

3 December 2024

## ASX ANNOUNCEMENT

# Resource and Reserve increased at Isaac Pit, part of the Burton Mine Complex.

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### Highlights

- Isaac Pit, a key potential production spoke at Burton Mine Complex.
- Increased Coal Reserve at Isaac Pit by 1.7 million tonnes (Mt) to 3.0Mt.
- Increased Coal Resource at Isaac Pit by 2.4Mt, totalling 7.2Mt.
- Total Burton Mine Complex Coal Reserve now 16.5Mt, up from 14.8Mt<sup>1</sup>.
- Total Burton Mine Complex Coal Resource now 110.7Mt, up from 107.5Mt<sup>1</sup>.

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**Bowen Coking Coal Ltd (ASX:BCB) ('Bowen' or 'the Company')** reports an updated Resource and Reserve estimate for the Isaac Pit, which forms part of the Company's flagship Burton Mine Complex near Moranbah.

New Resource and Reserve figures were estimated in accordance with the JORC Code (2012). The 3.0Mt Reserve at Isaac Pit is classified as 2.5Mt in the Proved category and 0.5Mt in the Probable category while the 7.2Mt Resource is classified as 4.3Mt in the Measured category and 1.8Mt in the Indicated category.

**Bowen CEO, Mr Daryl Edwards, said:** *"this is a great result, providing the Burton Complex with potential to expand the mining area, at excellent coal qualities. We will now commence with mine development scenario planning to explore the options to incorporate the upgraded Reserves at Isaac Pit into the overall Burton Mine Complex production plan."*

The Burton Mine Complex Mine consists of a centralised Coal Handling and Preparation Plant (CHPP) in close proximity to a number of operating open-cut mines and undeveloped pits. The Plumtree North Mine delivered first ROM coal to the CHPP in November ahead of schedule and sits just south of the Ellensfield South Mine which has been serving the CHPP since September last year.

The Company ended the 2024 financial year by achieving record operating results and reaching steady state production at the Burton Mine Complex.

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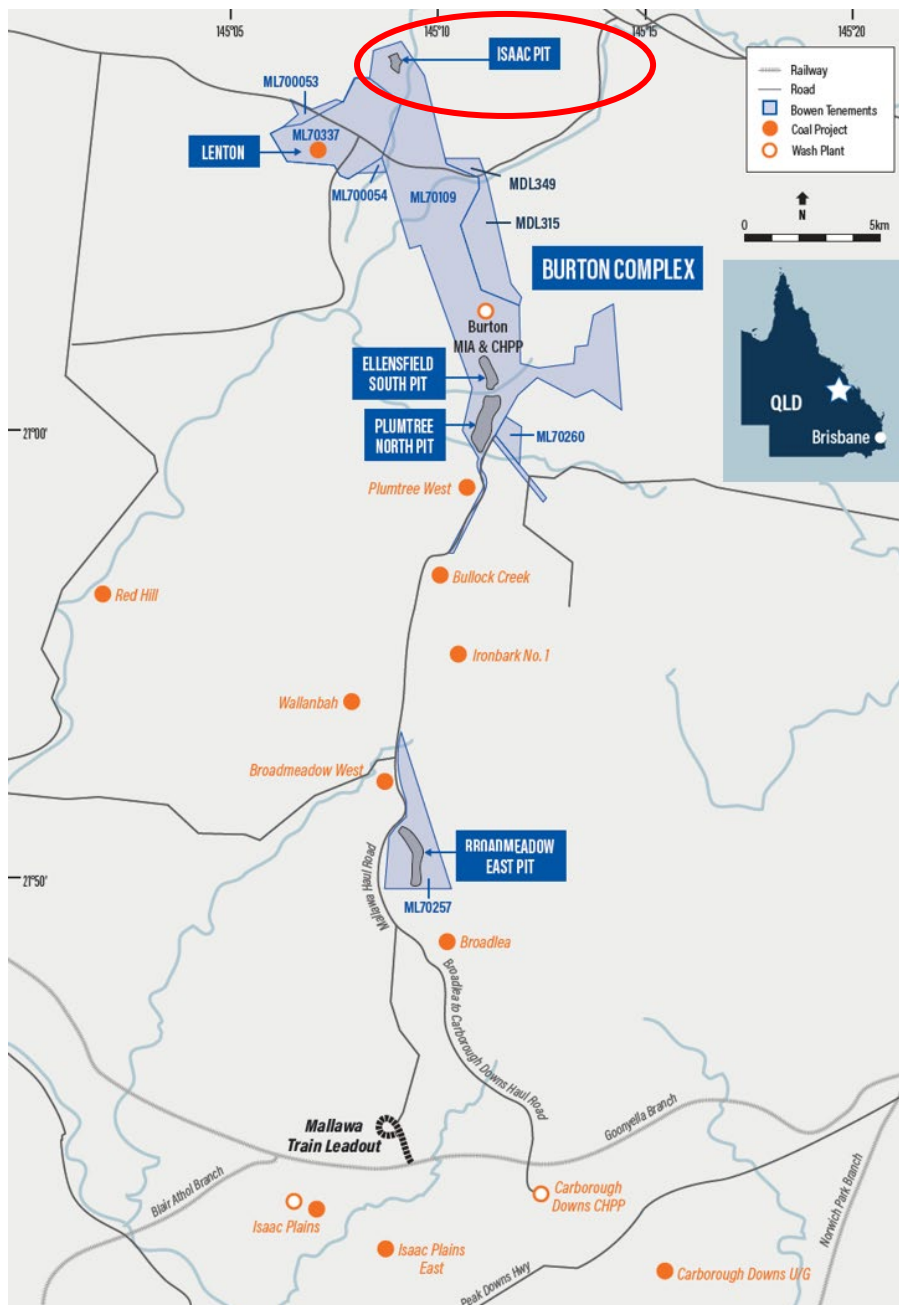
<sup>1</sup>Refer BCB's ASX announcement dated 10 April 2024 entitled Burton Coal Resource Update. BCB's ASX announcement dated 4 August 2021 headed "Transformational Acquisition of Burton Mine & Lenton Project", Burton Reserve Update as per BCB's ASX Release dated 10 April 2024. Annual Resources and Reserves depleted as of 30 June 2024 as per the ASX Release dated 18 September 2024. The Company confirms that except as set out in this announcement: (i) it is not aware of any new information or data that materially affects the information included in the cited market announcements and in the case of estimates of mineral resources or reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed; and (ii) that all material presumptions underpinning production targets in the cited announcements continue to apply and have not materially changed.



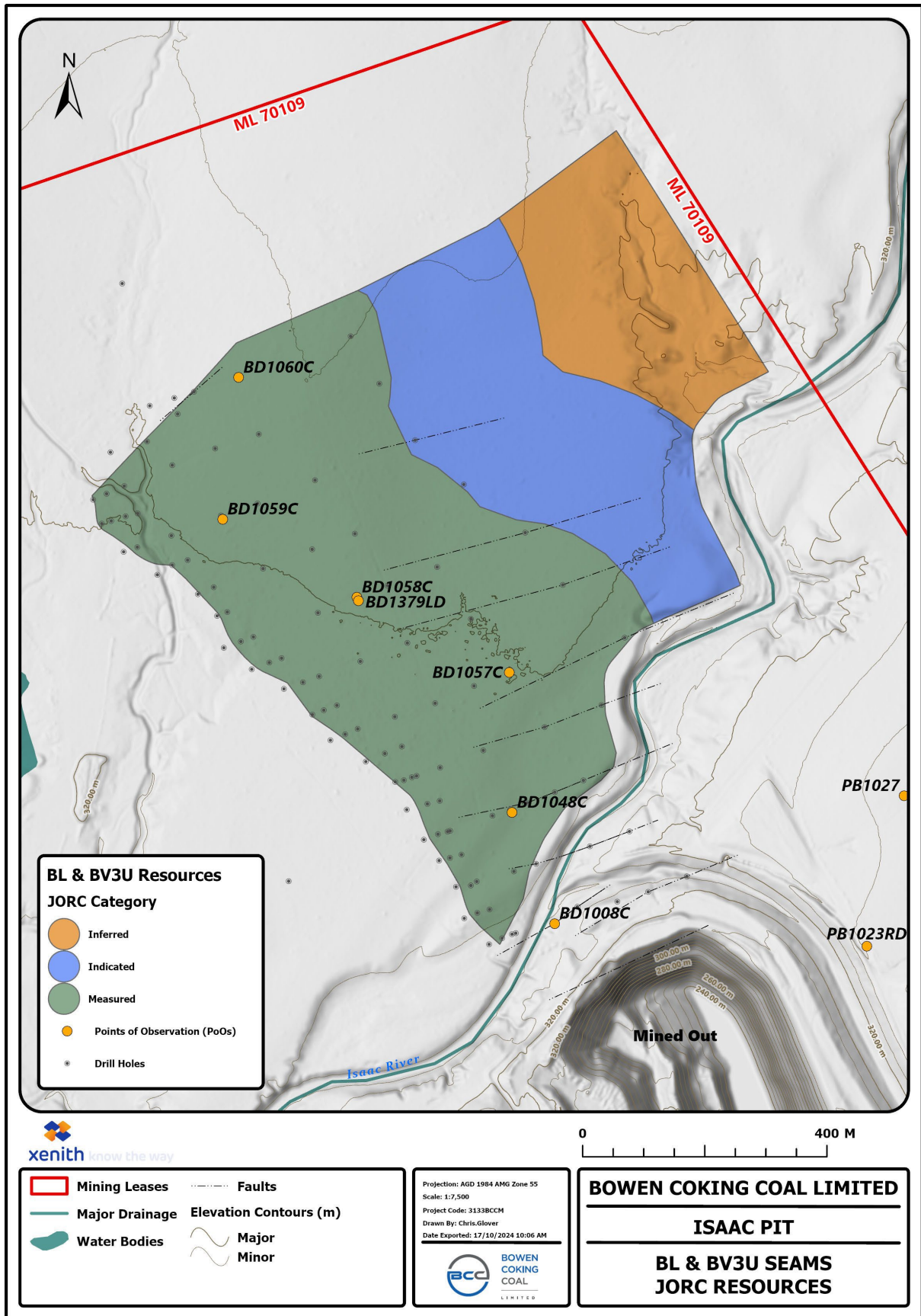
The Resource and Reserve increase at the Isaac Pit is significant in that it sits just north of the CHPP and has increasing potential to provide production continuity at the Burton Mine Complex along with deposits at Hillalong, Burton, Broadmeadow East and Lenton.

The Isaac Pit's Raw coal qualities represent an improvement from the qualities from the Ellensfield South and expected qualities at Plumtree North, with primary coking and secondary thermal product qualities (ash and yield) expected to be better than that currently achieved at the Burton CHPP.

The Burton Mine Complex is owned by the Lenton Joint Venture (LJV), which is owned by New Lenton Coal Pty Ltd (NLC), a subsidiary of Bowen Coking Coal Ltd, and Formosa Plastics Group (FPG), a subsidiary of MPC Lenton Pty Ltd. NLC has a 90% controlling interest with the remaining 10% held by MPC.

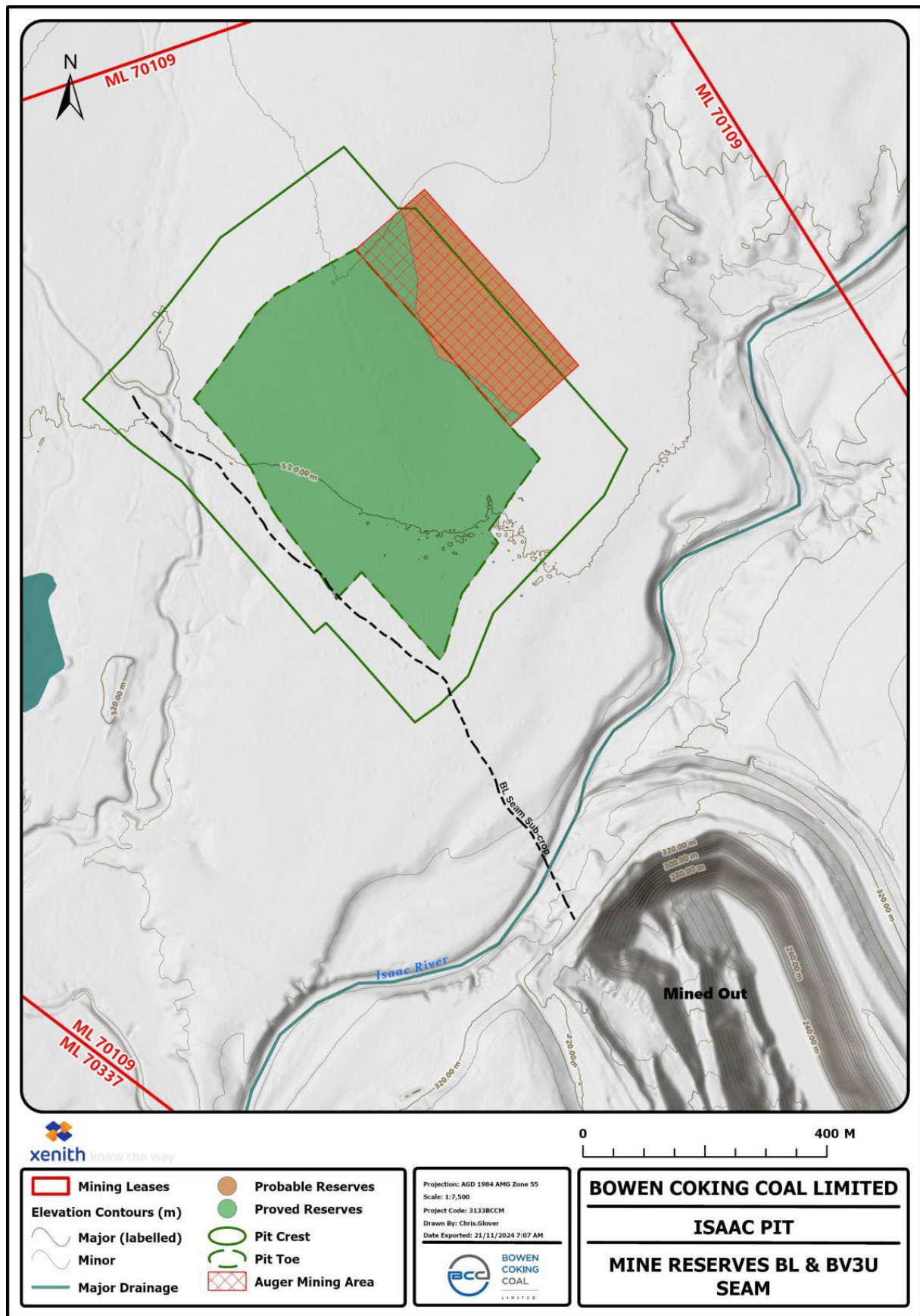


**Figure 1:** Location of Burton Mine Complex showing Isaac Pit in the northern part of Bowen's acreage around 10km north of the Central Handling and Processing Plant.



**Figure 2: Isaac Pit Resource Area**





**Figure 3:** Isaac Pit Reserve Area



**Table 1: Summary of Isaac Pit Resource by Resource Category**

Seam	Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Total (Mt)
BL	1.9	0.8	0.5	3.2
BV3U	2.4	1.0	0.6	4.0
<b>TOTAL</b>	<b>4.3</b>	<b>1.8</b>	<b>1.1</b>	<b>7.2</b>

Note – Some rounding to the nearest significant figure has occurred for overall reported Resources

**Table 2: Isaac Pit Resource – Raw Qualities by Seam**

Seam	Thickness (m)	In-Situ RD (g/cc)	IM % (adb)	Ash % (adb)	VM % (adb)	FC % (adb)	TS % (adb)
BL	2.9	1.51	1.8	28.7	19.9	49.5	0.38
BV3U	3.9	1.36	1.8	12.0	24.5	61.7	0.42
<b>TOTAL</b>	<b>6.8</b>	<b>1.43</b>	<b>1.8</b>	<b>19.5</b>	<b>22.5</b>	<b>56.2</b>	<b>0.40</b>

**Table 3: Total Coal Resource Burton**

Resource Area	Seam	Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Total (Mt)
North Pit (BN)	Burton	21.4	7.0	-	28
South Pit (BS)	Burton	17.1	-	-	17
ESPN Area	Leichhardt & Vermont	32.1	16.7	9.3	59
Isaac Pit	Burton	4.3	1.8	1.1	7
<b>TOTAL</b>		<b>75</b>	<b>26</b>	<b>10</b>	<b>111</b>

Note – Some rounding to the nearest significant figure has occurred for overall reported Resources

**Table 4: Summary of Isaac Pit ROM Reserves and Qualities**

Seam	Proved (Mt)	Probable (Mt)	Total (Mt)	Proved Ash (%)	Probable Ash (%)
BL	1.1	0.23	1.4	31	29
BV3U	1.4	0.27	1.6	13	12
<b>TOTAL</b>	<b>2.5</b>	<b>0.5</b>	<b>3.0</b>	<b>21</b>	<b>20</b>

Note – Some rounding to the nearest significant figure has occurred for overall reported Reserves

**Table 5: Isaac Pit Marketable Coal Reserves**

Seam	Proved (Mt)	Probable (Mt)	Total (Mt)
Coking Coal Reserves	1.60	0.31	1.90
Thermal Coal Reserves	0.12	0.03	0.15
<b>TOTAL</b>	<b>1.7</b>	<b>0.3</b>	<b>2</b>

Note – Some rounding to the nearest significant figure has occurred for overall reported Reserves

**Table 6: Total Coal Reserve Burton**

Resource Area	Proved (Mt)	Probable (Mt)	Total (Mt)
ESPN Area	12.4	1.0	14
Isaac Pit	2.5	0.5	3
<b>TOTAL</b>	<b>15</b>	<b>2</b>	<b>17</b>

The estimated Resources show raw coal qualities (air-dried basis) with moderate average ash (~19.5%), moderate total sulphur (~0.40%) and volatile matter (~22.5%).



## **Summary of the key information of the Isaac Pit Resource and Reserve estimate (Refer to Appendix A, Table 1 for detail):**

### **1. Location**

The project is covered by ML 70109 and is located about 45km northeast of the township of Moranbah, within the Central Bowen Basin in Central Queensland (Figure 1). Moranbah is located approximately 200km southwest of the city of Mackay. The township services the surrounding coal mining industry with the associated support industries and agriculture. The project is in an active coal mining and exploration area. The Burton Mine is located immediately to the south, with the project being within the unmined northern extensions of the Burton Mine pit.

The project is accessible in the north from Nebo via the Suttor Development Road or from the south via the Mallowa Haul Road. The Peak Downs Highway links Moranbah to the city of Mackay to the north on the coast, and to the towns of Clermont and Emerald to the south. The Mallowa Haul Road connects with the Goonyella rail network which lies about 35 km south of the CHPP.

### **2. Geology and Geological Interpretation**

The project targets the Rangel Coal Measures (RCM) and is located on the Eastern upthrown side of the Burton Range Fault within a structurally complex zone on the Eastern side of the Collinsville Shelf in the North Bowen Basin. The fault has upthrown the overlying Triassic strata and the coal bearing strata of the Permian Rangel Coal Measures by several hundred metres and subsequent erosion of the Triassic sequences has exposed the Rangel Coal Measures. Underlying the RCM are the Fort Cooper Coal Measures (FCCM) and the Moranbah Coal Measures (MCM).

The primary coal seams of interest are the Leichhardt Seams and the upper and middle Vermont Seams which are contained within the RCM and the lower Vermont Seams within the FCCM.

Typical Stratigraphic Column of the Isaac area is shown in Figure Figure 4. In the Isaac area, the Rider Burton (RB) seam is the uppermost coal seam and lies approximately 30 m above the Burton Leichhardt (BL) Seam. It is consistent across the area with a thickness of approximately 1.5m. The Rider Seam is underlain by the Burton Leichhardt (BL, ~2.9m thick) and the Burton Vermont Upper (BV3U, ~3.9m thick) seams. They coalesce to form a contiguous interval with a thickness generally between 6.5 and 7.5m.

### **3. Drilling and Sampling Techniques**

A total of 113 drill holes, including 104 open holes and 7 partly cored holes, have been drilled during various drilling campaigns in the Isaac area by previous explorers. Details of historic drilling, geological and geophysical logging, and sampling was not sighted and are assumed to be according to industry standards at time of production of the historic open cuts.

The drill hole density (core and chip) in the Isaac area allows for a good level of confidence in seam splitting, seam thickness and coal quality.



#### **4. Sample Analysis**

Coal quality and analysis were reportedly done by two companies, namely:

- ACIRL Ltd (Mackay) – Large Diameter Coal,
- SGS (Mackay) – LOX Testing.

All laboratories are Australian Certified testing facilities. Key raw qualities analysed were moisture, ash, volatile matter, sulphur, CSN and calorific value.

#### **5. Resource Estimation and Modifying Factors (Including Cut-off Grades)**

The coal resource has been estimated utilising the Australian Guidelines for Estimating and Reporting of Inventory Coal, Coal Resources and Coal Reserves (Coalfields Geology Council of NSW and the Queensland Mining Council, 2014).

In this resource estimate, for a drill hole to be classified as a Point of Observation (PoO) for a seam or ply, it must be a cored hole and have:

- A geophysical log for the cored hole (or its pilot hole), including density and gamma-ray data
- Greater than 90% core recovery across a seam or accepted by CP as being representative of the seam through analysis of the coal quality results, geophysical signature, and geological logging notes
- Raw coal quality data, including at least Relative Density and Ash.

There are seven coal quality holes (including the large diameter, duplicate hole) used as PoOs for this estimate.

The 2014 Coal Guidelines does not specify specific requirements on what constitutes a PoO but states the need for consistent seam stratigraphy and coal quality can be established.

For the project seams designated areas of confidence were assigned according to PoO spacing and seam variability relating to thickness and quality.

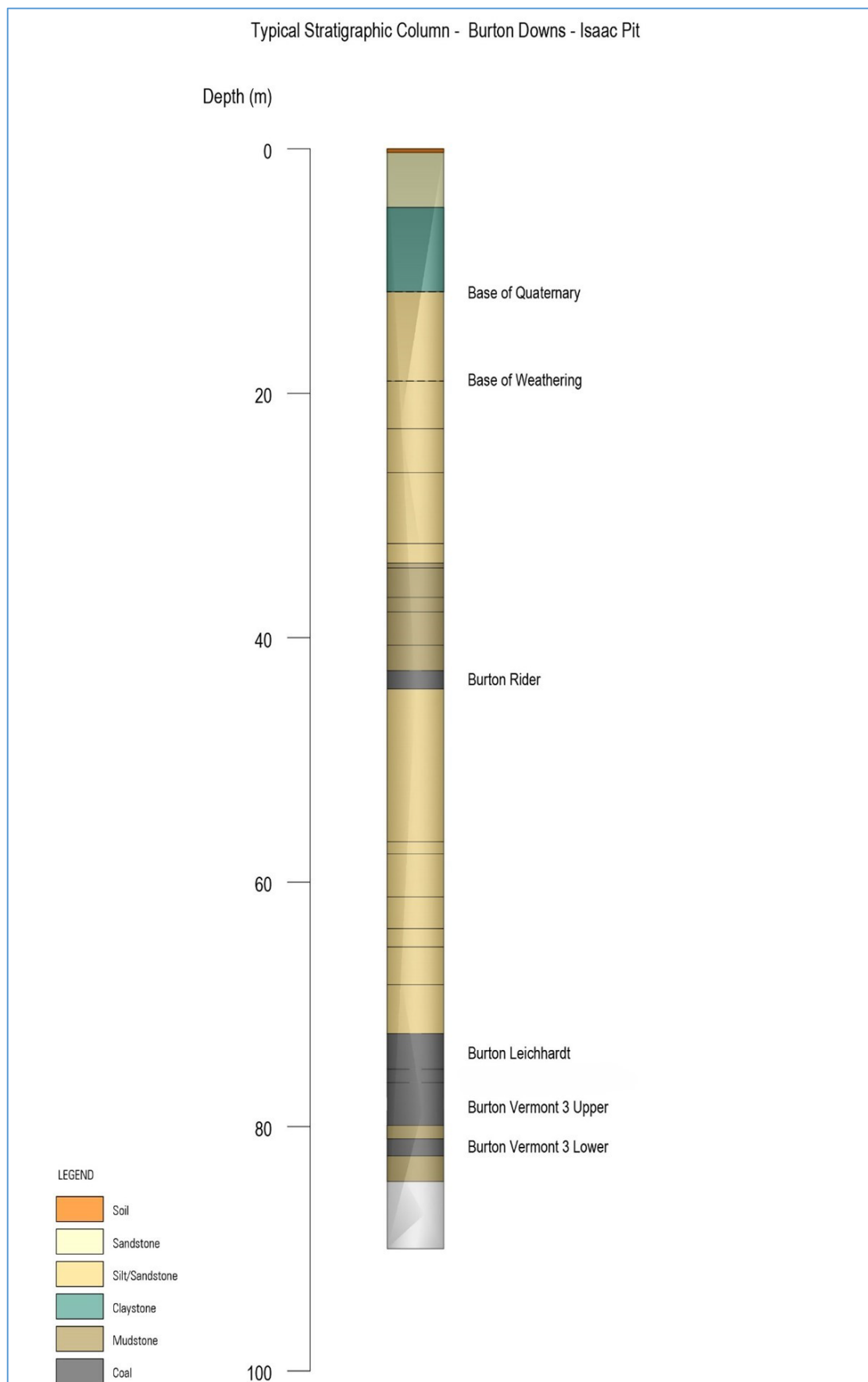
The nominal spacing between PoOs used for the classification is:

- 500 m for Measured
- 1,000 m for Indicated, and
- 2,000 m for Inferred.

The resources have been extrapolated beyond the last drill hole for the above nominal distances.

A minimum of three PoOs was required to generate resource estimates for a single resource category. Where these PoOs formed a linear relationship relative to each other, the continuity of the deposit could not be established. Therefore, as a minimum three PoOs needed to form a 'triangle shape' spatially, allowing the continuity between these points to be established.

A maximum raw ash content of 50% (adb) cut-off is generally applied to resource estimates. None of the Isaac Pit samples shows an ash content of > 50%.



**Figure 4:** Typical Stratigraphic Column (Isaac Area)





## 6. Mining Factors and Assumptions

Xenith prepared a Coal Resource estimate for the Isaac Pit in November 2024 which is used as a basis for the current JORC Coal Reserve estimate. These Coal Reserves are a sub-set of the underlying resource estimate; therefore, the Resources are inclusive of the Reserves. The Coal Reserve estimate presented in this report is based on the outcome of pit optimisation results, applicable mining methods, mining schedule and the financial analysis carried out by Xenith. The Competent Person for the estimation of Coal Reserves considers that the proposed mine plan and mining schedule is technically and economically viable and achievable. This has been done by reviewing all the modifying factors, estimating Reserve in the pit shell and preparing a production schedule and economic model which confirms a positive cash margin using the cost and revenue factors as described in this report. The Table 7 outlines the mine design factors to estimate the Reserve Tonnage.

**Table 7: Mine Design Factors**

Factor	Chosen Criteria
Minimum mining thickness of coal and maximum parting thickness	0.3m
Overall highwall and endwall slope of the open cuts	40° to 45°
Maximum pit depth for open cut	150m
Strip width	50m
Auger mining depth of penetration	Up to 150m
Offset from Q1000 limit	50m

Xenith engaged Blackrock Mining Solutions for Geotechnical design parameter assessment for the Isaac pit. The geotechnical assessment report dated December 2020 has suggested standard design angles and this information has been used for the construction of open cut pits for the Reserves estimate.

The open cut pit proposed in the Isaac mining area is green field and has not been mined previously. The mining factors applied to the resource model for deriving mining quantities were selected based on the use of suitably sized excavators and trucks which were used previously in this area and being currently used in the Ellensfield South (ES) and Plumtree North (PN) pits (Burton Complex).

The Coal resource geology, economic, lease extent and Q1000 lines have been used to form the limits of the open cut and auger mining. The economic pit floor for the Isaac pit is the BL/BV3U (Leichhardt and Vermont 3 Upper) seam in all the open cut mining areas. Auger mining area targets the BL/BV3U (Leichhardt and Vermont 3 Upper) seam Isaac pit highwall.

Loss and dilution factors that have been applied in determining ROM coal quantities. The coal recovery in the auger mining blocks has been estimated based on the similar mining conditions and the estimate provided by Coal Augering Services (CAS) in the proposed blocks.

Given the similarity in geological conditions between Ellensfield South and Isaac Pit, Xenith considers that the open cut mining in Isaac Pit would also use truck-shovel fleet/s for mining. The 2021 Coal Reserve estimate identified the opportunity for auger mining in the highwall. Upon

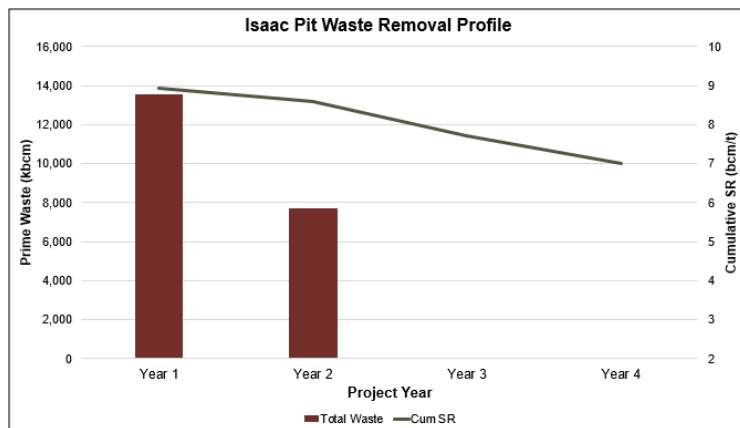


reviewing the updated information, Xenith considers auger mining of the highwall to be feasible. However, the presence of faults in the south prevents meaningful recovery. Therefore, auger coal designs were limited to the region north of the faulted region.

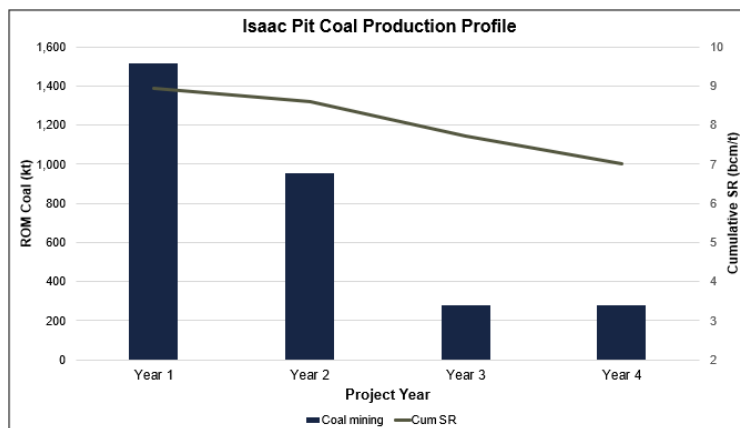
The Coal Reserve estimate is based on an equipment level dig, dump and haulage schedule created in Micromine's "Spry" software package. The Isaac Pit box cut is planned to be excavated with two excavator fleets. The two excavators are planned to continue strip mining in Isaac Pit until the final strip, at which point one excavator fleet will be removed. Once the final strip of coal is removed, the auger is planned to mine coal in the highwall.

Quantities for major mining activities (e.g. topsoil, drill and blast) were exported for costing. Isaac Pit has a mine life of four years with the selected equipment with a peak annual production of 1.1 Mtpa of ROM coal.

No waste can be dumped in-pit due to the steep dip of the pit floor. Therefore, the waste has been planned to be dumped out of pit. The Isaac Pit out-of-pit dump footprint is constrained by the Q1000 lines of the Isaac River. Because of this constraint, there was not enough room to fit all the waste from Isaac Pit. Therefore, a portion of the waste was planned to be dumped in the nearby Burton North void. Coal is planned to be hauled to the Burton CHPP. Both the coal hauls and Burton North waste hauls from Isaac Pit will require a crossing across the Isaac River.



**Figure 5: Isaac Pit LOM Waste Profile**



**Figure 6: Isaac Pit LOM Coal Profile**



## **7. Metallurgical Factors and Market Assessment**

The Isaac mining area has comprehensive coal quality data to support ROM and product coal. The metallurgical process is well known for the Burton, Leichhardt and Vermont seams in the Burton Downs mining area and has been used in the past for the marketable products. The existing coal handling and preparation plant will be using similar washing technology to produce low ash coking and moderately high ash thermal coal. The product coal (coking and thermal coal) from Isaac pit and auger will be sold into appropriate markets. The Coal Resource model used for this Coal Reserve estimate contained yield and washability data with specified products yields and coal qualities by seam. No allowance has been made for deleterious elements or out of specification products.

## **8. Cost and Revenue Factors**

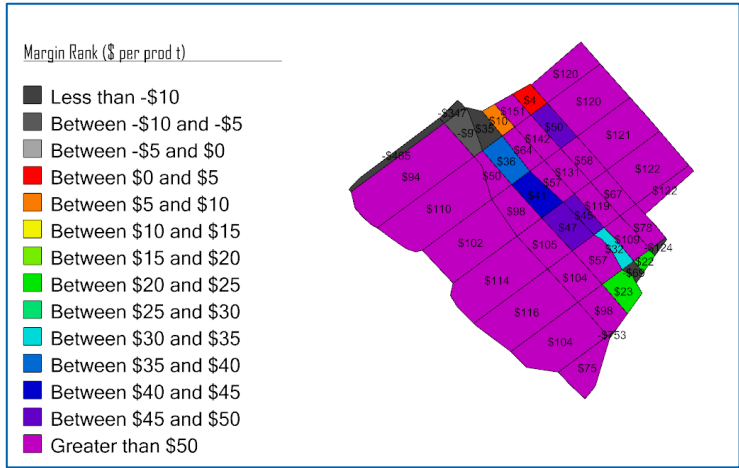
Quantities and qualities derived from the geological model and the battered block designs have been transferred into a Spry mine scheduling model. This Spry model performed the calculations needed to estimate in situ, ROM, Product and Reserve data from imported data. Margins have been calculated for all seam-level records, as an aid to determining cut-off margin blocks in all the Isaac pit area.

Measured and Indicated Coal Resources were used and defined separately with waste allocations in line with the current mine plan. Coal Reserve (Proved Coal Reserve and Probable Coal Reserve) have been estimated considering economics and physical and operational constraints such as existing infrastructure and spoil dump locations.

The Reserves for the Isaac pit and auger mining area have been estimated on the basis that the mining operations will be performed by truck and excavator for open cut mining and utilising augering in the planned high wall coal within the mining lease area when available. Reserve tonnages and qualities have been converted to the desired moisture bases for reporting.

A Commodity Insight ("CI") report dated August 2024 on coal price forecasts for long term coking and thermal coal price was used as a base pricing assumption. The long-term coal price for BCC Lenton coking at 9.5% ash as per the CI report has been estimated at USD 196/t. BCC also provided foreign exchange (FX) forecasts (AU\$:US\$) as 0.68.

Figure 6 shows the margin rank of Isaac Pit based on the cost, revenue and tax assumptions. Isaac Pit depth was limited by ramp access rather than economics, resulting in a strong positive margin for the final open cut strip. There is a negative margin pocket in the north-west of the pit. This is due to the coal dipping away from the endwall ramp, resulting in partial recovery.



## 9. Environmental Factors

Isaac Pit is a part of the greater Burton Downs complex, which contains two residual voids in Ellensfield and Burton North.

The Burton Downs project area also has four WLs associated with the operation of the Teviot dam, one levee and two diversions within ML 70109. There is no EPBC approval in place for this area and due to the age of the lease is believed the grandfather provisioning of the EPBC Act will apply.

Overall, the project is operationally of a good standard and the rehabilitation and closure risks presented are similar to other projects of this size and age within the Bowen Basin.

There are numerous tenures adjoining and overlapping, as well as various linear infrastructure (Sunwater and various power entities) located on the Burton Downs project area. This does not necessarily present a constraint but rather an increase in the number of stakeholders that require ongoing engagement and liaison activities. This is particularly relevant for the Mallowa haul road which is used by numerous parties.

The EA relating to ML 70109 falls within the transitional measures associated with the PRCP Guideline. This removes the extensive community consultation requirement. Overall, these issues are considered to be consistent with sites of this size and age within the Bowen Basin.



## 10. Risk Factors

Xenith has reviewed and assessed the risks associated with the mining of remaining coal through open cuts and auger blocks within the project.

Xenith views that the Coal Reserve estimates reported herein are subject to risks as per but not limited to the following:

- Securing up all the transfer of EA conditions and all the approvals and permits in place before the start date of mine operation
- The auger mining has been considered up to 150 m penetration depth into the highwall but the resultant coal recovery, coal qualities and penetration depth will depend on the actual geology
- Coal Reserve estimates resulting from the current mine plans and the mine schedules are based on supplied data from Bowen including the latest topographical plan and geological data
- Coal produced in the Burton Downs complex has historical product yields, but this may vary depending upon loss and dilution associated with coal mining
- Product coal from the project has always been sold to the market, but there will always be some risks associated with the marketing of product coal in the future
- Location of the northern fault, which may reduce the strike of the pit
- The availability of standard equipment and auger mining services

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**The Board of the Company has authorised the release of this announcement to the market. For further information please contact:**

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### About Bowen Coking Coal

Bowen Coking Coal has established a significant hard coking coal position in Queensland's world class Bowen Basin as the company serves the increasing demand for high, quality steelmaking coal around the world.

The Company's flagship Burton Mine Complex near Moranbah encompasses multiple operations with the Ellensfield South Mine serving a centralised Coal Handling and Preparation Plant (CHPP) and train load out facility connected by a haul road. Lenton and Plumtree North are co-located undeveloped open-cut projects which will provide production continuity at Burton.

Bowen's other assets include the Broadmeadow East Mine near Moranbah and the Bluff Mine near Blackwater, which are both currently under care and maintenance. The company also holds the Isaac River (100%), Hillalong (85%) Cooroorah (100%), Carborough (100%) and Comet Ridge (100%) coking coal development projects and is a joint venture partner in Lilyvale (15% interest) and Mackenzie (5% interest) with Stanmore Resources Limited.

The highly experienced Board and management aim to grow the value of the company's coking coal projects to benefit shareholders by leveraging innovation and maximising the assets and network of the team.





### Competent Person Statement

Resources have been approved by Mr Troy Turner who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Turner, Managing Director and a fulltime employee of Xenith Consulting Pty Ltd, has sufficient experience that is relevant to the styles of mineralisation under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Turner has approved this ASX announcement and Resources Statement as a whole in the form and context in which it appears in this release.

Reserves have been approved by Mr Sunil Kumar who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Kumar, Principal Mining Engineer and a fulltime employee of Xenith Consulting Pty Ltd, has sufficient experience that is relevant to the styles of mineralisation under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Kumar has approved this ASX announcement and Reserves Statement as a whole in the form and context in which it appears in this release.

### Forward-Looking Statements

Certain statements made during or in connection with this statement contain or comprise certain forward-looking statements regarding the Company's Mineral Resources, exploration operations and other economic performance and financial conditions as well as general market outlook. Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, such expectations are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or projected in any forward-looking statements and no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, delays or changes in project development, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in coal prices and exchange rates and business and operational risk management. Except for statutory liability which cannot be excluded, each of the Company, its officers, employees and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in this statement and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this statement or any error or omission. The Company undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events other than required by the Corporations Act and ASX Listing Rules. Accordingly, you should not place undue reliance on any forward-looking statement.



## APPENDIX A: JORC CODE, 2012 EDITION – TABLE 1

This Appendix details sections 1 2 3 and 4 of the JORC Code 2012 Edition Table 1. Section 5 'Estimation and Report of Diamonds and Other Gemstones' have been excluded as they are not applicable to this deposit and they are not applicable to this ASX announcement.

### SECTION 1 SAMPLING TECHNIQUES AND DATA

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

Criteria	JORC Code Explanation	CP Comments
<b>Sampling Techniques</b>	<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>The Isaac project drilling and sampling data have been provided by New Hope Group as part of the sales process to Bowen Coking Coal. No drilling has been undertaken on the subject mining leases since 2018. A review, by New Hope, of the drilling history revealed that Peabody used similar practises to New Hope's.</p> <ul style="list-style-type: none"> <li>• LOX Holes – were tested to define the full fresh face and soot lines. Initial testing to define the fresh coal intervals were undertaken on these holes using CSN determinations (CSN 7 = fresh coal). Subsequent testing of the weathered coal samples for Inherent Moisture (IM), Ash Content and Specific Energy (SE) was undertaken</li> <li>• Core Holes – All core holes are logged and sampled directly from the core table in the field. Depths are measured using a tape measure per core run.</li> <li>• All coal in the drill hole is sampled, regardless of thickness.</li> <li>• Coal quality analyses was done on the full seam interval.</li> </ul> <p>A review of historic coal quality data shows that slim core coal and LOX samples were sent to SGS Mackay. Slim core and carbonisation testing were conducted by ACIRL Ipswich. These labs are NATA accredited.</p>
<b>Drilling Techniques</b>	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i></p>	<p>All holes were planned and drilled vertically. Holes were drilled on air or water. Chip holes were drilled using a variety of bit types, PCD, Blade or Hammer with diameters ranging from 114-120 mm. Coal quality core holes were drilled using HQ size core diameter (63 mm). Only BD1379LD was drilled using 6-inch core size to assist in gaining a larger sample mass for detailed analysis.</p>
<b>Drill Sample Recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure</i></p>	<p>Core depth and sample reconciliation is recorded and compared against the drilled depth and the recovered thickness per run. Logged coal interval thicknesses are compared and reconciled against geophysical thicknesses and depths.</p>



Criteria	JORC Code Explanation	CP Comments
	<p><i>representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>Core loss and expansion is accounted for in the field. Typically, a 95% core recovery is required when drilling coal. Failure to meet this recovery generally resulted in a redrilling of the hole.</p>
<b>Logging</b>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>Chip holes – Drill cuttings (chips) are laid out metre by metre as they are drilled so they can be logged and recorded on the lithology log.</p> <p>Core holes – Core depths and sample intervals are marked on the core table. Samples are given unique sample numbers which are transcribed onto the lithology logs as the geologist logs and records the lithologic intervals.</p> <p>The core is photographed at generally 0.5m intervals. At the completion of drilling, downhole geophysical logging is conducted on all holes that intersect coal. The tools that are typically used to gather geophysical data are.</p> <ul style="list-style-type: none"> <li>• Dual Density (Long-spaced and Short-spaced Density)</li> <li>• Gamma</li> <li>• Caliper</li> <li>• Verticality</li> </ul> <p>A calibration drill hole was present at Burton and is used to ensure all geophysical tools are calibrated for this deposit.</p>
<b>Sub-Sampling Techniques and Sample Preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>Samples are marked on the core table. They are placed into uniquely numbered sample bags.</p> <p>Sample numbers are printed on waterproof tags, stapled facing outward on the sample bag, this is for ease of identification.</p> <p>The samples were analysed at NATA accredited laboratories typically for</p> <ul style="list-style-type: none"> <li>• Drop shatter</li> <li>• Raw Coal Analysis</li> <li>• Fresh Floats Analysis at F1.375</li> <li>• Sizing Properties Analysis</li> <li>• Float/Sink Analysis</li> <li>• Froth Flotation</li> <li>• Product Composite Analysis</li> </ul> <p>Carbonisation testing was conducted on BD1789LD.</p>
<b>Quality of Assay Data and Laboratory Tests</b>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and</i></p>	<p>The coal quality laboratories comply with Australian Standards for all coal quality tests and are certified by the National Association of Testing Authorities, Australia (NATA).</p>



Criteria	JORC Code Explanation	CP Comments
	<p><i>model, reading times, calibrations factors applied and their derivation, etc.</i></p> <p><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></p>	
<b>Verification of Sampling and Assaying</b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>Sampling and Assaying procedures were reviewed as part of the exploration programs.</p> <p>The only twinned holes are the slimcore hole BD1058C and the large diameter hole BD1379LD.</p> <p>Final coal quality results were loaded into the geological database GDB, this was used to eliminate any typographical errors and minimise data handling.</p>
<b>Location of Data Points</b>	<p><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>The Isaac project drill holes were surveyed using the AGD84 datum, Australian Map Grid Zone 55 with all elevation data recorded in Australian Height Datum (AHD).</p> <p>Historical drill hole survey was conducted by Pioneer Surveys Pty Ltd (Mackay). Cottrell Cameron &amp; Steen (CCS) surveyors have provided surveying services during the previous five years of activity at Burton.</p> <p>The topography surface used in the geological model was derived from Lidar data acquired from Peabody.</p>
<b>Data Spacing and Distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>123 holes have been modelled to define the Isaac project resources. This includes nine cored holes. Some of the holes are located south of the Isaac River.</p> <p>On average, the drill hole spacing for the Isaac Pit is in the order of 4 holes per hectare.</p> <p>Drill hole spacing has been dictated by the characteristics and consistency of the target seams within the deposit.</p> <p>Considering the continuity of the target seam(s) in the deposit, this spacing has proven to be sufficient to give adequate control to the model and give the required confidence in the geological interpretation.</p>
<b>Orientation of Data in Relation to Geological Structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p>	<p>The seams of the Isaac Pit deposit dip to the east. Dips range from approximately 9-19° with an average of approx. 15°.</p> <p>Several drill holes intersected seam repeats, caused by thrust faults with displacement of 5 to 10m.</p> <p>The samples were taken in un-faulted seams.</p>
<b>Sample Security</b>	<p><i>The measures taken to ensure sample security.</i></p>	<p>Samples are taken directly after they have been drilled and lithologically logged. They are placed into plastic bags and labelled with unique identifiers.</p>



Criteria	JORC Code Explanation	CP Comments
		Samples are stored in a cool, dry and shady location while awaiting dispatch. Samples are delivered directly to lab, together with a checklist of samples.
<b>Audits or Reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Peabody procedures included exploration audit. Xenith is not aware of any specific audit/review reports.

## SECTION 2 REPORTING OF EXPLORATION RESULTS

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

Criteria	JORC Code Explanation	CP Comments
<b>Mineral Tenement and Land Tenure Status</b>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	The Isaac Project is on Mining Lease ML 70109 (Burton). The Authorised Holder Representatives are New Lenton Coal Pty Ltd (90%) and MPC Lenton Pty Ltd (10%)
<b>Exploration Done by Other Parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Diversified Mineral Resources Limited N.L. (DMR) drilled 19 holes (2 partial cores) between 1990 and 1992. Portland Mining Ltd (PML) conducted work programs in 1994 and 1998. In 1994, one partially cored hole in the south of the Isaac area and 4 non-core structure holes were drilled as a part of a larger Burton Mine investigation program. In 1998, 5 slim cores were recovered for coal quality testing to assess the coal quality trends along strike of the Isaac deposit. In 2001, RAG undertook a structure and LOX drilling program throughout the Isaac area, reducing the drill line spacing to 100 m with holes spaced between 50 m to 100 m apart. Each drill line investigated the LOX extent. In 2006, Peabody Energy Australia Coal Pty Ltd who acquired the Burton Coal Project in 2004 undertook a LOX and structural drilling program that commenced in May 2006. A total of 48 LOX holes, 9 non-core holes and 1 large diameter hole were drilled as part of the program. A total of 113 holes have been drilled on the Isaac area which consists of 46 non-core holes, 7 partially cored holes, 1 diamond core hole, 1 large diameter hole and 58 LOX holes. The project was then sold to Peabody Energy Australia Coal Pty Ltd in 2004. Peabody continued exploration on the Burton project until it was sold to the Lenton Joint Venture (LJV) in November 2017 before being bought by the Bowen Coking Coal Ltd. During the Peabody exploration phase, field activities were conducted by McElroy Bryan Geological Service, Sydney.





Criteria	JORC Code Explanation	CP Comments
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Burton deposit is located 120 km west-southwest of Mackay, Queensland. The Isaac Pit is located north of the Isaac River. Burton Mine produced coking and thermal coal for the export market to the south of river.</p> <p>The Isaac deposit is located on the eastern limb of the Nebo Synclinorium and target the Rangal Coal Measures (RCM). These coal measures are laterally continuous across the Bowen basin and were mined at the Burton open pits to the north of the ESPN deposits. Underlying the RCM are the Fort Cooper Coal Measures (FCCM) and these coal measures occur within the Permian Blackwater Group. The RCM are overlain by sediments of the Triassic Rewan Group, with Cenozoic cover unconformably overlying the coal sequence. The RCM are comprised of fine to medium grained sandstone, siltstone, mudstone and coal. They range from 120 – 150 m thick and contain the Leichhardt and Vermont seams and these seams split significantly and coalesce along the strike of the deposit.</p> <p>The FCCM comprise grey lithic sandstones, siltstones, mudstones and coal. The Girrah coal seam is a thick unit that is high in ash, interbedded carbonaceous mudstones and multiple tuffaceous claystone bands.</p> <p>The Isaac Pit contains numerous small-scale, thrust faults with a maximum displacement of 5 m to 7 m. Currently these faults have been interpreted to trend in East-West and almost vertical. Further drilling is required to delineate the extent and scale of these interpretations. Seams dip to the east-northeast between 9-19°.</p> <p>The Isaac Pit is bound by the Isaac creek to the south of the deposit with a small unnamed tributary located to the north of the deposit area.</p> <p>6 coal seam or plies are recognised in the Rangal Coal Measures in the Isaac Pit deposit, in descending stratigraphic order the seams are named:</p> <ul style="list-style-type: none"> <li>• BR</li> <li>• BL</li> <li>• BV3U</li> <li>• BV3L</li> <li>• BV2</li> <li>• BV1</li> </ul> <p>The product make-up at Burton has been investigated to contain a split between coking and thermal coal from the RCM.</p>
<b>Drill Hole Information</b>	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length.</i>	<p>123 holes have been modelled in the Isaac Pit area, including 9 coal quality holes.</p> <p>Holes are drilled vertically and have been geophysically logged. The holes have been modelled as vertical holes. All the data is stored in the Datamine Minescape Geological DataBase (GDB)</p>



Criteria	JORC Code Explanation	CP Comments
	<i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	
<b>Data Aggregation Methods</b>	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	Isaac Pit samples were sampled to seam boundaries. No compositing took place. Seams with a raw ash (adb) above 50% are not classified as coal and are generally not included in resource estimates. None of the samples of the BL or BLV3U exceed 50% ash.
<b>Relationship Between Mineralisation Widths and Intercept Lengths</b>	<i>These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i>	Holes are drilled vertically to intersect the sub-horizontal seams (seam dip is an average of 15°). Coal seam depths are corrected to detailed density and gamma geophysical logs.
<b>Diagrams</b>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	A drill hole location plan as well as seam contour maps and cross-sections are provided in the resource report.
<b>Balanced Reporting</b>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	The relevant exploration data for the Isaac project has been reviewed, validated and reported accordingly. Some exploration holes have not been included in the geological model, for reasons including missing geophysical logs and historical sampling techniques where seams have been composited and rejected on the basis that the seams are being misrepresented in terms of coal quality results.



Criteria	JORC Code Explanation	CP Comments
		Sufficient drill hole coverage at the Isaac deposit has allowed for the classification of inferred/indicated/measured resource categories.
<b>Other Substantive Exploration Data</b>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	No seismic survey was carried out in the Isaac area.
<b>Further Work</b>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	The Isaac Pit area is sufficiently explored to estimate resources. Future works might include <ul style="list-style-type: none"> <li>• Coal quality holes for detailed sizing and washability;</li> <li>• More structural holes in the deeper areas;</li> <li>• Seismic 2D lines.</li> <li>• Geotechnical and hydrology drill holes.</li> </ul>

## SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

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

Criteria	JORC Code Explanation	CP Comments
<b>Database Integrity</b>	<i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used.</i>	The data used for the resource estimation have been reviewed against the geological logs, geophysical logs, laboratory results sheets.
<b>Site Visits</b>	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.</i>	The Competent Person has not conducted a recent site visit to the Project area but is familiar with the stratigraphy and coal seams as described in this report. The Competent Person's familiarity with the regional operating coal projects and stratigraphy is thorough and sufficient. Review of the exploration data indicates that the geology is typical of the area.
<b>Geological Interpretation</b>	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made.</i>	The drill hole density (core and chip) for the Isaac project allows a sufficient level of confidence for the seam splitting, seam thickness, coal quality, and the location of sub-crops.



Criteria	JORC Code Explanation	CP Comments
	<p><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></p> <p><i>The factors affecting continuity both of grade and geology.</i></p>	
<b>Dimensions</b>	<p><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></p>	<p>The resource area covers approximately 0.9 km<sup>2</sup>.</p> <p>The resources have been limited to less than 300m depth to the Burton Leichhardt seam</p> <p>The coal resources are limited to fresh, un-weathered coal below the base of weathering which typically averages 20 m.</p>
<b>Estimation and Modelling Techniques</b>	<p><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></p>	<p>The geological model was constructed in Minescape using different modelling algorithms for structure and coal quality parameters. Details of the modelling parameters are given in the resource report.</p> <p>The inverse distance squared interpolator was used for raw coal quality modelling.</p> <p>Samples have been collected on a full seam interval basis.</p>
<b>Moisture</b>	<p><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></p>	<p>Coal resource tonnages were estimated using a calculated Preston and Sanders in situ relative density.</p> <p>Based on the results from coal quality testing (as well as from Burton mine train moistures), the in-situ moisture has been estimated at 6.75%.</p> <p>Coal qualities relating to the resource tonnages are reported on an air-dried basis.</p>



Criteria	JORC Code Explanation	CP Comments
<b>Cut-Off Parameters</b>	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	A 50% maximum ash (air dried) limit is generally applied to coal resources. None of the resource seams samples exceeds 50% ash.
<b>Mining Factors or Assumptions</b>	<i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i>	Resources have been estimated to a maximum depth to the roof of the BL seam of 300m. A step off 50 m from the Isaac River and to an unnamed creek in the north-western subcrop area has been applied. A step off 50m from Mining Lease boundaries has been applied.
<b>Metallurgical Factors or Assumptions</b>	<i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i>	It is Xenith's opinion that at this stage of the project there are no limiting metallurgical factors.
<b>Environmental Factors or Assumptions</b>	<i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i>	It is Xenith's opinion that at this stage of the project there are no limiting environmental factors.
<b>Bulk Density</b>	<i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences</i>	Coal resource tonnages were estimated using a calculated Preston and Sanders in situ relative density. Based on the results from coal quality testing (as well as from Burton mine train moistures), the in-situ moisture has been estimated at 6.75%.





Criteria	JORC Code Explanation	CP Comments
	<p>between rock and alteration zones within the deposit.</p> <p>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</p>	
<b>Classification</b>	<p>The basis for the classification of the Mineral Resources into varying confidence categories.</p> <p>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</p> <p>Whether the result appropriately reflects the Competent Person's view of the deposit.</p>	<p>Three resource categories have been identified, depending on the level of confidence in the seam structure and continuity plus the level of variability in the coal quality data.</p> <p>Drill holes provide the basis for structural/thickness continuity, supported by seismic survey lines.</p> <p>Points of Observation have been used to establish coal quality continuity.</p>
<b>Audits or Reviews</b>	<p>The results of any audits or reviews of Mineral Resource estimates.</p>	<p>No external audits have been performed on the Mineral Resource estimate, but internal QA/QC protocols have been followed.</p>
<b>Discussion of Relative Accuracy/ Confidence</b>	<p>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person.</p> <p>For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</p> <p>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</p> <p>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</p>	<p>Xenith have assigned three levels of confidence (measured, indicated, and inferred) to the coal resource estimate, depending on the seam and drill hole spacing, as described.</p> <p>Factors that could affect accuracy include unknown structures between completed drill holes, seam washouts in roof or in-seam stone bands developing. No evidence exists now for these, apart from what has currently been geologically modelled or exists within the models' design database.</p>

## SECTION 4 ESTIMATION AND REPORTING OF ORE RESERVE

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

Criteria	JORC Code Explanation	CP Comments
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<p>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</p> <p>Clear statement as to whether the Mineral Resources are reported</p>	<ul style="list-style-type: none"> <li>Isaac Pit is located 120 km west-southwest of Mackay, Queensland. Isaac Pit is part of a wider mining complex called the Burton Downs complex that is composed of Isaac Pit, Burton North, Burton South, Ellensfield</li> </ul>



Criteria	JORC Code Explanation	CP Comments
	<i>additional to, or inclusive of, the Ore Reserves.</i>	<p>South and Plumtree North. The Burton pits were mined as open cut pits by Peabody until early 2017. Mining has resumed as of 2023 in Ellensfield South pit. Isaac Pit is located north of the existing Burton mines and north of the Isaac River. Isaac Pit is planned to produce coking and thermal coal for the export market.</p> <ul style="list-style-type: none"> <li>• The Lenton Joint Venture (LJV) is a tenancy in common agreement between New Lenton Coal Pty Ltd (NLC), a subsidiary of new Hope Corporation Ltd, and Formosa Plastics Group (FPG), a subsidiary of MPC Lenton Pty Ltd. NLC has a 90% controlling interest with the remaining 10% held by FPG. The Project includes Isaac Pit which is planned to extract metallurgical and thermal coal from ML 70109.</li> <li>• JORC Resource estimates for Isaac Pit have been prepared by Xenith and signed off by Troy Turner as the Competent Person. These have been used as the basis for the conversion from Coal Resources to Coal Reserves for the Burton coal assets.</li> <li>• The JORC Resource model for Isaac Pits included seams from the Rangal coal measures. Total Coal Resource estimates of 7.2 Mt reported within Burton Downs are as follows: <ul style="list-style-type: none"> <li>○ Measured Resource: 4.3 Mt</li> <li>○ Indicated Resource: 1.8 Mt</li> <li>○ Inferred Resource: 1.1 Mt</li> </ul> </li> </ul> <p>The JORC Resource estimate is inclusive of the Coal Reserve estimate.</p>
<b>Site Visits</b>	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.</i>	The competent person is familiar with the general area of Isaac Pit, no site visit specifically for the purpose of preparing this Coal Reserve estimate was undertaken, as the competent person doesn't believe it would have materially added to knowledge of the site.
<b>Study Status</b>	<i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i>	<ul style="list-style-type: none"> <li>• The Burton mining complex was initially developed by Portman Resources in 1996 and operated by Thiess. In 2004, Peabody Energy purchased the Burton Project which Thiess continued to operate on their behalf until its transfer to care and maintenance in 2016. Subsequently, New Lenton Coal Pty Ltd and MPC Lenton Pty Ltd, as part of the New Hope Lenton Burton Joint Venture, acquired the Burton Project area in late 2017, given its close proximity to their New Lenton Project area.</li> <li>• Both coking and thermal coal are currently exported for the market at from Ellensfield</li> </ul>



Criteria	JORC Code Explanation	CP Comments
		<p>South pit. The Leichhardt and Vermont seams of the Rangal Coal Measure and the top of the Fort Cooper Coal Measures were the primary resource targets. Processed coal from the Project CHPP was trucked 36 km south along the Mallowa haul road to the TLO located at the southern end of ML 70109. The product was then transported 150 km on the Goonyella Rail line to the export terminal at DCBT.</p> <ul style="list-style-type: none"> <li>• Xenith is of the view that there is sufficient information available with the past mining activities in Burton area for the mining mine plan and financial analysis to have a high confidence level. Also, the reasonableness of costs has been verified against current contractor rates in Ellensfield South.</li> <li>• Conventional strip mining is planned for Isaac Pit. Waste will be drilled and blasted before being removed by benches using diesel hydraulic excavators and rear dump trucks. Isaac Pit open cut mining will progress from the western subcrop to the east, terminating at approximately 150m depth. No waste can be backfilled into the void due to the steep dip and poor floor conditions. Isaac Pit will utilise the combination of an out of pit dump and the nearby Burton north void. Following open cut mining, high wall augering is planned in the non faulted area of coal.</li> <li>• From here, the ROM coal will be hauled and washed at CHPP near the Burton mine. The product coal will then be transported about 36 km on Mallowa Road to the TLO located at the southern end of ML 70109.</li> <li>• Product coal will be railed to export coal ship loading facilities.</li> </ul> <p>Modifying factors used to convert Coal Resources to Coal Reserves have been derived in part from knowledge of the current and past mining activities in the area.</p>
<p><b>Cut-off Parameters</b></p>	<p><i>The basis of the cut-off grade(s) or quality parameters applied.</i></p>	<ul style="list-style-type: none"> <li>• The final pit limits for Isaac Pit were determined by practical and geological factors. The Q1000 line bound the western and southern sides of the pit, and the steep coal dip determined the depth that the excavator fleet could reach, which was at 150m. The auger blocks were limited to the area north of the major fault zone. A margin rank was run on the mine design to check for a positive margin.</li> <li>• The mine plan was evaluated in a financial analysis model to evaluate its economic viability.</li> </ul> <p>A thickness cut-off of 0.30m was used for both coal (minimum seam thickness) and</p>



Criteria	JORC Code Explanation	CP Comments
		waste (maximum parting thickness) during coal seam aggregation.
<b>Mining Factors or Assumptions</b>	<p><i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i></p> <p><i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i></p> <p><i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i></p> <p><i>The major assumptions made, and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></p> <p><i>The mining dilution factors used.</i></p> <p><i>The mining recovery factors used.</i></p> <p><i>Any minimum mining widths used.</i></p> <p><i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></p> <p><i>The infrastructure requirements of the selected mining methods.</i></p>	<ul style="list-style-type: none"> <li>• The criteria utilised to determine if a Resource can be converted to a Reserve include appropriate Resource classification of Measured or Indicated, pit optimisation to determine target area, mine design to create mining blocks inside the economic pit limits, application of appropriate modifying factors to estimate the Reserve tonnage and scheduled economic evaluation to ensure financial viability.</li> <li>• The modifying factors used to convert Resources to Reserves were derived in part from knowledge on the current and past mining operations in the Burton Downs complex.</li> <li>• Truck and excavator mining methods are currently being employed in Ellensfield South. The competent person considers that this method is appropriate to extract in Isaac Pit given the similarity between the two pits.</li> <li>• Xenith engaged Blackrock Mining Solutions for Geotechnical design parameter assessment for Isaac Pit. The geotechnical assessment report dated December 2020 recommended batter angles which have been used in the mine design.</li> <li>• The geotechnical design parameters used were: <ul style="list-style-type: none"> <li>- 70 degree overall angle highwall through unweathered material</li> <li>- 45 degree overall angle highwall through weathered material</li> <li>- 37 degree lowwall (angle of repose)</li> </ul> </li> <li>• Isaac Pit will utilise the existing Burton Downs complex CHPP to process its ROM coal. The product coal from the CHPP will be hauled to the TLO located about 36km from the CHPP at the southern end of ML 70109.</li> <li>• Waste dilution was estimated by assuming an average roof and floor dilution of 0.05m each. Dilution density has been assumed at 2.2 t/m<sup>3</sup>. Dilution ash has been assumed at 85%.</li> <li>• Coal loss has been estimated by assuming an average roof and floor loss of 0.05 m each.</li> <li>• No minimum mining width has been explicitly defined. Strips have been designed to a width of 50m. Coal blocks have been designed to a length of 100m.</li> <li>• Auger mining recovery was assumed to be 18%.</li> </ul>



Criteria	JORC Code Explanation	CP Comments
		<ul style="list-style-type: none"> <li>No Inferred Coal Resource has been included in the reported Coal Reserves.</li> </ul> <p>Project infrastructure requirements were not included in project capital estimates.</p>
<b>Metallurgical Factors or Assumptions</b>	<p><i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature.</i></p> <p><i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></p> <p><i>Any assumptions or allowances made for deleterious elements.</i></p> <p><i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i></p> <p><i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></p>	<ul style="list-style-type: none"> <li>Isaac Pit has extensive coal quality data.</li> <li>The existing coal handling and preparation plant will be using similar washing technology to produce low ash coking and thermal coal.</li> <li>This metallurgical process is well known and has been used in the past for the marketable products.</li> <li>The Coal Resource model used for this Coal Reserve estimate contained yield and washability data with specified products yield and coal qualities by seam.</li> </ul> <p>No allowance has been made for deleterious elements or out of specification products.</p>
<b>Environmental</b>	<p><i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i></p>	<ul style="list-style-type: none"> <li>Key environmental approvals are in place as the Burton Downs complex is an operating mine.</li> <li>The proposed mining operation is located within ML 70109.</li> <li>Selective placement of potential acid forming, and non-acid forming waste rocks may need to be carried out during operation.</li> </ul> <p>The competent person considers that there are reasonable grounds to expect that the proposed mining operations will adhere to the current EA provisions.</p>
<b>Infrastructure</b>	<p><i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i></p>	<ul style="list-style-type: none"> <li>Infrastructure already existing on site includes site access roads, administration building, bathhouse, maintenance facilities, dams and water management infrastructure, a coal handling and processing plant and associated infrastructure, stockpiles, waste storage facilities and electrical infrastructure.</li> <li>The TLO and rail infrastructure is already available to transport the coal through Goonyella Rail line to the export terminal at DCBT.</li> </ul> <p>It is proposed that the workforce currently operating in Ellensfield pit could be used to mine Isaac Pit. Accommodation could be provided in the existing camp.</p>





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<b>Costs</b>	<p><i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></p> <p><i>The methodology used to estimate operating costs.</i></p> <p><i>Allowances made for the content of deleterious elements.</i></p> <p><i>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.</i></p> <p><i>The source of exchange rates used in the study.</i></p> <p><i>Derivation of transportation charges.</i></p> <p><i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i></p> <p><i>The allowances made for royalties payable, both Government and private.</i></p>	<ul style="list-style-type: none"> <li>• Project capital costs were provided by Bowen Coking Coal and compared to the capital costs for startup in Ellensfield South.</li> <li>• No capital has been incorporated for mining equipment as the project has been modelled as a contract operation and all earth moving and other mining equipment related capital is included in operating costs as a contractor capital charge.</li> <li>• Operating costs for the mining study were provided by Bowen Coking Coal and were considered reflective of other similar contractor operations.</li> <li>• Costs were estimated in Australian dollars.</li> </ul> <p>A government royalty determined in accordance with the standard QLD government mining royalty rates has been included in the economic evaluation.</p>
<b>Revenue Factors</b>	<p><i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i></p> <p><i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></p>	<ul style="list-style-type: none"> <li>• Price forecasts for coking and thermal coal products were supplied by Bowen Coking Coal.</li> <li>• Coking coal revenue was based on at 85% of the forecast benchmark HCC price.</li> <li>• Thermal coal was based on the forecast Newcastle benchmark price.</li> </ul> <p>The exchange rate forecast (AUD:USD) provided by Bowen Coking Coal and used for the evaluation is 0.68.</p>
<b>Market assessment</b>	<p><i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></p> <p><i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></p> <p><i>Price and volume forecasts and the basis for these forecasts.</i></p> <p><i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i></p>	<ul style="list-style-type: none"> <li>• The coal products from the Burton Project have a current market which is expected to continue in the future.</li> </ul> <p>Price forecasts are described in the section above labelled "Revenue Factors".</p>
<b>Economic</b>	<p><i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i></p> <p><i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></p>	<ul style="list-style-type: none"> <li>• A financial model has been developed by Xenith and used for financial evaluation of the mine plan that forms the basis of the Coal Reserve estimate.</li> <li>• The discount rate used was 8%.</li> <li>• Inflation was not included in the financial model, as all values used were quoted as real values.</li> </ul> <p>The project NPV and sensitivities are considered commercially sensitive and are not disclosed in this report.</p>
<b>Social</b>	<p><i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i></p>	<ul style="list-style-type: none"> <li>• The stakeholder engagements are already in place and will continue through the planned mining operations in Isaac Pit.</li> </ul>



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		The Competent Person considers that there are reasonable grounds to expect that the current agreements will continue to be in place and that there are no significant issues that should prevent stakeholder agreements as required by the project plan.
<b>Other</b>	<p><i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></p> <p><i>Any identified material naturally occurring risks.</i></p> <p><i>The status of material legal agreements and marketing arrangements.</i></p> <p><i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals.</i></p> <p><i>There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i></p>	<ul style="list-style-type: none"> <li>• Mining leases and environmental approvals are already in place received from the Government.</li> </ul> <p>The Competent Person considers that there are reasonable grounds to expect that the current approvals will continue to hold required by the project plan.</p>
<b>Classification</b>	<p><i>The basis for the classification of the Ore Reserves into varying confidence categories.</i></p> <p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p> <p><i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i></p>	<ul style="list-style-type: none"> <li>• All Measured Resources inside the mine design have been converted to Proved Coal Reserves. All Indicated Resources inside the mine design have been converted to Probable Coal Reserves.</li> <li>• Compared to the 2021 JORC Reserve estimate, the 2024 JORC reserve estimate has more coal washability data. Therefore, there will be no downgrade from proved to probable in the 2024 JORC Reserve estimate.</li> <li>• No Coal Resources classified as Inferred have been included in the Coal Reserve estimate.</li> <li>• The competent person considers that the classification of all Coal Reserves into Proved and Probable Coal Reserves reflects the current level of study and certainty in modifying factors.</li> <li>• The outcome reflects the Competent Person's view of the deposit.</li> </ul>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of Ore Reserve estimates.</i>	<ul style="list-style-type: none"> <li>• Xenith has not undertaken any external audits or reviews of the previously reported Burton Coal Reserves by Lenton Joint Venture and so it is not appropriate to consider the current estimate as a revision of any previous estimate.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<i>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an</i>	<ul style="list-style-type: none"> <li>• The study basis for the conversion of Coal Resources to Coal Reserves is commensurate with the Pre-Feasibility</li> </ul>



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	<p><i>approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</i></p> <p><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></p> <p><i>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i></p> <p><i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></p>	<p>study level, as the Burton mine has been mined by open cut since 1996 using the proposed mining method. The confidence level in the reported Coal Reserve estimate is commensurate with the level of confidence in Modifying Factors that underpins it.</p> <ul style="list-style-type: none"> <li>• Coal price and exchange rate forecasting and cost assumptions represent a degree of risk and opportunity for the project.</li> <li>• Uncertainty and risk associated with other specific modifying factors for the conversion of Coal Resource to Coal Reserves are also discussed in other sections of this table above.</li> <li>• The statements above relate to global estimates, as the uncertainty in the modifying factors apply globally.</li> </ul>