

stanmore coal

21 August 2020

MINERAL RESOURCES AND COAL RESERVE UPDATE FOR ISAAC DOWNS

Highlights

- Exploration activities over the last 18 months has resulted in an increase to the Mineral Resource estimate for the Isaac Downs Project to 36 million tonnes (Mt). Importantly, all Resources are now declared as Measured and Indicated as defined under the JORC Code (24.7 Mt Measured and 11.5 Mt Indicated)
- The work undertaken for the Bankable Feasibility Study (BFS) has resulted in an increase in Recoverable Coal Reserve to 25.9 Mt of which 22.3 Mt is classified as Proved Reserves and 3.6 Mt is classified as Probable Reserves
- Marketable Coal Reserves at Isaac Downs now totals 17.9 Mt (17.3 Mt is coking coal and 0.6 Mt is thermal coal)
- The Bankable Feasibility Study undertaken by Palaris Australia is now in draft form and the results will be published when completed

Stanmore Coal Limited (**Stanmore** or the **Company**) is pleased to announce that the exploration activities and work undertaken as part of the Bankable Feasibility Study (BFS) has generated increases in the Mineral Resources and Coal Reserves attributable to the project. This work is reported to the standard required by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012).

Mineral Resources

Measured Group have undertaken the resource modelling and updated to the Mineral Resources available to date for the project held under the following tenements - MDL137, EPC755 and EPC728.

Table 1 highlights Mineral Resource estimates based on each ply within the main economic coal seams – the Leichardt and the Vermont seams.

Seam	Ply	Measured (Mt)	Indicated (Mt)	Total (Mt)
	L ¹	10.8	0.6	11.4
Leichhardt	LU	1.4	2.7	4.1
	LL3	1.1	2.2	3.3
	LL2	0.8	2.0	2.8
	LL1	1.9	1.0	2.9
	VU1	7.4	0.6	8.0
Vermont Upper	VU2	1.3	2.0	3.3
	VU3	-	0.4	0.4
Grand Total		24.7	11.5	36.2

Table 1: Summary of Coal Resources by Seam and Ply

¹ Note – The L ply of the Leichhardt seam is the coalescence of the sum of the remaining Leichhardt plies, being LU, LL3, LL2 & LL1, also refer Figure 1.

The coal seam stratigraphy and the seam/ply naming convention is illustrated below. Note the VU3 is a subset of VU2 and is not shown explicitly.



Figure 1: Isaac Downs Project – Seam Stratigraphy

Stanmore Coal has undertaken an extensive exploration drilling campaign over the last 18 months to increase the certainty and reliability of the geological data and coal quality data available. Borehole locations and tenement boundaries are shown in Figure 1.



Figure 1: Isaac Downs Project Location, Boreholes and Resource Area

The reconciliation to the previous Mineral Resource estimate is shown in Table 2 below:

Table 2: Comparison	of 2018 v 2020 Coal	Resources by Seam/Ply
----------------------------	---------------------	------------------------------

Seam / Ply Section	Resource Category	2018 (Mt) ²	2020 (Mt)	Difference (Mt)
L		9.9	10.8	0.9
LU			1.4	1.4
LL (LL2/3)			1.9	1.9
LL1	MEASURED		1.9	1.9
VU1		5.6	7.4	1.8
VU2		1.0	1.3	0.3
VU3				
Total	MEASURED	16.5	24.7	+8.2
L		2.3	0.6	-1.7
LU		2.2	2.7	0.5
LL (LL2/3)		2.2	4.2	2.0
LL1	INDICATED	1.5	1.0	-0.5
VU1		2.9	0.6	-2.3
VU2		0.9	2.0	1.1
VU3			0.4	0.4
Total	INDICATED	12.0	11.5	-0.5
L		<1		
LU		1		-1
LL (LL2/3)		<1		
LL1	INFERRED	2		-2
VU1				
VU2		2		-2
VU3				
Total	INFERRED	4		-4
GRAND TOTAL	ALL CATEGORIES	33	36.2	+3.2

Coal Reserves

Palaris Australia Pty Ltd (Palaris) provided an estimate of Coal Reserves for the Isaac Downs (ID) open cut coal mining project as at 30th June 2020. This estimate was prepared in compliance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code - 2012 Edition) and the Australian Guidelines for the Estimating and Reporting of Coal Resources (2014 Edition).

This assessment compiles the geological and mining aspects of the Coal Reserves within the mining areas that are located within the Isaac Downs exploration licences and mining lease applications and are the subject of plans for mining by open cut mining methods.

Coal resources supporting this Reserve estimate are outlined in the report: SMC, 2020 - Coal Resource Estimate, Isaac Downs Project, In Situ Coal Resources within MDL 137, EPC 728 and EPC 755. QLD, Australia (June 2020); MG502_Report_2020_01.

The resources were estimated by Mr. Toby Prior of Measured Group, who also is the Competent Person signatory. The 2020 resource report is supported by a JORC Code (2012) Table 1 checklist (attached as Appendix A), which reasonably describes aspects of the exploration, sampling and resource estimation procedure.

Palaris have reviewed the resource report and geological model to ensure that the methodology used in the estimation of coal resources is reasonable and supports the quantum and reserve categories

² Refer ASX announcement "Supplementary Target's Statement" dated 21 December 2018, 9:34 AM

for the 2020 Coal Reserve estimate. The reported Measured and Indicated Resources are inclusive of the Coal Resources modified to produce the Coal Reserves.

The total Resource for Isaac Downs is 36.2 Mt. The Resource comprises 68% Measured and 32% Indicated.

The reserves are estimated as at 30th June 2020 and reflect the mine designs currently used for the Bankable Feasibility Study (Isaac Downs), and the relevant part of Table 1 of the JORC report is attached (Appendix B).

Open Cut Mining Reserves

The open cut Coal Reserve estimate for Isaac Downs is shown in Table 3 below.

Seam - Ply	Proved ROM (Mt) 7% MROM	Probable ROM (Mt) 7% MROM	Total ROM (Mt) 7% MROM
Leichardt Upper	4.3	0.8	5.1
Leichardt Lower 3	4.4	0.9	5.2
Leichardt Lower 2	2.8	0.6	3.4
Leichardt Lower 1	3.5	0.4	3.9
Vermont Upper 1	5.8	0.1	5.9
Vermont Upper 2	1.5	0.8	2.3
Total	22.3	3.6	25.9

Table 3: Isaac Downs Project Open Cut Coal ROM Reserve Estimate by Seam

Subject to rounding

Open Cut Marketable Reserves

Marketable Coal Reserves have been estimated by applying Coal Handling and Preparation Plant (CHPP) yield recoveries to the ROM Coal Reserves. The open cut Marketable Coal Reserves for the Isaac Downs Project are shown in Table 4.

Table 7. Isaac Duwiis I Tulett Ubell Cut Cual Mai Kelable Resei ve Estillau

Product Type	Proved (Mt)	Probable (Mt)	Total (Mt)
SSCC (9.5% Ash) (11% M _{prod} - avg)	15.3	2.0	17.3
Thermal (16% Ash) (9.5% M _{prod} - avg)	1.3	0.55	1.85
Total Product	16.6	2.55	19.2

Subject to rounding; M_{prod} - Average moisture in product

It is recognised that the project has options to produce a combination of different marketable coals including an 8-8.5% ash semi-hard coking coal. The Marketable Reserve published is based on the 9.5% ash high quality semi-soft coking product which generates the highest coking coal yield as a percentage of total product.

This announcement has been approved for release by the Board of Directors of Stanmore Coal Limited.

For further information, please contact:

Craig McCabe Chief Executive Officer 07 3238 1000

Frederick Kotzee Interim Chief Financial Officer 07 3238 1000

Competent Person Statement

The information in this report relating to Coal Resources for the Isaac Downs Project is based on information prepared by a team of consultants under the guidance of Mr Toby Prior who is a Principal Geologist with Measured Group Pty Ltd. Mr Prior is a qualified Geologist (BAppSc (Geology), University of Southern Queensland), a member of the Australasian Institute of Mining and Metallurgy with over 20 years' experience, and has sufficient relevant experience to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Prior consents to the inclusion in the report of the matters based on the information, in the form and context in which it appears.

The Ore Reserve estimate is based on information compiled by Mr Michael Barker, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) (112634). Mr Michael Barker is General Manager, Feasibility Studies for Palaris. He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity 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 Barker has over 23 years' experience in the estimation, assessment, evaluation and economic extraction of Coal Reserves. He consents to the inclusion of this Reserve Estimate in reports disclosed by the Company in the form in which it appears.

About Stanmore Coal Limited (ASX: SMR)

Stanmore Coal operates the Isaac Plains coking coal mine in Queensland's prime Bowen Basin region. Stanmore Coal owns 100% of the Isaac Plains Complex which includes the original Isaac Plains Mine, the adjoining Isaac Plains East (operational), Isaac Downs (open cut mine project) and the Isaac Plains Underground Project. The Company is focused on the creation of shareholder value via the efficient operation of the Isaac Plains Complex and the identification of further development opportunities within the region. In addition, Stanmore Coal holds a number of high-quality development assets (both coking and thermal coal resources) located in Queensland Bowen and Surat basins.

Stanmore Coal Limited ACN 131 920 968

p: +61 7 3238 1000

info@stanmorecoal.com.au www.stanmorecoal.com.au

Level 15, 133 Mary Street, Brisbane QLD 4000 GPO Box 2602, Brisbane QLD 4001

APPENDIX A

JORC CODE 2012 EDITION – TABLE 1 FOR ISAAC DOWNS COAL RESOURCES AS AT JUNE 30 2020

This Table details Section 1, 2 and 3 of the JORC Code, 2012 Edition Table 1.

Section 1: Sampling Techniques and Data

Criteria	Explanation	Detail
Sampling techniques • 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 downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	 All core sampled drill holes were wireline geophysically logged with a minimum down-hole tool suite of gamma/density/calliper to afford confirmation of sample recovery and ply representation and to ensure that the core recoveries were satisfactory (> 95%). Linear core recovery was calculated by dividing the measured length of the core by the drilled length. Open hole rotary chip holes including the initial (non-core) sections of partial core holes provided chip samples for geological logging and in the case of Line of Oxidation (LOX) drilling, chip samples for laboratory testing. 	
	 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. 	 Geophysical logs were acquired to supplement the geological description of all drill holes, and to assist with the correlation of the various seams and to demonstrate the continuity of seam character. Geophysical logging was carried out by external contractors and subject to their internal calibration, quality assurance and quality control procedures. For cored holes, coal and its immediately proximal stone were ply sampled discretely on the basis of lithological characteristics and quality. Non-coal parting material greater than 0.1m thick and up to 1.0m was sampled separately. The immediate roof and floor of coal boundaries have been sampled at lengths of approximately 0.2 m, in general. At a minimum Apparent Relative Density (ARD) analysis has been conducted on these roof and floor samples. All coal samples were collected in plastic bags and transported to the laboratory via tracked freight courier and accompanied by a sample advice sheet. Chain of Custody and field observations were emailed to the Laboratory to arrive before the sample. Coal Quality samples were sent to either of SGS, Mackay or Mitra PTS, Gladstone. All coal quality samples were prepared and analysed using industry-standard testing methodologies. Each laboratory used is a National Association of Testing Authorities (NATA) registered organisation.

Criteria	Explanation	Detail
		• Line of Oxidation (LOX) chip samples, were collected in 1 m samples.
		• Lox samples were double bagged on-site and sent to Mitra PTS, Gladstone for proximate analysis.
		 Selected geotechnical samples from fully cored geotechnical holes were taken to analyse the overburden, coal and floor sediments for rock strength and other quantifiable geotechnical characteristics. Samples were stored in core trays, at representative lengths and wrapped in plastic, foil and sealed from moisture. Samples were selectively chosen by the specialist geotechnical consultant, Geotek Solutions of Milton, and then dispatched for laboratory testing.
		 Geotechnical laboratory testing was undertaken by Cardno, Ullman and Nolan Geotechnic laboratories in Mackay. Testing on selected samples included; Unconfined Compressive Strength, Brazilian Compressive Strength, Direct Shear Strength and Atterberg Limits.
Drilling techniques	ing techniques • Drill type (e.g. core, reverse circulation, open-hole	All drill holes were vertical in nature.
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.).	• A variety of drilling types and techniques were used depending on borehole purpose, described further as follows:	
	• Partial core holes for coal quality testing: Partial core holes were completed primarily to obtain core samples of the coal seam, the immediate coal seam roof and floor and any associated stone partings. These holes were planned based off depths to the target coal seam/s as predicted from the geological model. The initial portion of each hole was drilled using rotary chip methods with a ten (10) metre offset from the predicted top of first coal marking the commencement of core drilling. The core was then taken until a minimum of 4 metres past the base of last target coal seam. These boreholes produced a conventional 4-inch core (101.6 mm diameter) and were core drilled primarily using air techniques and with mud/water injection as required.	
		• Fully cored holes for open-cut geotechnical characterisation: Fully cored holes were completed to obtain core samples of the complete stratigraphic sequence likely to be encountered in mining, including the weathered overburden, fresh overburden, coal, inter-burden, partings and under-burden. The initial 6 metres of each hole was drilled using rotary chip methods with the remainder of the hole fully cored until a minimum of 6 metres post the base of last target coal seam. These boreholes were drilled using HQ wireline core techniques resulting in a 61.1mm core sample.
		• Open (rotary chip) holes: All open (non-core) rotary chip holes drilled were completed using blade, poly- crystalline diamond (PCD) and hammer drill bits, or a combination thereof. All holes were at a typical final hole diameter of 125mm. Rotary holes were completed for a combination of purposes including structural and fault definition and also LOX drilling which aimed to define the boundary of fresh and weathered coal.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. 	 For core sections of drill holes, samples requiring eventual laboratory analysis were visually assessed and taken by the field geologists according to the established project sampling protocol. Samples were double-bagged in

Criteria	Explanation	Detail
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 plastic and care was taken by the geologist to ensure all fines material was swept into the appropriate sample. Core sample returned which was not required for further analysis was placed in core boxes and retained at the Isaac Plains Mine core storage facility. All samples to be analysed were then initially stored on-site in chest freezers until wireline geophysical logs were run on the completed drill hole. Once the geophysical logs were received, the cored borehole sections were corrected to geophysics to ensure correct core sample intervals, core recovery and core representivity. Linear core sample recoveries were recorded and samples selected and sent to the analysis laboratory for further testing. The core drilling produced good results in terms of sample recovery with most holes achieving >95% linear core recovery. Minimum linear sample recovery cut-off (for use as a quality point of observation) was set at 95% of the mining ply/seam thickness.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	 All chip and core sections were visually inspected and logged, with details recorded in accordance with accepted industry standards and practices (e.g. CoalLog Standard). For each of the fully cored geotechnical holes and where possible for the partial core quality core holes, core sections were geotechnically logged in accordance with accepted industry standards and practices (e.g. CoalLog Standard). All drill core was photographed in 0.5m intervals. All drill core was geologically logged and marked prior to sampling. All chip holes or chip portions of partial core holes, had chips collected in 1.0-metre intervals, which were then geologically logged and photographed. All holes have been geophysically logged (except where blocked) with a minimum suite of tools run being: Density, Calliper, Verticality/Deviation (not for LOX) and Gamma. The calibration of the geophysical tools was conducted by the logging contractor, MPC Kinetic Pty Ltd.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation 	 Sampling for analysis was undertaken on core samples and sampling of the core was in accordance with accepted industry standards and practices. The core was field sampled in increments of no greater than 0.5m or at ply/brightness profile boundaries by splitting the core with hammer and chisel. All core coal samples were double bagged and then stored on-site in cold storage before eventual transport to

Criteria	Explanation	Detail
	technique.	the nominated laboratory for testing.
	 Quality control procedures adopted for all sub- sampling stages to maximise representivity of 	• Two coal testing laboratories were utilised being, SGS Mackay and Mitra PTS Gladstone both of which comply with the Australian Standards for sample preparation and sub-sampling.
	 samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	• All samples were initially tested for Apparent Relative Density (ARD) to help validate and determine coal/non- coal boundaries. Samples were then subsequently composited into working ply washability sections, the thickness of which typically ranged from 0.5 to 1.5 metres.
		• To simulate mine transport conditions each composite sample was then drop shattered 20 times from a heigh of 2 metres, any sample mass remaining of > 50 mm was hand knapped to 50 mm, dry tumbled and dry size
		at 31.5 mm, 25 mm, 16 mm, 8 mm, 4 mm and 2 mm. Composite samples were then split and further allocated as follows:
		• 1/8 for quick coke: Crush to 11.2mm, float sink at 1.425 density, crush to 4mm and mill sample to test for Proximate, CSN, Gieseler & Dilatation
		• 1/8 for raw analysis: Crush to 4mm, mill sample to test for RD, MHC, Proximate, TS, CSN, Calorific Value & Chlorine
		 ¾ for float sink: Wet tumble and wet size at 31.5, 25, 16, 8, 4, 2, 1, 0.5, 0.25, 01.25 & 0.063mm. Re-combine samples in following fractions: -50+16mm, -16+8mm, -8+2mm and -2+0.25mm. Float sink each size fraction at densities (F1.30, F1.35, F1.375, F1.40, F1.45, F1.50, F1.55, F1.60, F1.70, F1.80 and F2.00)0.25+0mm fraction subject to tree froth flotation. All fractions analysed for ash and CSN.
		 Washability simulations were performed by McMahon Coal Quality Resources (MCQR) on laboratory the float sink results and from that data, clean coal composite (product) sample instructions were compiled at a range of target ashes for: Primary Coking (-16+0mm), Coarse Coking (-50+16mm) and Secondary Thermal Coal Composites. At the time of this report, product testing and analysis are ongoing, with final results not yet available.
Quality of assay data and	• The nature, quality and appropriateness of the assaying and laboratory procedures used and	• All coal quality and geotechnical analysis techniques are per Australian Standards and completed at NATA accredited laboratories.
laboratory tests	whether the technique is considered partial or total.	• All coal quality results were checked by cross plots and comparison to original geological logging for accuracy.
	• For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors	• Down-hole geophysical logging tools are per industry-accepted standards, with the standard tool suite consisting of; natural gamma, density, calliper and verticality/deviation. Additional tools selectively run on holes included; electrical resistivity, neutron, multi-channel sonic, acoustic and optional televiewer.
	 applied and their derivation, etc. Nature of quality control procedures adopted (e.g. 	• Geophysical logging was carried out by external contractor MPC Kinetic and subject to their internal calibrations, quality assurance and quality control procedures. Downhole tools are calibrated at a test well on a monthly basis.

Criteria	Explanation	Detail
	standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	
Verification of sampling and	 The verification of significant intersections by either independent or alternative company personnel. 	• All sample information was transferred from sample sheets completed in the field to the appropriate database at the time.
assaying	• The use of twinned holes.	• All data was checked against geophysics and is currently stored within a database.
 Documentation of primary data, data entry procedures, data verification, data storage (physic and electronic) protocols. Discuss any adjustment to assay data 	Documentation of primary data, data entry procedures, data verification, data storage (physical	• All primary digital data is entered into a company database with physical copies being scanned and saved to a separate file server.
	and electronic) protocols.	• Coal quality sample intervals and results were checked and correlated against lithological and geophysical logs.
	• Apparent Relative Density testing was undertaken on all coal quality samples with density results selectively and randomly cross-checked against geophysical and geological datasets to ensure accuracy.	
		• Raw coal quality data was checked for internal consistency and consistency with the existing data set by checking cumulative totals and cross-correlations.
		 SGS and Mitra PTS are NATA accredited testing laboratories and comply with the Australian Standards for coal quality testing and as such conduct the verification and validation for coal quality analysis outlined in the standards.
		 Coal analysis procedure design, laboratory program management, staged lab data validations; washability simulation (undiluted coal only) and product coal assessment were undertaken by independent consultant Chris McMahon at McMahon Coal Quality Resources (MCQR).
		• All coal quality results were validated by MCQR prior to provision to Stanmore and Measured Group for inclusion into the geological model and resource estimate.
		• No further adjustment to the resultant assay data has been undertaken.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine	• A professional survey of all Stanmore exploration boreholes was conducted by Airmap3D Surveyors (Moranbah).
	workings and other locations used in Mineral Resource estimation.	 All survey associated with drill collars, conducted using high precision differential GPS with base station reference with an accuracy of +/- 20 mm.
	• Specification of the grid system used.	

Criteria	Explanation	Detail
	• Quality and adequacy of topographic control.	• All survey co-ordinates captured in AGD 1984 AMG Zone 55 (ESPG 20355).
		• Topographic control was captured using Lidar aerial survey in 2015, with an accuracy of +/- 20 mm.
		• Checks of the topography surface and drill holes were completed, with only minor and acceptable variances identified between the two data sets.
Data spacing and distribution	 g and Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. 	• Geostatistical and classical statistical analysis of coal ply and working section parameters (thickness and ash) was used to assist in determining the variability of the deposit.
		• Non-core holes are spaced approximately 400 m and 600 m apart and core holes are generally spaced at between 500 m and 750 m apart.
		• The drill hole spacing has been deemed sufficient to define the areas of resource confidence quoted in this report.
	• Whether sample compositing has been applied.	• Some seam compositing of raw samples has been undertaken based on geological boundaries.
Orientation of data	of data o Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	• Samples have been distributed along known coal seam strike and down dip to ensure unbiased sampling.
in relation to geological structure		• All drill holes used as points of observation were drilled as vertical holes, which is appropriate given the flat lying and stratiform nature of the coal deposits.
	 If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	• The principal coal quality attributes are controlled by stratigraphy rather than structure (faults, veins, joints etc.) and no sampling bias is expected to be generated by this orientation of data. Coal quality variability is interpreted to be influenced more by depositional environment than structure and vertical core holes provide unbiased sampling for analysis.
		• The orientation and spacing of the drilling grid is deemed to be suitable to detect geological structures and coal seam continuity within the defined resource area.
Sample security	• The measures taken to ensure sample security.	• Each sample was secured in 2 x plastic bag(s) and tagged with a unique sample ID.
		• Prior to shipment sample bags were grouped and loaded into a polyweave sacks and dispatched to the laboratory by a commercial transport company. A sample dispatch form is sent with the drum to the laboratory.
		• A digital copy of the sample dispatch form along with sample advice information is emailed to the laboratory; when the drum is opened the dispatch forms and drum contents are reconciled.

Criteria	Explanation	Detail
		• All samples were held in cold storage prior to leaving site and also at the laboratory prior to commencing analysis.
		• The same sample security procedure was used for all geotechnical samples derived from geotechnical cored holes
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	 Several previous resource estimates have been completed by other parties and were reviewed prior to the commencement of the current resource estimate. An internal review of modelling and estimation methods, assumptions and results has been conducted by Peter Handley, Principal Geologist of Measured Group Pty Ltd.

Section 2:	Reporting	of Exploration	n Results
------------	-----------	----------------	-----------

Criteria	Explanation		Detail					
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national	•	 Coal Resources for the Isaac Downs Project are contained within Mineral Development Licence (MDL) 137 and portions of Exploration Permits for Coal (EPC) 728 and (EPC) 755. Tenure is held by Stanmore IP South Pty Ltd (a 100% owned subsidiary of Stanmore Coal Limited). Project tenure details are as follows: 					
	park and environmental settings.		Permit Number	Grant Date	Expiry Date	Sub-Blocks or Area		
	• The security of the tenure held at the time of reporting along with any known impediments to		EPC 728	17/04/2001	16/04/2021	7		
	obtaining a licence to operate in the area.		EPC 755	04/10/2002	04/09/2023	21		
		•	MDL 137	07/06/1993	30/06/2023	652 ha		
Exploration done by other parties	 Acknowledgement and appraisal of exploration by other parties. 	 Majority of exploration in MDL 137 prior to 2004 was conducted by BHP Mitsui. Appraisal of exploration d and resource assessment was conducted by JB mining in 2002, at which time 9 coal quality holes and 38 holes had been drilled in the tenure. The majority of the holes were not geophysically logged and topographic surface and collar relative levels relatively inaccurate. Due to these issues, the majority of the deposit was classified as inferred. Drilling in EPC 755 has predominantly been conducted by Aquila Coal Pty Ltd and Bowen Central Coal. Approf the exploration drilling in EPC 755 was conducted by JB Mining in 2018 as a part of the Isaac Plains Resource Statement. 					sal of exploration drilling quality holes and 38 chip collar relative levels were offerred. In Central Coal. Appraisal of the Isaac Plains South	
Geology	• Deposit type, geological setting and style of mineralisation.	•	 Within the project area, economic coal is contained within the Permian Rangal Coal Measures (RCM). Loca the RCM is unconformably overlain by Tertiary sediments and basalt flows and the sequence dips towards t east at around 2 degrees to 5.5 degrees. The deposit type is coal with the potential to produce a range of thermal, PCI, semi-soft to semi-hard coking c depending on the selected beneficiation strategy. The Leichhardt and Vermont seams host the resource and typically have a combined thickness of up to 7.5 					
		•	Coal is weathered to an	average of 25 m.				
		•	No known volcanic activ	vity has materially	impacted on the c	oal contained within the dep	oosit.	

Criteria	Explanation	Detail
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	• Detailed drill hole intercepts have not been included as it is deemed commercially sensitive. This information may be supplied if requested.
	• 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	
	downhole length and interception depth	
	hole length.	
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case	
Data aggregation methods	 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. 	 All seams have been modelled as individual plies and partings and resources have been estimated and reported on a ply or coalesced full seam basis. Coalesced parent seams structure roofs and floors were created based on their respective uppermost and lowermost ply roofs and floors.
	 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. 	• A parent seam was created wherever the adjacent plies could be coalesced based on a minimum interburden thickness of 0.5 m.
		• Samples have been aggregated within the modelling software to match the combined seam. Non-coal intervals greater than 0.3m have been excluded from aggregation.
		 Individual samples have been weighted by thickness and density (mass weighting). Laboratory determined air- dried RD (RD ad) has been used for the density weighting.
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship	• These relationships are particularly important in the	• Seam thicknesses have been reconciled to geophysics to ensure accuracy.
between	reporting of Exploration Results.	• Coal thicknesses shown are for downhole thickness. Coal resource modelling and estimation adjusts for seam thickness versus the apparent thickness modelled.

Criteria	Explanation	Detail			
mineralisation widths and intercept length	 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 downhole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	• Thicknesses for each seam/ply were contoured and any bullseyes were investigated.			
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	• All appropriate diagrams are contained within the main body or appendices of the Isaac Downs reso estimate report.			
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	 All available validated data has been included in the geological model, is reflected in the estimate and associated reporting. The estimate and reporting are considered to be a balanced representation of the Coal Resources contained within the project area. 			
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 Regional aeromagnetic and gravity data hosted by the Queensland Department of Natural Resources and Mir was referenced when assessing regional structures that impact on the project area. 			
Further work	 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. 	 The proposed upcoming exploration programs will address the following: Split Delineation – infill drilling to tighten up the location of the L seam splitting. Coal Quality – Infill drilling in areas of lower coverage Structure Delineation – Refine the location of structures (particularly in lower coverage areas downdip) – Both exploration drilling and seismic surveys LOX – infilling between lines and in lower coverage areas to increase the confidence in the lox line locations. 			

Section 3: Estimation and Reporting of Coal Resources

Criteria	Explanation	Detail
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying	• The geological database contains all hole surveys, drilling details, lithological data, and coal quality results and is the primary source for all such information.
	 errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	• Where possible, all original geological field logs (scanned or hard copy), downhole geophysics (LAS) files and hard copy logs, hole collar survey files, digital laboratory data and reports and other similar source data are maintained in a project library and referenced within the database to provide an audit trail to this source data.
		• Some validations were undertaken on the database that helps ensure consistency and integrity of data including, but not limited to:
		• the relational link between geological, downhole geophysical and coal quality data;
		 exclusion of overlapping geological intervals;
		 restriction of data entry to the interval of the defined hole depth;
		\circ use only of defined rock type and stratigraphic codes; and
		 basic coal quality integrity checks such ensuring data is within normal range limits; that proximate analyses add to 100 per cent; etc.
		• Lithological logs, geophysical wireline logs, assay results and coal intersection depths were adjusted to geophysics before modelling and resource estimation.
		Coal quality data checked against NATA laboratory reports where available prior to resource estimation.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	• The Competent Person has not visited the site, however, is very familiar with the geology and target coal seams of the surrounding areas, having previously worked on, and visited adjacent projects.
	• If no site visits have been undertaken indicate why this is the case.	Material geological assumptions have been reviewed by Stanmore technical staff.
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	• The modelling process has divided the deposit into 4 sub-areas, constrained by thrust faulting; fault blocks 1-4. Resources are currently limited to the westernmost fault block 1, where the confidence in
	• Nature of the data used and of any assumptions made.	the deposit is at its greatest. Future exploration programs will further delineate fault blocks 2 – 4 with the expectation of increasing the down-dip resources, once sufficient confidence in these areas is increased.
	• The effect, if any, of alternative interpretations on	• The overall confidence in the geological interpretation of the deposit is reasonably high. This is due to

Criteria	Explanation	Detail
	 Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 low variability as evidenced by the laterally consistent seam thickness, dip and relatively homogeneous coal quality. Areas of higher variability exist in the areas adjacent to local and regional scale thrust faulting towards the eastern side of the deposit (fault blocks 2 – 4). Regional-scale geological mapping was also used as supporting information to confirm continuity of the deposit, both along strike and down-dip. The geological interpretation is based on the integration of all drill hole, geophysics, GIS and assay data.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	 Within the resource estimation area (Fault block 1), the deposit is open to the east, but the depth to the roof of the coal seams of interest is increasing. To constrain the resources; toward the deeper areas to the east; a vertical strip ratio cut-off limit of 20:1 (bcm per tonne of coal) has been applied. As well as this, other constraints to the resource estimation area include; the seam subcrop zone (at an average of 25 m depth of weathering) in the west and fault structure/s in the northeast. To the south, the resources are constrained by a buffer around the Isaac River and the lease boundary. The dimensions of the deposit are approximately 3 km north-south 2 km east-west.
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). 	 The modelling and resource estimation was undertaken using a geological model created using the modelling and estimation tools within Maptek's Vulcan (v12) modelling software. To account for the regional overthrusting present within the deposit, the model has been subdivided into 4 fault block areas using the Maptek fault block methodology. This method operates as follows: The fault blocks method creates a fully-featured, grid-based integrated stratigraphic model in each fault domain. Each set of grids generated is unmasked, triangulated and then clipped exactly to each of the fault blocks bounds. This results in a series of disjointed surfaces representing the roofs and floors of each horizon. All the pieces of each horizon's roof and floor are appended to each other to create two faulted surfaces for each horizon - one roof and one floor. Coal analysis samples have been composited (where necessary) to the individual ply level and modelled using the Maptek coal compositing and create multiple surfaces tools. Minimum and Maximum statistics for each coal quality variable were used to constrain the modelling interpolations. The models created were validated by visual inspection of the modelled structure against drill holes intersections through cross-sections, and by visual analysis of data postings versus modelled

Criteria	Explanation	Detail
	 In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 	 thicknesses/coal quality in plan view. As well as data honouring; by determining the residual between the data point and the resultant model; any unusual bullseyes were investigated and validated. Grid models were created using a node spacing of 20 m.
	 Any assumptions behind modelling of selective mining units. 	 Seam structure was modelled using a node spacing of 20 m. Seam structure was modelled using planar surface modelling algorithms. Coal Quality was modelled using a variation of the inverse distance algorithm for each assay for each ply and merged seam.
	 Any assumptions about correlation between variables. 	 Outputs from the fault block and coal compositing models were used to generate a HARP block model.
	• Description of how the geological interpretation was used to control the resource estimates.	• Estimations of the total resources were completed using the HARP block model and the Advanced Reserves tools within the Vulcan software. This technique reports the aggregated volumes of blocks
	 Discussion of basis for using or not using grade cutting or capping. 	within the HARP block model chosen by specific criteria (Resource polygons for eg.) and modified by various variables contained within each block.
	• The process of validation, the checking process	• There are no known deleterious elements of economic significance.
used, the comparison data, and use of reco	used, the comparison of model data to drill hole data, and use of reconciliation data if available.	• Correlation between several coal properties has been undertaken (such as raw ash versus relative density) and reported.
Moisture	 Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	• All tonnages are calculated using a coal density that has been adjusted according to the Preston & Sanders equation, assuming an in situ moisture of 4%.
Cut off parameters	• The basis of the adopted cut-off grade(s) or quality	• A raw ash % (ad) cut-off grade of 50% was used to distinguish between coal and rock material.
	parameters applied.	• No weathered or oxidised coal was included in the Coal Resource estimate.
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal	• The assumed mining method is conventional open-cut strip mining, utilizing dragline, excavators, dozers and mining trucks similar to adjacent Stanmore Coal Limited operations.
	(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 reaardina	• An economic cut-off for Coal Resources has been applied based on a high-level economic analysis undertaken by Measured, which determined that a strip ratio of 20:1 (bcm per tonne of coal) was appropriate to limit resources at depth. This was also influenced by the economic limits of Stanmore Coal Limited's open-cut mining operations at Isaac Plains Complex.
	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.	• A minimum coal seam / ply thickness of 0.1 m is assumed for the Mineral Resources.

Criteria	Explanation	Detail
Metallurgical factors or	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as	• Washability stage analyses for all recent quality boreholes have been received. MCQR and Stanmore Coal have undertaken washability simulations and initial product coal potential assessments.
assumptions part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions reasonable metallurgical treatment	• This work indicates that several beneficiation options exist for the coals contained in the project area. These available options are a factor of both processing and mining inputs and considerations. The most likely options being considered are:	
	processes and parameters made when reporting Mineral Resources may not always be rigorous.	 Option 1 – A "High Quality" Primary Product (-16+0mm) delivering semi-hard (potential) / with a Coarse (-50+16mm) Secondary PCI (pulverised coal injection) product.
	where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 Option 2 –A "High Yielding" (-50+0mm) Primary Product delivering a semi-soft coking product with a Secondary Export Thermal product.
		 Instructions for laboratory product coal testing are presently being issued and testing is ongoing. Results of analysis of Coking, PCI and Thermal laboratory composites will determine characteristics of the eventual achievable marketable products and help inform the decision making processes, once combined with mining cost, yield and revenue inputs.
		• It is MCQR's and Stanmore's opinion that there are no limiting metallurgical factors in the production of market acceptable products.
		• No other assumptions or factors have been used.
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a Greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	 No environmental factors or assumptions have been considered. It is assumed that Stanmore Coal Limited will keep the tenures in good standing and operate within environmental approvals.
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the	 Bulk density assumptions are based on relative density (RD) sample analysis results (reported on air- dried moisture basis), which are moisture corrected (using the Preston & Sanders equation and 4% in

Criteria	Explanation	Detail
	method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	situ moisture).
	 The bulk density for bulk material must have been measured by methods that adequately account for void spaces (i.e. vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. 	
	• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories.	• The classification of resources is based on the spacing and distribution of coal quality holes (Quality PO) and of non-core geophysically logged structure holes (Structure PO) along with other data including non-geophysically logged drill holes.
	• Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data,	 Points of Observation for coal quality (Quality PO), were determined on a full seam basis for each seam using the following criteria:
confidence in continuity of geology and metal values, quality, quantity and distribution of the	 Seam and/or ply interval cored, sampled and analysed; and 	
	 Whether the result appropriately reflects the Competent Person's view of the deposit. 	 sample recovery was nominally a minimum of 95% per coal type within a seam. Where sample recovery was less than this, the intersection was investigated, and a determination was made by the competent person as to whether the loss would have constituted a material difference to the assay result for that type for that seam.
		• Points of Observation for seam structure (Structure PO), were determined on a full seam basis for each seam using the following criteria:
		• Hole collar is surveyed;
		 coal seam has been geophysically logged;
		 seam has detailed lithological logging; and
		 the hole has been included in the model.
		• All seam intersections which were deemed not to be a Structure PO but were included in the model were deemed to be an interpretive data point (IDP).
		• Statistical analysis conducted to determine optimal ranges for each resource category consisted of general statistics and Variography based on the following domains and variables.

Criteria	Explanation			D	etail		
		o Seam thio	ckness; and				
		 Coal qual 	ity - raw ash,	% air-dried.			
		• A greater emphasi Downs deposit, the	s on the var variability o	iography of the f the coal quality	coal quality sp y (ash) is greate	oacings was use r than that of th	d because at the Isaac e thickness.
		• The spacings derive required boreholes	ed from the spacings to u	variography ana se is determined	alysis serve as a d by the Compe	a guide. Ultimat tent Person.	ely the decision on the
		• For the Stanmore R	lesources Est	imate, the follow	wing distances v	vere used for ea	ch category:
		Resource Category Dista	inces (m) – Be	etween Defined	Points of Obser	vation	
			Seam	Measured	Indicated	Inferred	
			LUD-LL1 (L)	500	1000	2000	
			LUDLU	500	1000	2000	
			LL3	500	1000	2000	
			LL2	500	1000	2000	
			LL1	570	1070	2000	
			VU1	1000	2000	4000	
			VU2	500	1000	2000	
			VU3	400	800	2000	
		 Resource categorie following criteria: 	s were extra	polated beyond	the last line of	Quality and Stru	cture POs based on the
		Measured					
		 Extrapola 	tion to half t	he resource cat	egory range dis	stance for meas	ured if seam continuity

Criteria	Explanation			Detail
				could be proven.
			Indicate	<u>d</u>
			0	Extrapolation to half the resource category range distance for indicated as long as seam continuity could be inferred.
			Inferred	
			0	Extrapolation to half the resource category range distance for Inferred.
		•	Categori seam ch level of c the depo	es defined to represent an area where, based on the competent person's observations of aracter and coal quality, the coal resource could be estimated with a high, moderate or low confidence. This was based on the understanding of the geological properties and controls of osit and was achieved using the following method and criteria.
			Measure	ed Coal Resource
			0	A polygon was drawn connecting the last line of Structure PO's if they were located within the coal quantity measured range distance of two other Structure PO's.
			0	Polygon was adjusted to ensure that the Structure PO's were within half the measured coal quality range from 2 adjacent Quality PO's.
			0	IDP's used to adjust or expand this polygon if there was high confidence in the area.
			0	Extrapolation distances were applied.
			0	Areas where, due to a lack of supporting data, it was deemed that resources could not be estimated with high confidence were converted to either Indicated or Inferred.
			0	Limiting factors were applied as described in the body of the report and summarised in Table 1.
			Indicate	d Coal Resources
			0	A polygon was drawn connecting the last line of Structure PO's if they were located within the coal quantity indicated range distance of two other Structure PO's.
			0	Polygon was adjusted to ensure that Structure PO's were within the half indicated coal quality range from 2 adjacent Quality PO's.
			0	IDP's used to adjust or expand this polygon if there was high confidence in the area.
			0	Extrapolation distances were applied.
			0	Areas where, due to a lack of supporting data, it was deemed that resources could not be

Criteria	Explanation	Detail
		estimated with high confidence were converted to Inferred.
		 Limiting factors were applied as described in the body of the report and summarised in Table 1.
		Inferred Coal Resources
		 A polygon was drawn connecting the last line of Structure PO's if they were located within the coal quantity inferred range distance of two other Structure PO's.
		 Polygon was adjusted to ensure that Structure PO's were within half the inferred coal quality range from 2 adjacent Quality PO's.
		 IDP's used to adjust or expand this polygon if there was high confidence in the area.
		 Extrapolation distances were applied.
		 Limiting factors were applied as described in the body of the report and summarised in Table 1.
	•	The results of the resource classification appropriately reflect the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	An internal review of modelling and estimation methods, assumptions and results have been conducted by Peter Handley, Principal Geologist of Measured Group Pty Ltd.
	•	The process and results were deemed suitable for public release.
Discussion of relative accuracy/	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral	The coal seam resource polygons are limited by the modelled coal seam sub crops and by the drill hole distribution. This ensures no weathered coal can be counted within the estimate.
confidence	Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or	In areas where there is limited LOX drilling, Measured resources have been downgraded to Indicated status; and indicated to inferred status.
	geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed	The thickness grids of each of the seams are based on actual drill intersections. These intersections are checked and adjusted against geophysics in both cored and chip holes.
	appropriate, a qualitative discussion of the factors that could affect the relative accuracy and	Field geologist seam picks and correlations have been checked, and individual seam picks are generally within 0.1 m of the actual seam thickness.
	 confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the 	There is unlikely to be any systematic high or low bias in the seam picks. Apparent seam thicknesses have been accounted for as the estimation utilises a block model which sums the volumes of the individual blocks rather than relying on an apparent seam thickness multiplied by an area.
	relevant tonnages, which should be relevant to	The thickness of seam intersections that have been thickened or thinned by faulting, thinned by

Criteria	Explanation	Detail
	technical and economic evaluation. Documentation should include assumptions made and the procedures used.	weathering or otherwise considered unreliable is not used in creating thickness grids. Thickness grids were checked to ensure that they honour the data and that no obvious anomalies exist which are not geologically sound. Where seams were missing from a drill hole, the thicknesses have been pinched to zero halfway between the nearest hole with a seam intercept.
	 These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	• The resource estimate has not been reconciled against production values. However, the current resource estimate has been reconciled back to the previous resource estimate for the project area.

APPENDIX B

JORC CODE 2012 EDITION - TABLE 1 FOR ISAAC DOWNS COAL RESERVE AS AT JUNE 30 2020

This Appendix details section 4 of the JORC Code 2012 Edition Table 1. Section 5 Estimation and Report of Diamonds and Other Gemstones has been excluded as they are not applicable to this deposit and estimation.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in Section 1, and where relevant in Sections 2 and 3, also apply to Section 4)

Criteria	JORC Code Explanation	C	ommentary					
Mineral Resource estimate for conversion to Ore ReservesDescription of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.		Re Pt re Ti Ti re	Reserves are based on the geological model constructed by Measured Group Pty Ltd, and the resource classification polygons and estimate of coal resources prepared by Mr. Toby Prior of Measured Group Pty Ltd. The estimate is dated June 2020. The reserves are included in, and not additional to, the JORC Resources as reported by Measured Group.					
			Seam	Ply	Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Total (Mt)
				L	10.8	0.6		11.4
				LU	1.4	2.7		4.1
			Leichhardt	LL3	1.1	2.2		3.3
				LL2	0.8	2.0		2.8
					1.9	1.0		2.9
			Vermont Upper		1.4	0.0		3.3
			vermone opper	VU3	-	0.4		0.4
			Grand Tota		24.7	11.5		36.2
		1	Notes: L. Coal Resources estim	ated at 49	6 in situ moisture.			
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	M th re	Mr Barker has not visited the Isaac Plains Complex however has contributed to the technical assessment being undertaken for the BFS Study. Travel restrictions due to COVID-19 have prevented this occurrence.					
Study status	The type and level of study undertaken to enable Mineral Resources	0	pen Cut mining I	nas bee	en carried ou	t at the Isaac	Plains Comp	lex in the close

Table 1 JORC Code, 2012 Edition – Table 1 Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code Explanation	Commentary
	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.	 vicinity of Isaac Downs since 2006. Palaris assessed the project to have complete the following areas of study to a Feasibility level: Mining, Metallurgy, Economic, Marketing, Legal, Environmental, Social, Governmental, Native title and cultural heritage This reserve estimation is based on a SPRY scheduling model provided by SMC, which has been updated progressively as additional exploration drilling has occurred, the model used is as of last exploration borehole completed on the 3rd September 2019. At the time of writing the SMC team were in the final stages of completing the BFS. This model incorporates the current Isaac Downs Open Cut Pit shell designs. Results from the model were used for independent economic viability testing. Mining of the open cut reserves is considered technically achievable and economically viable. Appropriate modifying factors have been considered that consider geological structure, seam thickness, geotechnical conditions, loss, dilution and practical open cut mining thicknesses.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	There are no specific cut off grades applied to the project other than to say the project is preferentially targeting the SSCC/SHCC seams with the mine layout. The final target products are defined as 9.5% ash primary coking product with 16% secondary thermal product. The initial margin ranking completed in 2018 was used as guide to develop the current pit design - however since that time a detailed mine layout and DCF model has been used to assess the extents of the pit.
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling. The major assumptions made and Mineral Resource model used for	 The open cut mining operation will utilise a conventional strip-mining mining method, utilising a combination of excavator, dragline, cast blast and dozer push. Access will be via a constructed haul road and low-wall ramp. The Open cut mine is designed in consideration of the localised geology, geotechnical conditions. Allowances for loss and dilution have been made when estimating run of mine coal reserves. Roof dilution 0.05 and a loss of 0.075m Floor dilution 0.05 and a loss of 0.025m

Criteria	JORC Code Explanation	Commentary
	pit and stope optimisation (if appropriate). The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. The infrastructure requirements of the selected mining methods.	 Edge dilution of 0.25 and a loss of 0.25m Other dilution of 1.1% and a loss of 1.7% (seams greater than 3m) A minimum recoverable coal thickness of 0.2m Maximum non separable parting thickness of 0.3m All unclassified resources have been removed from the reserve. Of the coal scheduled in the open cut life of mine plan, 80% was classified as Proved Reserve, 13% was classified as Probable Reserve and 7% was unclassified. The timing these unclassified Reserves is towards the end of the mine life and it is expected future drilling programs will further define the Resources. Additional infrastructure requirements include mine water dam, access road, ROM stockpile area, explosives magazine, pit to ROM haul road, peak downs highway underpass, satellite MIA, dragline walk route and clean water diversion.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	ROM Coal from the open cut operation is planned to be washed to produce semi-soft coking and thermal coal products at the Isaac Plains CHPP. In-situ coal tonnages are based on assumed 4% (in situ) moisture for the coal portion. An assumed 7% ROM moisture, 11% SSCC product moisture and 9.5% for the thermal product moisture has been used in the calculation of coal reserves and marketable reserves. The primary Semi-soft Coking Coal product is expected to yield between 52- 76.7% based on modelling, with an average of 64.4%. The secondary thermal product ranges between 1.4-3.4% with an average of 2.4% over the duration of the project. The total average yield for the project is 66.8% (55.1% -78%). The recovered Vermont Lower Plies in the mining schedule are unclassified and therefore have not been considered for the Reserve. A full coal quality model has been developed including practical yields through the use of LIMN simulations and reconciliation of the project parameters with the experience in the adjacent IPE deposit.
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	The tenements at Isaac Downs are a combination of Mineral Development Licences (MDL 137) and Exploration Permits Coal (EPC 728 and EPC 755). The following Environmental Authorities cover the tenements at Isaac Downs: EPVX03766416 (MDL 137), EA0001288 (EPC 728), EPVX00880413 (EPC 755). An EIS for the project was submitted for the project in March 2019 followed by a Mining Lease Application MLA700046 in May2019. The ToR for the project were published in October 2019. It is assumed that Isaac Downs will be able to acquire all environmental

Criteria	JORC Code Explanation	Commentary
		authorities as SMC's current operating sites, located near to Isaac Downs, have done so. SMC asses and monitor environmental and approval risks on an ongoing basis for their current mines and this is assumed to transfer to Isaac Downs.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	Key existing infrastructure will be provided from the existing Isaac Plains Complex including CHPP for coal processing, rejects and tailing disposal voids, rail spur and train loadout facility, internal haul roads, water supply, power and communications. The workforce will be accommodated in the local communities.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private.	 Palaris produced a fully costed, first principles, financial model based on the on the owner operator case detailed in the BFS. The operating costs incurred at the current operating Isaac Plains operations were used for CHPP, rail, port and marketing. The capital cost requirements are detailed in the BFS and are considered to be appropriate and viable. The financial model considers all project and sustaining capital to undertake the mining schedule as well as royalties and levies. There are several royalties that are applicable for the project that are also detailed in the BFS. These include: Private Royalty to financier at 1.0% royalty on coal sales revenue Private Royalty to Peabody at \$1/t of product coal when the premium hard coking coal benchmark is over A\$170/t (indexed to CPI) capped at circa \$10M Private Royalty payable to the landholder when HCC prices are above USD200/tonne, paid at A\$0.2/tonne (not included in the model as coal price not assumed to reach this) State Government Royalty
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	Export semi-soft coking pricing is supplied by Commodity Insights and thermal coal sale price and foreign exchange rate forecasts were determined by Palaris using data from Consensus Economics June 2020 survey.

Criteria	JORC Code Explanation	Commentary			
		Table 4.6 Isaac Downs Pricing assumptions			
		Product 2021 2022 2023	LT		
		Isaac Downs Semi-Hard Coking Coal (82% of index) USS/t 124 125 123	121		
		Isaac Downs Semi-Soft Coking Coal (79% of index) USS/t 120 120 119	116		
		Isaac Downs PCI Coal (67% of index) USS/t 101 102 101	98		
		Isaac Downs Thermal Coal (88% of index) US\$/t 63.8 62.2 62 Source: Commodity Insights & Consensus Economics - Note - all pricing is on a real basis	64		
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	A market assessment was conducted by Commodity Insights as part of The report found that demand for metallurgical coal was forecast for t markets of China, India, Japan, Korea, Taiwan, Europe, Brazil and Sou Asia. The assessment was based on steel consumption patterns and por growth in these regions. Commodity Insights also identified that from 2019-35, metallurgical co- import demand from these markets is forecast to increase from 326Mt 409Mt, with growth driven by India and Southeast Asia. Thermal coal demand is driven by growth in China, India and Southeas with the seaborne thermal coal market growing by approximately 60% volume over the last decade and is now approaching a billion tonnes ir Demand is expected to continue to grow due to industrialisation, urba population growth and the economic competitiveness of coal for basel electricity generation, particularly in Asia.	the BFS. the key theast pulation al to t Asia, in size. nisation, pad		
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs.	Palaris have used the designs and scheduling conducted by SMC person evaluated them in the Palaris first principals DCF model. Mining costs were built-up on a first principles based on local assessme EA's, OEM supplied fuel burn and maintenance costs for major equipm actuals supplied for energy and water from IPE. All modelling was conducted on a real basis using a discount rate of 9% Depreciation of project capital is on a double declining balance method Analysis shows a positive NPV for the project life. Key outputs include: Avg FOB Cash Costs- A\$126.85/t saleable Avg Realised Price- A\$164.03/t saleable NPV ₍₉₎ - A\$118M Project Capital- A\$301	nel and ent of ent, d.		

Criteria	JORC Code Explanation	Commentary
		 Sensitivities were conducted on several parameters to test the economic viability of the project, these included: operating costs coal price plant yield foreign exchange rate ex-mine costs capital costs Isaac Downs is most sensitive to operating costs, plant yield, export coal price and the exchange rate. The project strip ratio increases towards the end of the mine life and in combination with a reduction in yield as the seams split results in a significant reduction in margin. On a DCF basis the last three years of the mine life are considered marginal. However, all years of the mine show a positive operating cash flow. In these later years the mine is also transitioning to back to operations at Isaac Plains East and as such a proportion of costs associated with labour is allocated to Isaac Plains East on a production ratio basis.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	SMC is currently in negotiations under the Native Title act to obtain approval for Lot 8 GV196. SMC has no reason to believe this will not be granted.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	The required approvals for operations have been identified with a schedule in place to obtain these approvals. It is anticipated that they will be in place as required. SMC have applied for a mining lease that will cover the entire Isaac Downs Reserve as previously discussed.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's	 Mineral Resource to Ore Reserve conversion: Mining domains within Measured Resource have been converted to Proved Reserves

Criteria	JORC Code Explanation	Commentary
	view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	 Mining domains within Indicated Resource have been converted to Probable Reserves Mining domains within Inferred Resource areas have not been converted into Reserves The reserve estimate consists of 80% Proved, 13% Probable Reserves and 7% Unclassified (ROM). This appropriately reflects the view of the Competent Person (Michael Barker) with regard to the confidence levels for Isaac Downs reserves.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	Palaris is not aware of any audits or reviews of Isaac Downs reserve estimate, or production reconciliations.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The confidence level determined in the Resources was estimated by Mr Toby Prior of Measured Group, who is also the Competent Person signatory. Palaris considers that the resource categories are appropriate for the Reserve classification. This meant that it was possible to directly transfer Measured Resources into Proved Reserves and Indicated Resources into Probable reserves for all areas with sufficient Reserves confidence. As with most projects the extents of the pit are heavily reliant on the forecast coal prices and foreign exchange. Material negative changes in these forecasts are likely to reduce the extent of the mining limits. As the mine is considered a brownfields expansion of the existing operations at Isaac Plains there is a high level of confidence in the ability to achieve the productivities and operating costs detailed in the BFS and utilised for this Reserve statement.