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27 July 2018

Coal Resource - Isaac South Project

HIGHLIGHTS

- Total Coal Resource (2012 JORC standard) of 52.0 Million tonnes (Mt)[1] declared within the 100% owned EPC755 southern area
- 50% of Total Resource is categorised as Measured and Indicated
- 45% of resources are <10:1 in-situ strip ratio
- An exploration programme has been planned to commence in FY19 to increase the confidence level and expand the coal resources further to the south

Stanmore Coal Limited (**Stanmore** or the **Company**) (**ASX: SMR**) is pleased to announce Coal Resources for the Isaac South Project (within EPC755). These Coal Resources have been upgraded to the standard required by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ('the 2012 JORC Code') based on exploration data generated in 2012 and represent coal within Stanmore Coal's 100% owned tenement. The Isaac South Project is based on the Coal Resources within the tenement EPC755 that was previously part of the Isaac Plains South Project.

Resources are presented by seam/ply and resource category in **Table 1** and are contained entirely within EPC755, 100% owned by Stanmore IP Coal Pty Ltd.

Table 1: Isaac South (EPC 755) - JORC Resource Status by category and coal seam[2]

Seam (ply)	Resource Categories			Totals
	Measured (Mt)	**Indicated** (Mt)	**Inferred** (Mt)	**Sub Total** (Mt)
LHD	5.7	2.6	0.2	8.4
V1	5	4.2	9.7	19
V2	0.2	5.1	8.9	14.1
V31	0.9	1.3	2.9	5.1
V32	0.1	1.4	3.7	5.1
Grand Totals	**11.9**	**14.5**	**25**	**52**

[1] Refer Competent Person (CP) Statements from June 2018 JORC Resources Estimate for Isaac Plains South EPC 755 completed by JB Mining Services Pty Ltd.

[2] Note – Rounding to the nearest significant figure is applied to Total Resource Tonnes in the Inferred Category. This is deemed conservative and reflective of the Inferred Resource category confidence level and accounts for the minor differences in the overall reported resource

Coal Resource - Isaac South Project

The Isaac South deposit lies approximately 12 kilometres south-east of Stanmore's Isaac Plains Mine (ML70342), and is immediately south of Stanmore's recently announced acquisition, MDL137 Wotonga South[3] (renamed "Isaac Downs"), per **Figure 1**.

Isaac Plains South Exploration History

Isaac Plains South was explored extensively during a period between 2004 and 2013 under Bowen Central Coal Management (BCCM), being the JV management vehicle of several prior tenure holders. The two most recent BCCM JV owners were Vale Australia (IP) Pty Ltd and Ocean Coal Mining Pty Ltd.

On the 9th December 2015, Stanmore IP Coal Pty Ltd became holder of EPC755, obtaining the lease as part of the same transaction which acquired the Isaac Plains Mining Lease, ML70342.

A prior Designated Area Agreement (DAA) originally agreed in 2004 afforded access to the BCCM JV for exploration and evaluation purposes to 4 sub-blocks (which cover the sub-crop of the Rangal Coal Measures) in the eastern neighbouring coal tenement EPC548 (presently MDL277, Moranbah South).

In late 2015, prior to Stanmore ownership of EPC 755, this contractual agreement expired. Stanmore being the present owner of EPC 755, no longer has rights for exploration or access to the portion of resources contained within MDL277 and as such the current JORC resource only reports resources contained within EPC 755. For this reason, Stanmore Coal has re-named the area within EPC755 as the Isaac South Project.

Exploration works completed by BCCM from 2004 to 2013 primarily included 2D seismic surveys and drilling for coal quality, gas, geotechnical, structure, limit of oxidation (LOX) and water monitoring purposes.

These works have resulted in a total of 432 boreholes in the combined IPS lithological database, of which 98 are within EPC755 and the remainder are in the adjacent MDL277. A summary of drilling, numbers and primary type, for holes completed within EPC755 is provided in **Table 2.**

Chip borehole spacing is approximately 250 metres in the up-dip half of resource area, while 100mm cored holes spacing is approximately 500m. Drilling density is sparse in the south eastern down-dip portion of the resource. Drilling density is sufficient to classify the majority of the up-dip portion as Measured and Indicated status.

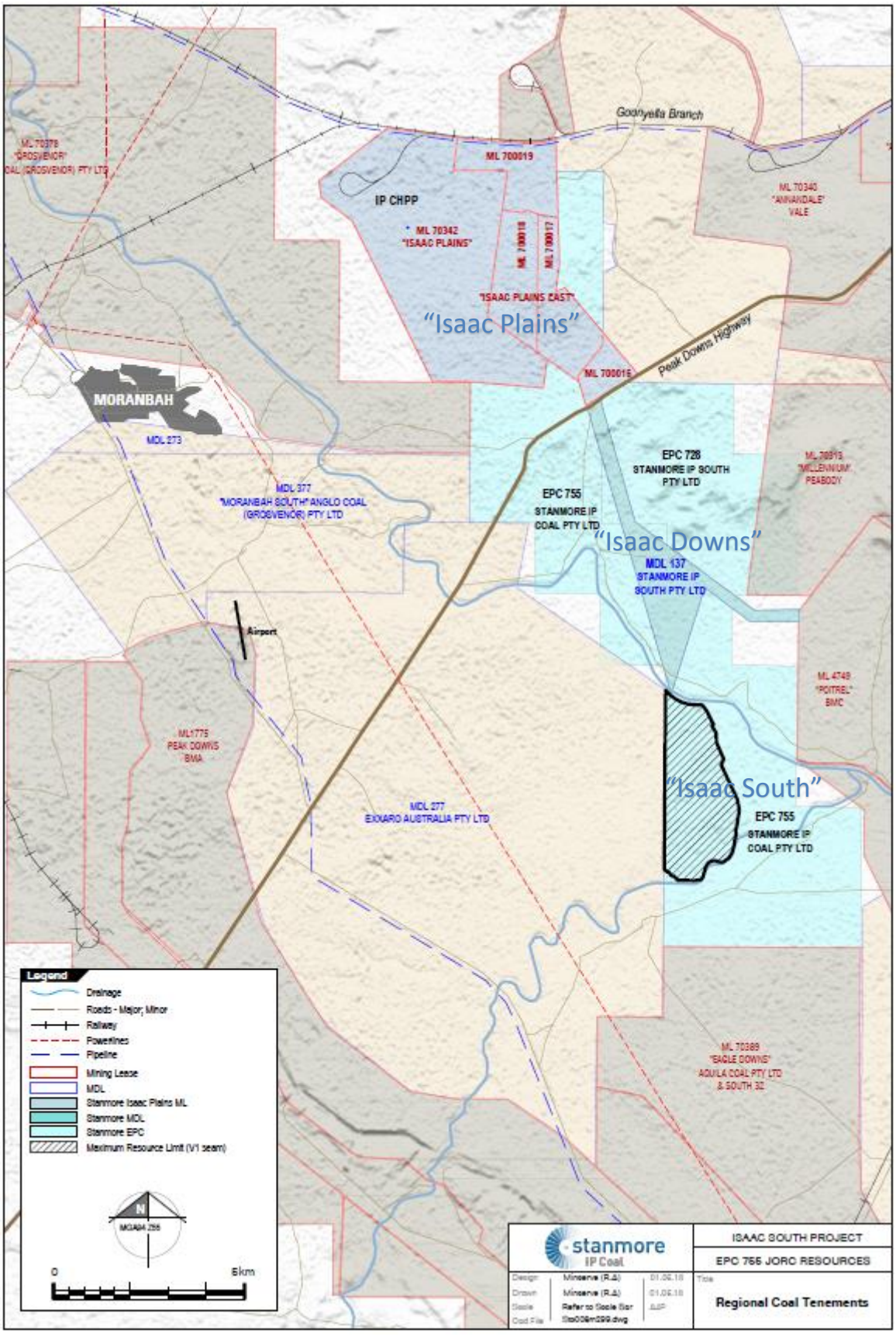
Table 2: Isaac South EPC 755 - Summary of drilling by type

Type/Purpose	Number
Coal Quality Core	19
Geotechnical	1
Piezometric	5
Chip/Open	69
Lox	4
Total:	**98**

[3] Note – Refer SMR ASX Release dated 12th June 2018 entitled "Acquisition of Wotonga South Coking Coal Deposit"

Coal Resource - Isaac South Project

Figure 1: Isaac South EPC 755 – Project Location



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Coal Resource - Isaac South Project

Geology

All resources in the project area exist within the Leichardt (LHD) and the Vermont Seam (and its sub-plies – V1, V2, V31, V32). Predominantly the Leichardt seam exists as a contiguous single coal seam (LHD), though it splits into an upper (L1) and lower (L2) ply in the east of the project area. As there are no cored samples in the L1 or L2 down-dip of the split line, no resources have been defined for the L1 or L2 seam plies.

The LHD & V1 are part of the regional formation known as the Rangal Coal Measures. Technically the V2 and V3 coal plies mark the commencement of the underlying Formation, the Fort Cooper Coal Measures.

The boundary between the Rangal Coal Measures and the Fort Cooper Coal Measures is a regional marker band, typically referred to as the Yarrabee Tuff (YT), commonly a cream to brown tuffaceous claystone band. The YT has been identified immediately below the V1 coal ply in most drill holes in the Project area and is the readily recognised by a significant "high" identified in the geophysical gamma logs.

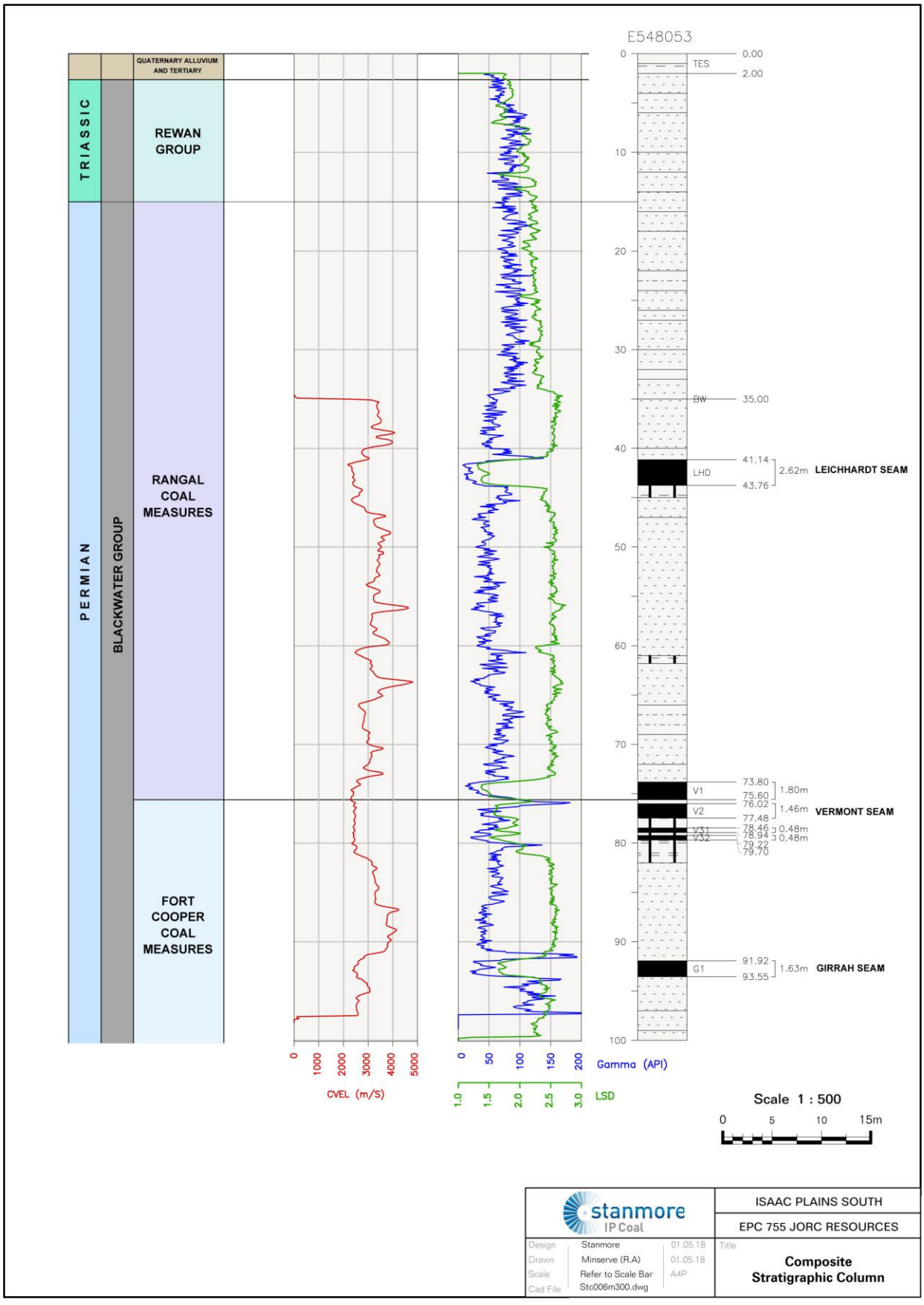
In the north of the Project area, proximal to MDL 137 (Wotonga South) the Leichardt and the Vermont seams coalesce to form a thickened pod of coal. Typical coal thicknesses by ply are presented in ***Table 3***: Isaac.

Table 3: Isaac South EPC 755 – Typical Coal Thickness

Seam	Ply	Typical thickness (metres)
Leichardt	LHD	2.5
Vermont	V1	1.8
	V2	1.4
	V31	0.4
	V32	0.4

Figure 2 presents a diagrammatic section of the typical seam stratigraphy of the area.

Figure 2: Isaac South EPC 755 – Typical Stratigraphic Column



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Coal Resource - Isaac South Project

JORC Status

Resources Parameters

The prior resource estimate was completed in February 2010 by JB Mining according to the 2004 JORC Code. The present resource estimate is the first one undertaken under direction of Stanmore Coal and has been completed in accordance with the 2012 JORC Code[4].

Constraints as applied to the resource model are noted as follows:

Areal Constraints

- The up-dip limit is the EPC755 western boundary or the full fresh coal thickness coal line
- The down-dip limit for open cut resources is the 15:1 cumulative waste to in-situ tonnes ratio to the V32 seam.
- The northern limit is set by a ~120m offset to the Isaac River
- The southern limit is set by the lox line and a 100m offset to Cherwell Creek
- Underground resources are assumed to be mined by high wall mining with a maximum penetration of 250m

Thickness Constraints

- Minimum seam thickness for open cut is 0.3m
- Minimum seam thickness for high wall mining is 1.5m

Resources by in-situ ratio and extraction type (open-cut and underground)

Coal Resources (2012 JORC Code) for Isaac South EPC 755, by in-situ ratio and JORC category are given in **Table 4**.

2018 Coal Resources are constrained to a 15:1 cumulative waste to in-situ coal ratio to the basal V32 seam. 2018 Coal Resources also include a small underground resource (2Mt) based on high wall mining of the V1 seam.

A 15:1 in-situ strip ratio has been chosen as it represents a potential limit of open-cut mining methods. Actual limits of open cut mining are dictated by application of several varying modifying factors, considered when determining a Mineable Reserve (such as processing and economics). No defined Coal Reserve presently exists for this project.

Structural thicknesses, resources by seam and category and other plots are presented in **Appendix Table 1**, as an extract of the JORC report.

[4] Note – The Resource Statement was prepared in accordance with the "Australian Guidelines for Estimation Reporting and Classification of Coal Resources" (December 2014), and are reported in compliance with the Joint Ore Reserves Committee's Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (December 2012).

Coal Resource - Isaac South Project

Table 4: Isaac South EPC 755 – Coal Resource Tonnage Status by JORC category and in-situ ratio[5]

Ratio	Ply	Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Sub Total (Mt)
<5 bcm/t	V1	0.02	0.1	0.3	**0.4**
	V2			0.2	**0.2**
	V31	0.02	0.0	0.1	**0.1**
	V32		0.1	0.1	**0.2**
Sub Total	**All seams**	**0.04**	**0.3**	**0.6**	**0.9**
5-10 bcm/t	LHD	4.49	1.3	0.1	**5.9**
	V1	3.87	1.8	1.2	**6.9**
	V2	0.12	3.3	2.3	**5.7**
	V31	0.76	0.7	0.5	**2.0**
	V32	0.07	1.1	1	**2.2**
Sub Total	**All seams**	**9.31**	**8.3**	**5.2**	**22.8**
10-15 bcm/t	LHD	1.22	1.2	0.1	**2.5**
	V1	1.13	2.3	6.2	**9.6**
	V2	0.03	1.8	6.4	**8.2**
	V31	0.14	0.5	2.3	**3.0**
	V32		0.2	2.6	**2.8**
Sub Total	**All seams**	**2.52**	**6**	**17.5**	**26**
Total <15 bcm/t		**11.9**	**14.5**	**23**	**50**
U-G (highwall)	V1			2	**2**
Total O/C & U/G	**All seams**	**11.9**	**14.5**	**25**	**52**

Isaac South Raw Coal Quality

Raw ash varies by seam and ply, with Table 5 summarising average weighted raw coal qualities by seam and ply for Measured and Indicated Coal Resources[6].

The Leichardt (LHD) seam averages a raw ash of 24.0%[7], ranging from as low as 21.7% to 32.2%. Higher raw ash values occur in the deeper down-dip areas of the resource.

The Vermont seam is separated into 4 plies (V1, V2, V31 and V32). Average raw ash by ply is lowest for the V1 at 23.8% and highest for the V31 at 41.3%.

Both the Leichardt and Vermont seam coals may be classified as medium volatile bituminous coal (ASTM Classification) with a reflectance (RoMax) in the order of 1.00%. Raw sulphur for both seams is low.

[5] Note – Rounding to the nearest significant figure is applied to Total Resource Tonnes in the Inferred Category. This is deemed conservative and reflective of the Inferred Resource category confidence level and accounts for the minor differences in the overall reported resource

[6] Note – The raw qualities are weight averaged and based on Measured and Indicated resources within EPC755

[7] Note – All ash values quoted are to a percentage air-dried basis (%adb), and all values expressed are weighted by thickness.

Coal Resource - Isaac South Project

Table 5: Isaac South EPC 755 – Selected summary of weighted raw coal qualities for all seams

Seam	Ply	Lab RD (g/cc)	Raw Proximate Analysis % (adb)				Total Sulphur % (adb)	Specific Energy kcal/kg % (adb)
			Ash	IM	VM	FC		
Leichardt	LHD	1.52	24.0	2.0	22.4	51.6	0.40	6,050
Vermont	V1	1.51	23.8	2.0	22.1	52.1	0.35	6,067
	V2	1.64	36.6	2.6	18.9	41.9	0.28	4,871
	V31	1.68	41.3	2.1	19.7	36.9	0.40	4,432
	V32	1.62	37.7	2.2	19.3	40.8	0.46	4,775

Isaac South Washability and Product Coal Quality

The LHD and V1 seam plies are generally low in raw ash and exhibit good washability characteristics. The remaining Vermont plies (V2, V32 and V32) are higher in ash and exhibit poorer washability characteristics. Simulation studies conducted by BCCM, based off the laboratory float-sink dataset for all Isaac Plains South bore cores show the seams can be beneficiated to produce a coking primary and thermal secondary product at a range of product ashes and yields, refer to the **Appendix Table 1** for further detail.

Results of more recent plant simulations, conducted by McMahon Coal Quality Resources (MCQR) on request of Stanmore Coal, suggest some further optimization of coal products by seam/ply is possible by targeting different primary and secondary ash levels, than those defined in previous simulation studies. Different target product ash levels will alter product yield and coal characteristics (relative to present results). Stanmore intends to continue to evaluate washability and product options on a per ply basis and additional future work is needed to consider and settle on an optimum processing methodology. This work will be undertaken as part of the upcoming exploration and evaluation of EPC755 and reported upon in the future.

Attached to this ASX announcement is the Table 1, Sections 1, 2 and 3 extracted from the formal JORC Mineral Resource reports the Isaac South EPC 755 Resource.

Yours faithfully
Ian Poole
Chief Financial Officer & Company Secretary

Coal Resource - Isaac South Project

FOR FURTHER INFORMATION, PLEASE CONTACT:

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Chief Financial Officer & Company Secretary
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ABOUT STANMORE COAL LIMITED (ASX CODE: 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 Project (now a new open cut mine that commenced operations in July 2018), and the Isaac Plains Underground Mine (currently being assessed in a Bankable Feasibility phase). The company is focused on the creation of shareholder value via the efficient operation of Isaac Plains, timely development of Isaac Plains East Project and identification of further development opportunities (such as the Isaac Plains Underground Mine and the Isaac Downs Coking Coal Resource) within the region. In addition, Stanmore Coal holds a number of high quality development assets (both coking and thermal coal resources) located in the Queensland's Bowen and Surat Basins.

COMPETENT PERSON STATEMENT

The information in this report relating to the Isaac South EPC755 resource is based on information compiled by Mr Mal Blaik who is a member of the Australian Institute of Mining and Metallurgy and is a Principal Consultant of JB Mining Services Pty Ltd. Mal Blaik is a qualified geologist (BSc App Geol (Hons) University of Queensland, 1979) with over 30 years' experience in coal geology 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 Blaik consents to the inclusion in the report of the matters based on the information, in the form and context in which it appears.

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ISAAC SOUTH (EPC755) COAL RESOURCES

JUNE 2018

JORC TABLE 1

CHECKLIST OF ASSESSMENT AND REPORTING CRITERIA
(THE JORC CODE, 2012 EDITION)

JORC TABLE 1 provides a summary of assessment and reporting criteria used for the ISAAC SOUTH EPC755 Project in accordance with the Table 1 Checklist in "*The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition)*".

Coal Resource - Isaac South Project

Section 1	SAMPLING TECHNIQUES & DATA (Criteria in each section apply to all preceding and succeeding sections.)
Criteria	**Explanation**
Sampling Techniques	Core holes were partly cored. Drilling rigs comprised both conventional and top head drive units providing 100mm and 200mm core for coal quality sampling and 63.5mm (HQ) for geotechnical sampling. All cores were photographed, geologically logged, sampled and bagged in the field. Open hole rotary drilling provided chip samples where seams were not cored. All holes were attempted to be drilled vertical. Almost all holes were geophysically logged.
Drilling techniques	Wireline and conventional core drilling. Rotary drilling using blades, poly crystalline diamond (PCD) or hammer bit. Based on pilot hole depths 100mm cores were taken from several metres above the target seams to several metres below.
Drill sample recovery	Core sample drilled and recovery noted by supervising geologist. Sample weights are compared with estimated weights to aid determination of sample recovery. Density logs used to check sample recovery. Redrills were required where core recoveries are <95%, except when due to adverse geological conditions.
Logging	Drill cuttings and cores were lithologically logged in the field. Lithological logs were encoded directly in the field on industry standard coding sheets. Coal seam intercepts were corrected to downhole geophysics. Cores were photographed. Where possible, wireline logging of all drill holes has been routinely undertaken for the industry standard suite of logs - calliper, gamma and density. As the drill holes are relatively shallow no down hole deviation surveys were carried out. The level of detail is considered to be appropriate for coal resource definition.
Sub-sampling techniques and preparation	Full cores were used for sample testing. Core sampling was completed at the drill site or core shed. Core samples were bagged to reduce oxidation and transported to the lab as soon as reasonable. Samples have been crushed and sub-sampled in NATA registered laboratories using appropriate Australian Standards for coal testing. All samples are weighed, air dried then re-weighed before being crushed. Sampling is generally on a whole seam basis. Raw coal analyses were carried out on the samples including Proximates, RD, phosphorus, total sulphur, SE, chlorine. Comprehensive washability and clean coal composite analyses were carried out on the whole seam samples including the full suite of tests on the primary coking and secondary thermal composites. Analyses of Floats 1.375 material was initially performed to allow assessment of the target quality of the final clean coal composites and to “quickly” access coking properties such fluidity, which deteriorates with time. The coking clean coal composites were subject to the following suite of tests, Proximates, phosphorus, total sulphur, CSN, Gray King Coke Type, Giesler Fluidity, Dilatometer, Ash Analyses, Petrographic analyses, Reflectance Ro Max. The Thermal clean coal composites were subject to the following suite of tests, Proximates, phosphorus, SE, chlorine and fluorine total sulphur, CSN, HGI, Ultimate Analyses, Ash Fusion Temperatures and Ash Analyses.

Coal Resource - Isaac South Project

Section 1	SAMPLING TECHNIQUES & DATA (Criteria in each section apply to all preceding and succeeding sections.)
Criteria	**Explanation**
Quality of assay data and laboratory tests	NATA registered laboratories have been used for all coal testing. Nata laboratories have quality assurance/quality control schemes.
Verification of sampling and assaying	On arrival at the laboratory, sample mass is compared with theoretical mass to check for recovery and thickness loss/inconsistencies. Samples are compared with geophysics to confirm to ensure consistency and check for core loss. If lithological logs are adjusted to geophysics, sample depths are adjusted accordingly. Numerous holes drilled in close proximity- cross checked for consistency in seam elevation, thickness and quality.
Location of data points	The survey grid is MGA94 Zone 55 which is based on the GDA94 datum. The height datum in the Australian Height Datum. Drill hole collars are surveyed by registered surveyors post drilling. Drillhole collars have been checked against the DTM and found to be consistent.
Data spacing and distribution	A total of 432 holes are in the lithological database of which 294 are used for structure modelling. 59 cored holes are used in the coal quality model. Chip drillhole spacing is approximately 250 metres in the updip half of resource area, while 100mm cored holes spacing is approximately 500m. Drilling density is sparse in the south eastern downdip portion of the resource. Drilling density is sufficient to classify the majority of the updip portion as Measured and Indicated. Some cores are excluded from modelling due to inappropriate sampling/ analyses and or core loss.
Orientation of data in relation to geological structure	Drilling has attempted to maintain hole verticality. The general dip of the area is 2-6 degrees to the east, steepening around faults. Drill hole spacing downdip is essentially equivalent to that along strike (with the exception of Lox definition drilling).
Sample security	Core samples were bagged and labelled with a unique field sample ID. Field sample despatch records were compiled detailing the sample depths, general composition (coal/parting) and intended analyses instructions. On arrival at the laboratory field samples were re-weighed and confirmed against sample despatch advice data.
Audits or reviews	Coal seam intercepts are corrected to downhole geophysics. Drillhole collars have been checked against the DTM and found to be consistent. Several internal reviews have been undertaken.

Coal Resource - Isaac South Project

<table>
<tr><th colspan="2">Section 2</th><th>REPORTING OF EXPLORATION RESULTS
(Criteria listed in the preceding section also apply to this section.)</th></tr>
<tr><th>Criteria</th><th colspan="2">Explanation</th></tr>
<tr><td>Mineral tenement and land tenure status</td><td colspan="2">EPC755 covering 36 sub-blocks was granted to Aquila Coal Pty Ltd, a subsidiary of Aquila Resources, on 10 April 2002 for a period of 3 years. Since then the EPC has changed ownership several times and the current holder is Stanmore IP Coal Pty Ltd, a wholly owned subsidiary of Stanmore Coal Limited. The permit has also been subject of some relinquishment, its present area covers 21 sub-blocks.
<table>
<tr><th>Tenure No.</th><th>Status</th><th>Date Granted</th><th>Expires</th><th>Sub Blocks</th><th>Holder</th></tr>
<tr><td>EPC 755</td><td>Granted</td><td>17/08/2001</td><td>9/04/2023</td><td>21</td><td>Stanmore IP Coal Pty Ltd</td></tr>
</table></td></tr>
<tr><td>Exploration done by other parties</td><td colspan="2">The earliest recorded exploration in the area was carried out by the Utah Development Company Pty Ltd in the 1960’s. A series of shallow drill traverses were drilled north of the Isaac River and south of Cherwell Creek and hence fell outside the currently defined IP SOUTH Project area. Thiess Peabody Mitsui Pty Ltd conducted traverses in the area from the mid-1960’s into the 1970’s.Queensland Mines Department in the 1970’s drilled some regional exploration holes in the south of EPC755, including CC15 and CC16 south of Cherwell Creek.

Iscor Australia Pty Ltd as the holder of EPC602, and EPC548 drilled a series of holes in the southern part of the area, all of which targeted the deeper Moranbah Measures and were to the west of the IP South project area. The potential of the Rangal and Fort Cooper Coal Measures was not investigated although coal was intersected at very shallow depths in one of these holes. Iscor later became Kuma Resources which is now majority owned by Anglo Coal.

MGC Resources Australia Pty Ltd conducted 2D dynamite seismic surveys across the general area, and followed this up with some gas/oil exploration holes. In 1993 Line 93-4, a dynamite seismic line transected the Isaac Plains South area. To the east it shows the Isaac Thrust fault (some 200+m throw) to the east of the Isaac River. Some 17.5 km of 93-4 crossed the Isaac Plains SOUTH project area. River Paddock 1 was completed in August 1993 to a depth of 560 metres and is on the western extent of the seismic line 93-4. This hole is some 4km west of IP South Project area.</td></tr>
<tr><td>Geology</td><td colspan="2">Regional Geology

The Isaac South EPC755 resource area is located in the northern part of the Permo-Triassic Bowen Basin containing principally fluvial and some marine sediments. The Bowen Basin is part of a connected group of Permo-Triassic basins in eastern Australia, which includes the Sydney and Gunnedah Basins. The Basins axis orientation is NNW-SSE roughly parallel to the Paleozoic continental margin.

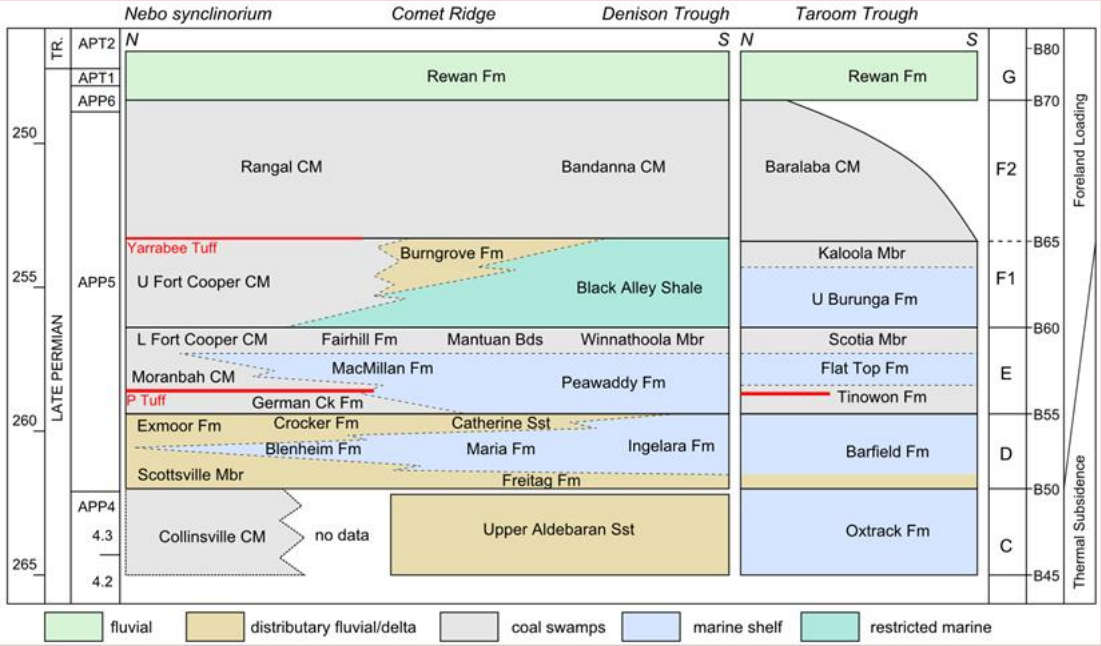
Tectonically, the basin can be divided into NNW-SSE trending platforms or shelves separated by sedimentary troughs. The units from west to east are the Springsure Shelf, Denison Trough, Collinsville Shelf/Comet Platform, Taroom Trough, Connors and Auburn Arches (interrupted by the Gogango Over-folded Zone) and the Marlborough Trough.

Development of the basin in the Early Permian was in the form of half grabens which subsequently became areas of regional crustal sag. The basin has suffered NE-SW oriented extensional and compressional events during its history which has influenced deposition and formed large synclinal and anticlinal features.</td></tr>
</table>

Section 2	REPORTING OF EXPLORATION RESULTS (Criteria listed in the preceding section also apply to this section.)
Criteria	**Explanation**

Structurally the Isaac Plains South EPC755 project is located near the western boundary of the deformed Nebo Synclinorium west of a major thrust system.

Relationships between stratigraphic Supersequences and lithostratigraphic units in the Bowen Basin (modified from Brakel et al. (2009), Fielding et al. (2001) and others)



Local Geology

Tertiary

Quaternary sediments range in thickness from 2 to 20m (average 7.8m) in the deposit area. Quaternary sediments appear to thicken to the west close to the subcrop of the Vermont seam. Some thicker Quaternary is seen along the banks of the Isaac River in the north and a minor amount along Cherwell Creek to the south.

Weathering

Depth of weathering over the whole deposit ranges from 15 to 30m averaging 22m. In the seam subcrop zone the depth of weathering averages 19.5m. Deeper weathering zones are generally related to faulting.

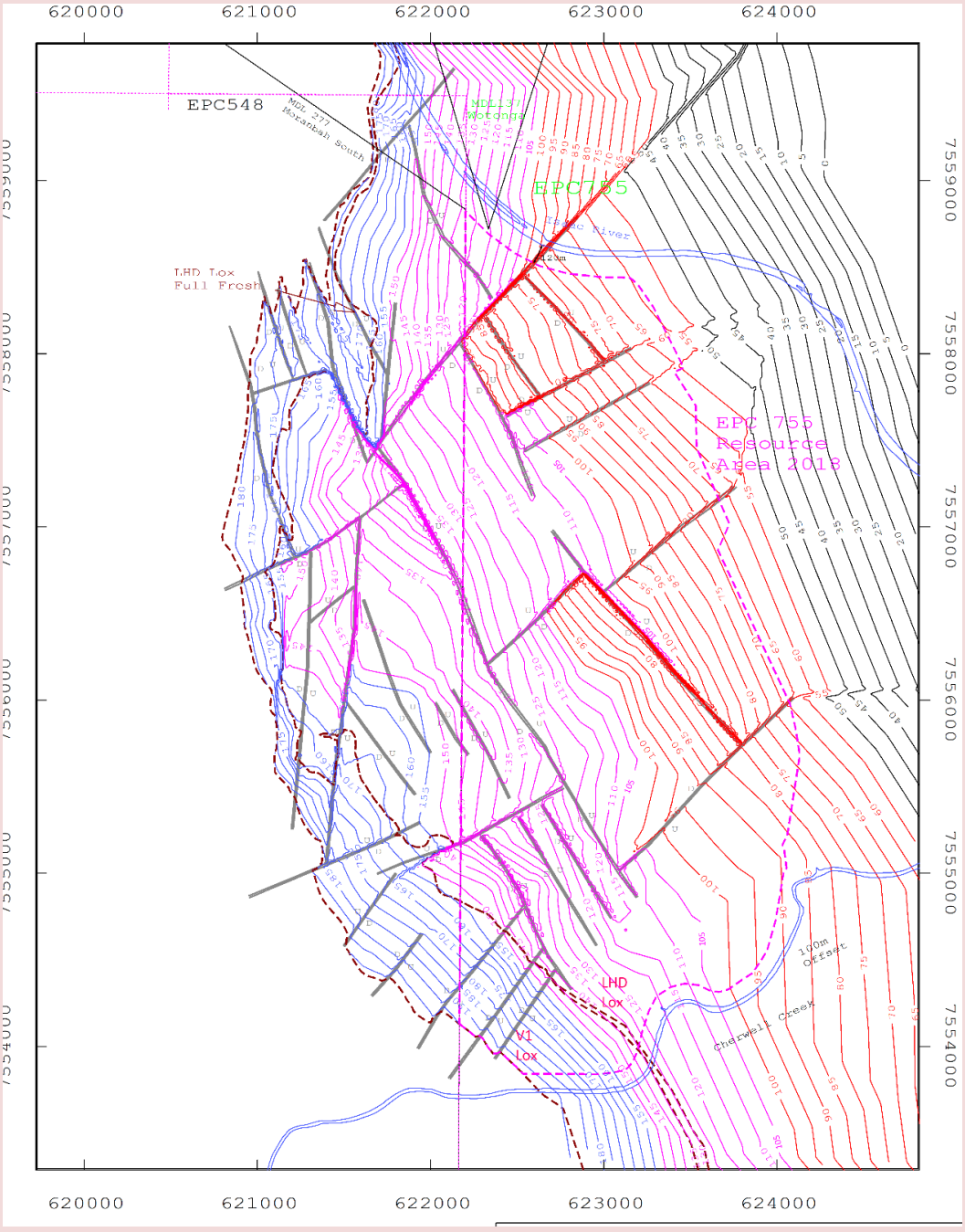
Structure and Faulting

In the IP South area, the Rangal Coal Measures dip to the east at 2 to 6 degrees. Dips steepen in the vicinity of major faults. Refer to the following figure for V1 seam structure floor contours and major faults. East of the deposit (beyond the limit of drilling) a major thrust system - the Isaac Thrust has been regionally interpreted and identified in the MGCRA seismic line 94-4 to the east of the Isaac River.

North-north-west trending thrust faults and orthogonal transverse faults feature in the resource area. A major thrust fault with a throw up to 25m occurs in the middle of the deposit area. A significant NE trending normal fault with throws of 5-15m occurs in the northern portion of the deposit area.

Coal Resource - Isaac South Project

Section 2	REPORTING OF EXPLORATION RESULTS (Criteria listed in the preceding section also apply to this section.)
Criteria	**Explanation**



Igneous Geology

Following a review of the Department of Natural Resources regional magnetic survey it has been concluded that there are no significant Tertiary basalt flows in the IP South Project area. Tertiary basalt flows do exist to the west of the resource area in the local Council basalt quarry.

No igneous material has been intercepted in drill holes within the resource area.

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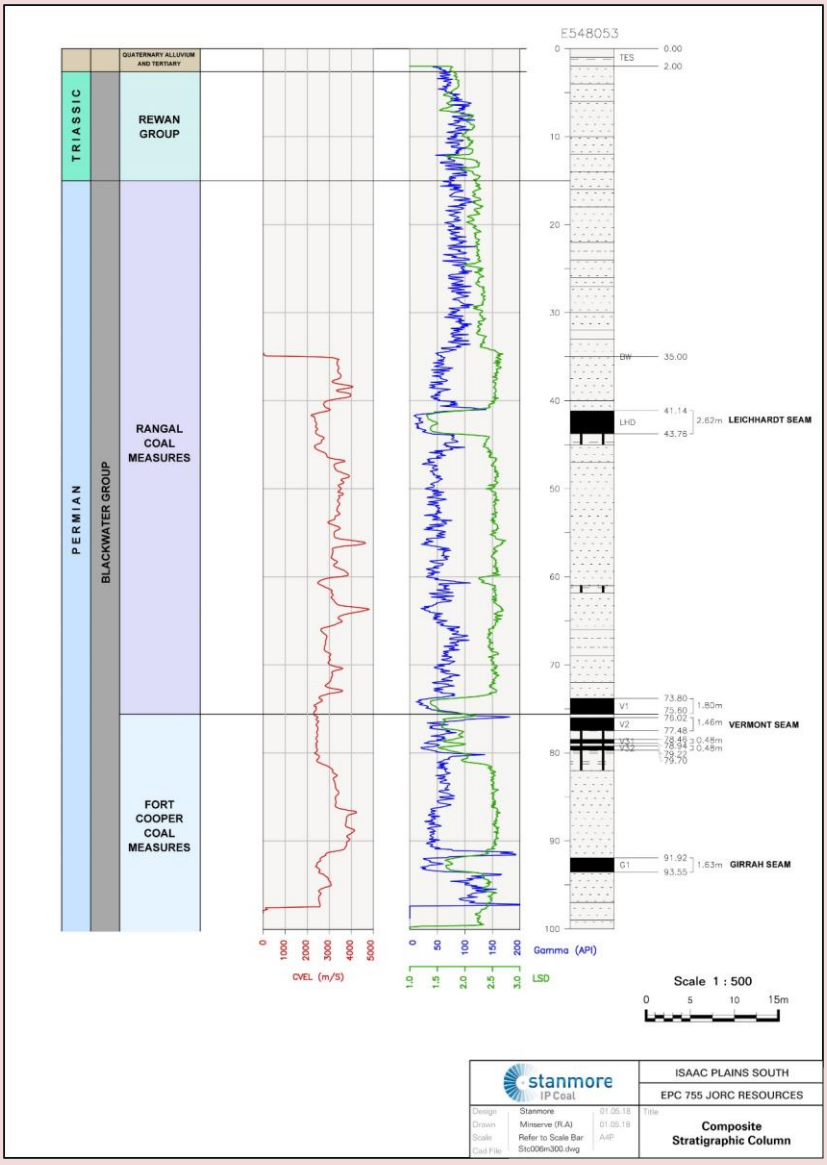
Section 2	REPORTING OF EXPLORATION RESULTS (Criteria listed in the preceding section also apply to this section.)
Criteria	**Explanation**

Coal Seams

General

The Leichardt (LHD) and the V1 ply of the Vermont Seam of the Rangal Coal Measures form the principal economic coal resources in the Isaac Plains South Project area. The boundary between the Rangal Coal Measure and the underlying Fort Cooper Coal Measures is the typical a cream to brown tuffaceous claystone band (commonly called the **Yarrabee Tuff** – YT). The YT has been identified immediately below the V1 coal ply in most drill holes in the IP South Project area Technically the V2 and V3 coal plys are the top of the Fort Cooper Coal Measures.



Coal Resource - Isaac South Project

Section 2	REPORTING OF EXPLORATION RESULTS (Criteria listed in the preceding section also apply to this section.)
Criteria	**Explanation**

Leichardt Seam

The Leichardt Seam is typically 2.5m thick and splits down dip into the L1 and L2 seams. The L1 seam is typically 0.8m thick, and L2 is 0.4m thick. At depth the L2 seam disappears within a strong coarse sandstone sequence. The coalesced LHD seam has some stone bands that are consistent over relatively short distances. The Leichardt whole seam raw ash averages 21.4%.

Vermont Seams

The Vermont seam lies approximately 25 m below the Leichardt seam and varies in total thickness between 5-9m (V1 to V32 including parting). There are three plys identified in the Vermont seam (V1, V2 and V3, which is further split into V31 and V32 plys). V1 averages 1.8 metres in thickness, V2 averages 1.4 metres, V31 averages 0.4 metres and V32 averages 0.4 metres.

Coal Quality

Leichardt and Vermont seam coal in the Isaac Plains SOUTH area may be classified as medium volatile bituminous coal (ASTM Classification) with a reflectance in the order of 1.00%. The LHD seam is generally low in ash and exhibits reasonable washability characteristics. The Vermont seams are higher in ash and exhibit poorer washability characteristics than the LHD seam. The seams can be beneficiated to produce a coking primary and thermal secondary product.

Weighted Average Raw Coal Qualities (adb) by Seam *

Seam	Lab RD	IM%	Ash%	VM%	TS%	Chlorine	Phos.%	Specific Energy (Kcals/Kg)
LHD	1.52	2.0	24.0	22.4	0.40	0.06	0.102	6,050
V1	1.51	2.0	23.8	22.1	0.35	0.05	0.070	6,067
V2	1.64	2.6	36.6	18.9	0.28	0.05	0.032	4,871
V31	1.68	2.1	41.3	19.7	0.40	0.05	0.027	4,432
V32	1.62	2.2	37.7	19.3	0.46	0.03	0.014	4,775

*The qualities are weight averaged for Measured and Indicated resources in EPC755.

Weight Averaged Coking Clean Coal Composite Qualities*

Seam	Lab Yield	Ash adb	Volatiles adb	CSN	Total Sulphur adb	Phos. adb	Basicity Index	Log Fluidity
LHD	27.0	8.4	28.0	3.9	0.39	0.041	0.17	0.84
V1	26.9	8.7	28.5	6.8	0.43	0.037	0.17	1.13
V2	14.0	12.5	28.4	5.4	0.46	0.014	0.13	1.32
V31	18.3	9.6	28.7	8.0	0.61	0.007	0.10	1.77
V32	20.9	9.4	28.8	8.2	0.60	0.009	0.09	1.83

*The qualities are weight averaged for Measured and Indicated resources in EPC755.

Section 2	REPORTING OF EXPLORATION RESULTS (Criteria listed in the preceding section also apply to this section.)
Criteria	**Explanation**

Weight averaged Thermal Clean Coal Composite Qualities

Seam	Lab Yield	Ash adb	VM adb	Total Sulphur adb	SE MJ/Kg	Phos. adb	CSN	HGI
LHD	40.6	14.3	26.4	0.36	28.47	0.064	1.0	62
V1	35.7	17.6	25.8	0.33	27.66	0.051	1.0	60
V2	25.3	24.0	26.4	0.33	25.44	0.013	1.0	58
V31	8.7	24.3	28.5	0.43	25.38	0.007	1.3	65
V32	23.2	23.8	27.7	0.44	25.75	0.007	1.1	64

*The qualities are weight averaged for Measured and Indicated resources in EPC755.

Opportunity exists for further optimisation and assessment of coal product and types.

Results of recent plant simulations by MCQR suggest some optimization of coal products by seam/ply is possible by targeting different average primary and secondary ash levels than those defined in previous simulation studies. Different target ash levels will alter yield and CSN characteristics. This change in ash could also result in some differences in coal product analysis (relative to present results).

Drill hole information

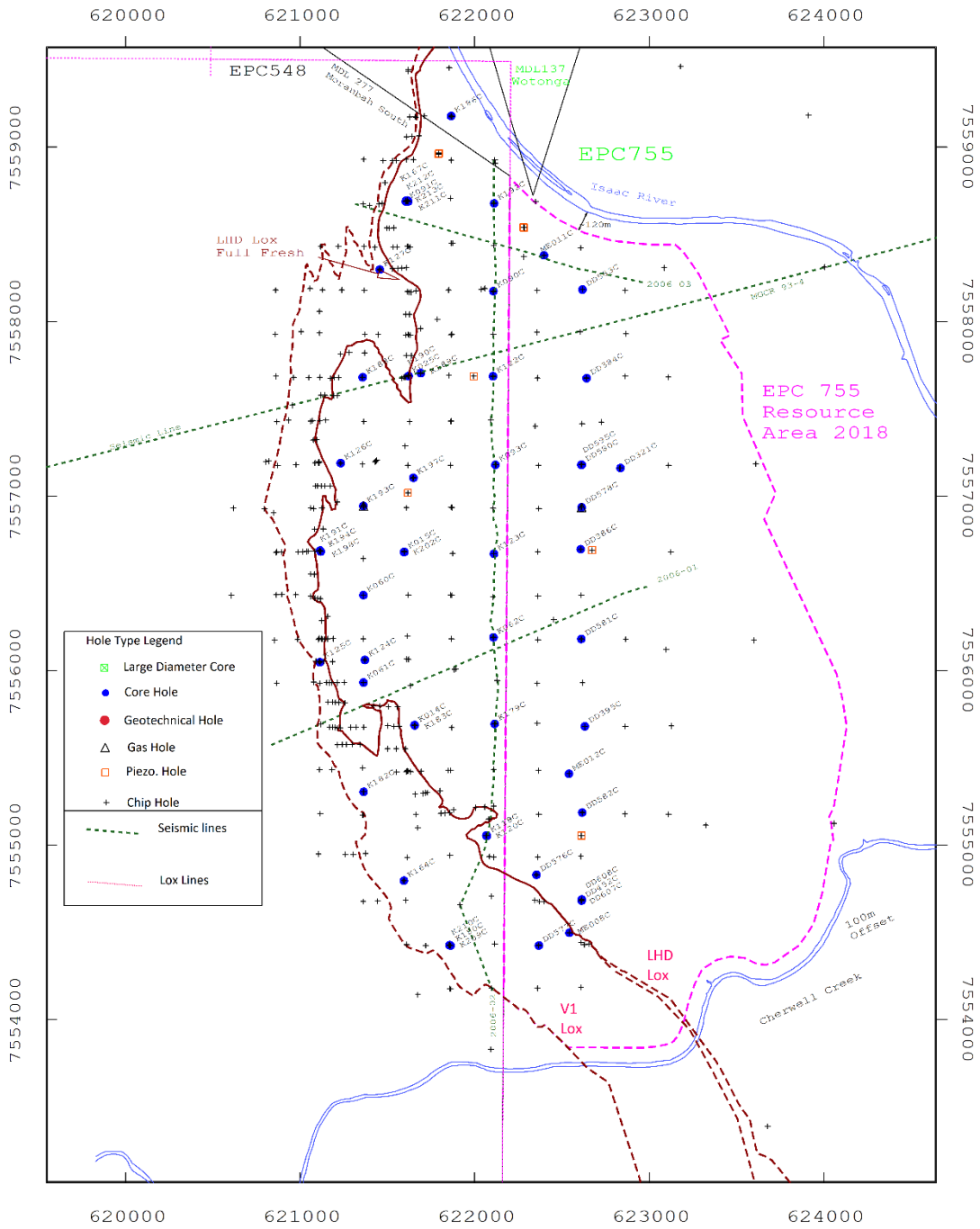
Given the large amount of data as detailed in the following table- tabulation of all the drill hole locations and seam intercepts would overload this document with information of limited value. Instead, plots of the holes used for structural and quality modelling demonstrate the location and density of the drilling data.

Number	Details
432	Total Number of Holes in Database including barren holes
294	Holes in used in Structural Model
59	Holes in used in Quality Model

Drill hole locations are shown in the following diagram:

Coal Resource - Isaac South Project

Section 2	REPORTING OF EXPLORATION RESULTS (Criteria listed in the preceding section also apply to this section.)
Criteria	**Explanation**



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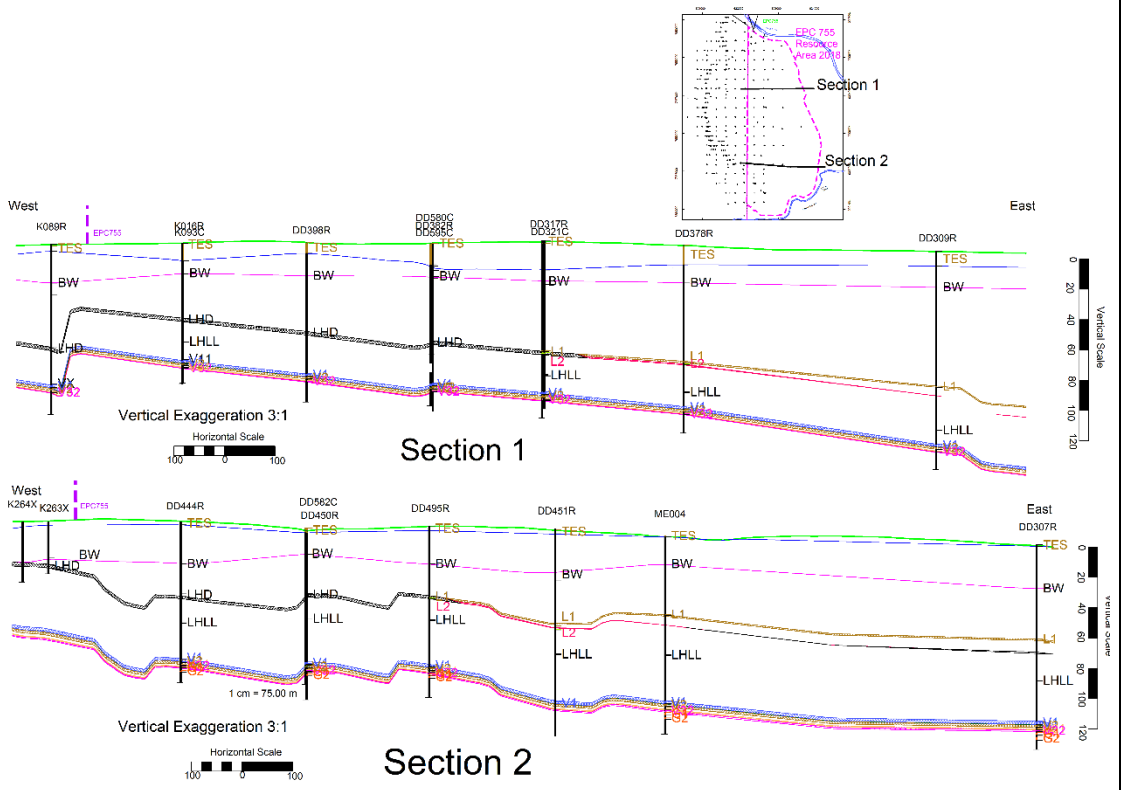
Coal Resource - Isaac South Project

Section 2	REPORTING OF EXPLORATION RESULTS (Criteria listed in the preceding section also apply to this section.)
Criteria	**Explanation**
	
Data aggregation methods	A number of contiguous coal seam samples have been composited on an industry standard length by density basis for Raw coal quality and length by density by yield basis for clean coal quality. Reported coal quality is by Seam.
Relationship between mineralisation widths and intercept depths	Tabulated coal thickness are downhole thicknesses. Coal resource modelling and estimation methods adjust for seam thickness versus the apparent thickness. Seam structure modelling is based on triangulation of the structure roof and floor intercepts. Seam thickness is derived by structure roof minus floor models.
Diagrams	Apart from figures embedded in the text of this table, appended to the end of this document are the following diagrams: Resource outline plots, Seam contour and thickness plots and Raw ash coal quality plots.

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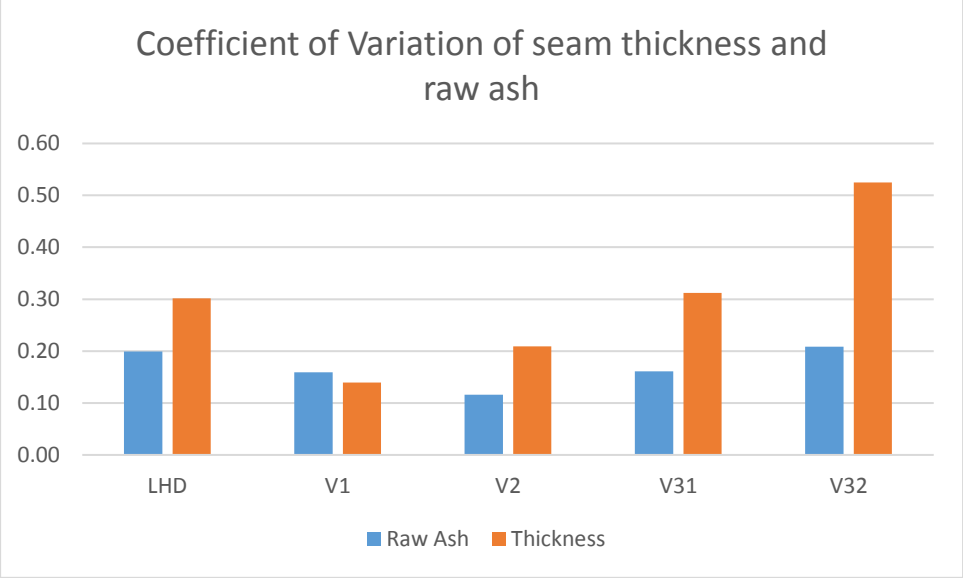
Coal Resource - Isaac South Project

Section 2	REPORTING OF EXPLORATION RESULTS (Criteria listed in the preceding section also apply to this section.)
Criteria	**Explanation**
Balanced reporting	All data and geological information is reported on. Where data has not been used an explanation is provided as to why the data has been excluded from the modelling and resource definition. Coal resources are reported by seam, confidence level (Measured, Indicated and Inferred) in depth categories and by tenement.
Other substantive exploration data	2D seismic surveys provide support for structural interpretation Locations of the surveys are shown in the previous diagram.
Further Work	Structural and Coal quality drilling is required for Leichardt seam splits L1 and L2.

Coal Resource - Isaac South Project

Section 3	ESTIMATION AND REPORTING OF MINERAL RESOURCES (Criteria listed in section 1, and as relevant in section 2, also apply to this section.)
Criteria	**Explanation**
Database integrity	Lithological logs, wireline geophysical logs, assay results and coal intersection depths have been reconciled in previous modelling and resource estimations. Random checks of seam intercepts depths with downhole geophysics show no inconsistencies.
Site visits	The competent person has visited the site during the 2013 drilling campaign and has experience in modelling and resource estimation of nearby deposits in the same formation.
Geological interpretation	The geological interpretation for this resource estimate is based in the integration of all drillhole and coal quality data. There is sufficient drilling data to allow an unambiguous interpretation of the area. The interpretation is consistent with previous work on the deposit.
Dimensions	The dimensions of the Isaac Plains South EPC755 resource are approximately 4.8 km north south (downdip) by 2 km east west. The resource dips to the east at 2 to 6 degrees. The target seams range in depth from 20m to 110m.
Estimation and modelling techniques	Geological modelling and resource estimation has been carried out by the Competent Person using Maptek's VULCAN 3-D geological modelling software. The model is of seams with waste modelled as a default. Seam structure modelling (20x20m grid) is based on triangulation of the structure roof and floor intercepts. Seam thickness is derived by structure roof minus floor models. Coal quality models (100x100m grid) are generated using the Inverse Distance Algorithm.
Moisture	Air dry Relative Density and Inherent Moisture are modelled from directly from analytical data for each seam. There is no MHC data to assist in the estimation of insitu Moisture. An insitu moisture of 5% is assumed for this resource estimation. Insitu density is calculated using the Preston & Sanders formula.
Cut-off parameters	The resources at Isaac Plains South are considered to have reasonable prospects of eventual extraction by opencut methods. Economic studies indicate open cut mining is viable to a cumulative waste to coal insitu tonnes ratio of 15:1 to the V32 seam. The driving component is the value of the coking coal product. Highwall mining of the V1 seam is viewed as viable • The up-dip limit is the EPC755 western boundary or the full fresh coal thickness coal line. • The down-dip limit for open cut resources is the 15:1 cumulative waste to insitu tonnes ratio to the V32 seam. • The northern limit is set by a ~120m offset to the Isaac River. • The southern limit is set by the lox and a 100m offset to Cherwell Creek. • Minimum seam thickness for open cut is 0.3m. • Underground resources are assumed to be mined by Highwall mining with a maximum penetration of 250m. • Minimum seam thickness for highwall mining is 1.5m.
Mining factors or assumptions	The assumed open cut mining method is overburden and coal removal by dragline, shovel and trucks. Underground mining by highwall mining methods is only viable for the V1 seam. A maximum penetration of 250m is assumed for the HW mining resource.

Section 3	ESTIMATION AND REPORTING OF MINERAL RESOURCES (Criteria listed in section 1, and as relevant in section 2, also apply to this section.)
Criteria	**Explanation**
Metallurgical factors or assumptions	This coal resource estimation is based on the assumption that the coal will require beneficiation prior to export.
Environmental factors or assumptions	Resources are excluded within 120m of the Isaac River in the north and within 100m of Cherwell Creek in the south.
Bulk density	*In-situ* density is estimated using the Preston & Sanders formula. Air dry Relative Density and, Inherent Moisture are modelled directly from analytical data for each seam. *In situ* Moisture is assumed to be 5%.
Classification	Resource classification is based on the density of Coal quality Points of Observation (POB) and Structural POB. In this deposit the Coal quality POB have a lower density than the structure POB and thus are the principal delimiter of the resource. **A quality point of observation** for each seam is defined as a cored hole with coal recovery of >90 % and having raw and clean coal composite quality data. A **quantity point of observation** for each ply is defined as a ply drill hole intercept with downhole geophysics or fully cored section. Structural definition is aided by 2D seismic surveys which provide some fault definition and proof of seam continuity. The vast majority of structural holes have downhole geophysics. Seam thickness contours indicate continuity and consistency with local trending. Seam correlation is aided by the Yarrabee Tuff stratigraphic marker and facilitated by downhole geophysics and detailed core logging. Despite the faulting, the structural geology is simple and well understood. Seam thickness has a low coefficient of variation (indicating good consistency) as shown in the chart below. Raw coal ash has a lower variability than seam thickness as shown in the following chart. 

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Coal Resource - Isaac South Project

<table>
<tr><th>Section 3</th><th>ESTIMATION AND REPORTING OF MINERAL RESOURCES
(Criteria listed in section 1, and as relevant in section 2, also apply to this section.)</th></tr>
<tr><td>Criteria</td><td>Explanation</td></tr>
<tr><td></td><td>Results from geostatistical studies have provided a basis for the following classification criteria.

Drill Hole Radius of Influence for Resource Classification
<table><tr><th>Criteria</th><th>Measured</th><th>Indicated</th><th>Inferred</th></tr><tr><td>Structure</td><td>250</td><td>500</td><td>1500</td></tr><tr><td>Quality (Grade)</td><td>250</td><td>500</td><td>1500</td></tr></table>
Resource outline plots are attached to this table.</td></tr>
<tr><td>Audits or reviews</td><td>Several internal reviews were undertaken by Isaac Plains Coal.

Xenith reviewed the IPS resource assessment in 2015 and again in 2017. Checks included model validation against database and fault interpretation as well as resource estimation checks.</td></tr>
<tr><td>Discussion of relative accuracy/confidence</td><td>Confidence classification involves evaluation of both structural definition as well as grade definition. Confidence in structural definition involves confidence both in seam thickness consistency/continuity as well as confidence in seam location. Confidence in seam thickness prediction is high as indicated by locally trending consistent contours and the large range of the seam thickness variogram. Confidence in coal quality prediction is also reasonably high due to locally trending consistent contours.</td></tr>
</table>

Attachments

- Depth of Leichardt Seam Contours
- Depth of V1 Seam Contours
- Thickness Contours: Leichardt Seam and V1, V2, V31 and V32 seams,
- Raw Ash Contours: Leichardt Seam and V1, V2, V31 and V32 seams,
- Resource Outlines: Leichardt Seam and V1, V2, V31 and V32 seams

620000 621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC548

MDL 277
Moranbah South

MDL137
Wotonga

EPC755

Isaac River

120m

LHD Lox
Full Fresh

EPC 755
Resource
Area 2018

100m
Offset

LHD
Lox

V1
Lox

Cherwell Creek

Leichhardt Seam
Depth to Roof

620000 621000 622000 623000 624000

620000 621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC548

MDL 277
Moranbah South

MDL137
Wotonga

EPC755

Isaac River

EPC 755
Resource
Area 2018

Cherwell Creek

100m
Offset

V1 Depth to Roof

621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC755

Isaac River

~120m

LHD Lox
Full Fresh

LHD Split

LHD
L1
L2

LHD
L1
L2

LHD Split

LHD
Lox

V1
Lox

Isaac Plains South
Resource Area 2013

100m
Offset

Cherwell Creek

LHD Raw Ash adb

18.0
23.7
17.4
22.2
23.8
19.2
21.7
22.3
21.9
21.8
16.8
17.9
23.3
22.6
25.5
27.7
15.9
16.9
20.6
22.8
22.5
32.2
14.1
20.3
18.5
18.4
16.6
16.4
20.6
27.1
22.1
21.1
16.7
19.6
25.8
18.0
17.3
17.1
15.5
16.6
21.2
28.2
15.3
22.9
32.2
19.2
21.9
24.6

18 19 20 21 22 23 24 25 26

621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC755

Isaac River

~120m

100m Offset

Cherwell Creek

Isaac Plains South Resource Area 2013

V1 Raw Ash adb

V1 Lox

20.2 23.8 20.8 18.7 21.8 22.7 20.5 22.8 16.8 23.6 37.1 33.8 21.7 27.3 21.0 19.7 22.0 28.6 24.5 24.0 18.2 21.9 22.8 21.4 25.9 27.0 22.8 20.8 22.6 19.9 27.8 30.7 24.6 21.7 22.4 23.0 26.5 22.3 21.9 24.8 26.2 27.2 30.0 25.8 24.0 21.8 22.6 22.4 23.8 19.4 18.9 22.2 23.7 21.0 21.4 19.8

20 21 22 23 24 25 26

V2 Raw Ash adb

EPC755

Isaac River

~120m

Isaac Plains South Resource Area 2013

100m Offset

Cherwell Creek

V1 Lox

621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC755

Isaac River

~120m

42.0 53.0 49.3 44.8 45.5 40.6 38.3 35.7 28.3 33.8 41.2 41.3 53.2 41.0 35.1 34.6 39.0 54.7 35.1 35.7 35.9 30.0 40.6 36.0 40.3 38.6 36.1 32.0 34.5 34.4 36.7 43.6 33.6 29.4 31.9 41.2 37.9 38.9 34.1 39.0 38.6 37.5 39.9 31.8 41.5 56.0 42.6 35.9 47.5 45.2 45.0 34.0

46 44 42 40 38 36 42 38 36 34 38 40 42 44 46

V31 Raw Ash
adb

Isaac Plains South
Resource Area 2013

100m
Offset

Cherwell Creek

V1
Lox

621000 622000 623000 624000

621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC755

Isaac River

~120m

36.8 46.8 57.3 60.4 20.5 35.1 32.2 37.6 34.7 41.3 30.3 50.1 34.7 42.8 37.2 37.3 37.3 55.2 39.7 38.6 34.2 31.3 30.9 43.0 45.3 41.9 28.1 33.0 33.8 41.3 37.6 45.0 26.7 36.2 25.5 38.6 33.5 31.1 40.8 30.2 36.7 43.4 44.2 39.9 34.4

42 44 40 38 36 34 33

V32 Raw Ash

V1
Lox

Isaac Plains South
Resource Area 2013

100m
Offset

Cherwell Creek

620000 621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC548

MDL 277
Moranbah South

MDL137
Wotonga

EPC755

Isaac River

~120m

LHD Lox
Full Fresh

LHD Split

LHD

L1
L2

Legend

Measured

Indicated

Inferred

Quality Point of Observation

Structure Point of Observation

LHD Resource Outlines

LHD

Lox

L1
L2
LHD Split

15

15

15

15:1 Ratio
to V32 inc V2

Cherwell Creek

Isaac Plains South
2018 Resource
Outline

EPC755

620000 621000 622000 623000 624000

620000 621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC548

MDL 277
Moranbah South

MDL137
Wotonga

EPC755

Isaac River

~120m

Legend

Measured

Indicated

Inferred

Quality Point of Observation

Structure Point of Observation

U/G Area
HW Mining
V1 seam

250m HW
mining
limit

15:1 Ratio
to V32 inc V2

V1 Resource Outlines

Isaac Plains South
2018 Resource
Outline

Cherwell Creek

EPC755

620000 621000 622000 623000 624000

620000 621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC548

MDL 277
Moranbah South

MDL137
Wotonga

EPC755

Isaac River

~120m

Legend

Measured

Indicated

Inferred

Quality Point of Observation

Structure Point of Observation

250m HW mining limit

15

15

15

15:1 Ratio to V32 inc V2

V2 Resource Outlines

Isaac Plains South
2018 Resource
Outline

Cherwell Creek

EPC755

620000 621000 622000 623000 624000

620000 621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC548

MDL 277
Moranbah South

MDL137
Wotonga

EPC755

V31 <0.3m thick

0.3m

Isaac River

~120m

15

15

15

15

250m HW mining limit

15:1 Ratio to V32 inc V2

Legend

Measured

Indicated

Inferred

Quality Point of Observation

Structure Point of Observation

V31 Resource Outlines

Isaac Plains South 2018 Resource Outline

Cherwell Creek

EPC755

620000 621000 622000 623000 624000

620000 621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC548

MDL 277
Moranbah South

MDL137
Wotonga

EPC755

Isaac River

~120m

V32 < 0.3m thick

0.3m

0.3m

15

15

15

Legend

Measured

Indicated

Inferred

Quality Point of Observation

Structure Point of Observation

250m HW mining limit

V32 Resource Outlines

15:1 Ratio to V32 inc V2

Cherwell Creek

Isaac Plains South
2018 Resource
Outline

EPC755

620000 621000 622000 623000 624000

620000 621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC548

MDL 277
Moranbah South

MDL137
Wotonga

EPC755

Isaac River

~120m

LHD Lox
Full Fresh

LHD Split

LHD

L1
L2

EPC 755
Resource
Area 2018

LHD

L1
L2

LHD Split

100m
Offset

LHD
Lox

V1
Lox

Cherwell Creek

LHD Seam
Thickness

620000 621000 622000 623000 624000

620000 621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC548

MDL 277
Moranbah South

MDL137
Wotonga

EPC755

Isaac River

120m

EPC 755
Resource
Area 2018

100m
Offset

Cherwell Creek

1.75 2.00 1.50

V1 Seam Thickness

620000 621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC548

MDL 277
Moranbah South

MDL137
Wotonga

EPC755

Isaac River

120m

EPC 755
Resource
Area 2018

100m
Offset

Cherwell Creek

1.00 1.25 1.50 1.75

V2 Thickness

620000 621000 622000 623000 624000

620000 621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC548

MDL 277
Moranbah South

MDL137
Wotonga

EPC755

Isaac River

~120m

0.25

0.50

0.75

EPC 755
Resource
Area 2018

100m
Offset

Cherwell Creek

V31 Thickness

620000 621000 622000 623000 624000

620000 621000 622000 623000 624000

7559000 7558000 7557000 7556000 7555000 7554000

EPC548

MDL 277
Moranbah South

MDL137
Wotonga

EPC755

Isaac River

~120m

0.25 0.50 0.75 1.00

EPC 755
Resource
Area 2018

100m
Offset

Cherwell Creek

V32 Thickness

620000 621000 622000 623000 624000