factors. Inferred Coal Resource and unclassified material are not included as reserves. Reserve definitions are as follows: • A Proved Coal Reserve is the economically mineable part of a Measured Coal Resource and implies a high degree of confidence in the modifying factors. • A Probable Coal Reserve is the economically mineable part of an Indicated and in some circumstances a Measured Coal Resource. The confidence in the modifying factors applying to a Probable Coal Reserve is lower than that applying to a Proved Coal Reserve.  **Figure 11 Coal Reserve classification** The Coal Reserve classification reflects the Competent Person's view of the deposit. No Probable Coal Reserves have been derived from Measured Resources.

Audits or reviews	Internal Reviews A comprehensive risk review has been conducted in 2023 to ensure that all significant and material risks to tenure, Coal Resources and Coal Reserves are adequately managed. This review process identified key changes relevant to the annual declaration of Coal Resources and Coal Reserves and agreed actions were completed prior to annual reporting. Following a review of the updated (depleted) estimates, the Competent Person is of the opinion that no additional risks have been identified, as there is no new information, nor any change in technical, economic conditions, or modifying factors. External Audits External audits of the Coal Resource and Coal Reserve estimates occur periodically and if there is a material change to the estimate. It is the Competent Persons' opinion after reviewing this year that assurance activities undertaken provide confidence that there are no material errors related to the estimation and reporting of Coal Resources and Coal Reserves.
Discussion of relative accuracy/ confidence	Blackwater's Coal Resources and Reserves have been estimated on a site level basis and the risks in these estimates are reflected through the resource and reserve classification applied. However, significant departure from estimated values may occur locally due to unknown faulting or increased local variability in specific coal quality parameters (examples include phosphorus and sulphur). These anomalies, should they occur, are addressed by collaboration between the mine planning, resource modelling and exploration teams and, as part of the production process. Significant risks or uncertainties have been addressed appropriately in the estimation of the Coal Reserves. Other areas of uncertainties that may materially impact the Coal Reserve estimation include: • Changes in the long-term coal commodity prices. • Changes to exchange rates from US$ to AU$. • Changes in the operating costs and sustaining capital cost assumptions. • Variations in the geotechnical and geological assumptions. • Company's capacity to maintain and obtain environmental approvals including a continuing social license to operate. There are, at times, fluctuations in the global metallurgical coal market. The nature of Blackwater's high quality coal deposits, the understanding of these deposits and robust processes surrounding resource integrity provide the Competent Person with confidence of sustained long-term economic viability despite this risk of price fluctuation. Blackwater also has supply chain security and offtake agreements and contracts for many cost items and sales contracts that are expected to protect the viability of the project in the long-term. Sensitivities have been run on these key cost and revenue items to validate their suitability for estimation. Reconciliation of tonnes and qualities are carried out on a quarterly basis to determine the relative accuracy/ confidence in the Coal Reserve estimations and related classifications. Full year reconciliation results are conducted on a calendar basis to align with reporting requirements. The reconciliation process tests the accuracy and reasonable predictions of the models used to plan future mining. This process also provides quantitative feedback into the appropriateness of our resource classifications which are key inputs to the Coal Reserve estimations. Blackwater reconciles actual coal tonnes and qualities against those predicted by the Mining Model at key points in the mining process, assessing **F1** (the validity of the geological interpretation and modifying factors), **F2** (the accuracy and efficiency of extraction), and **F3** (the ability to deliver saleable tonnes and quality as predicted). The results inform confidence levels in the estimates and support ongoing model refinement.