stanmorecoal



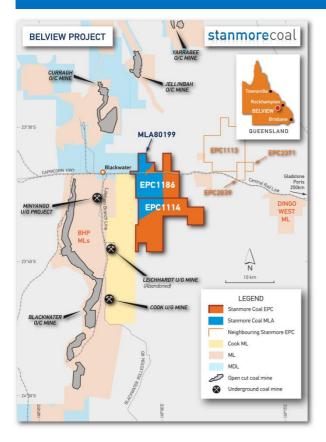
ASX announcement

16 June 2014

Belview Coking Coal Project Coal – Coal Quality & Exploration Update

Highlights

- JOGMEC / Taiheiyo funded drilling program concluded at Belview
- Coal quality results from the main target seams continues to demonstrate promising coking properties (7-8.5 CSN) and high overall washed yield
- Project JORC Inferred Resource increased to 342 million tonnes
- Stanmore is strongly positioned to progress its projects through the current coal market downturn with a \$18m cash balance and no take or pay liabilities



Stanmore Coal Limited ("Stanmore" or "the Company") has completed further geological modelling and coal quality analysis upon completion of two holes (CQBN0009 and CQBN0010) drilled this calendar year within the Belview Project area. Exploration activities were undertaken using funding provided by Taiheiyo Kouhatsu Inc. ("Taiheiyo") supported by the Japan Oil, Gas and Metals National Corporation ("JOGMEC") under an Exploration Support Agreement.

Increase to JORC Inferred Resource estimate

The results have given rise to an increase to the



Project's JORC Inferred Resource estimate and the additional data has allowed further refinement to the project geological model. Incorporating the results of these additional two holes increased the Project's JORC Inferred Resource from 322 million tonnes to 342 million tonnes.

Confirmation of Attractive Coking Properties

Coal quality analysis conducted on samples from these additional holes supports the previous coal quality results announced by the Company regarding target products which can be produced from the main target seams within the project area, namely the Castor and Pollux seams. Coal quality results for the project to date were reviewed by Ross Stainlay, Manager of Coal Technology at M Resources. The laboratory results obtained from the bore core samples display characteristics and properties typical of the Rangal coal measures in the region.

The vitrinite coking fraction concentrates in the finer size ranges, enabling the potential production of a hard coking coal from this fraction. The coking coal is classified as a high rank coking coal of low ash with a high CSN value (typically 7 - 8.5). Attractive ash levels of 6-8% can be produced, at an average primary product yield of 50-55%. The total sulphur level is low at less than 0.50%. The vitrinite content of the coking coal lies between 45-60% and this is standard for Rangal coals.

The secondary product will be a readily saleable low volatile PCI coal as the product displays high carbon content, calorific value and coke replacement ratio and would be attractive to most blast furnace operators. The sulphur level is very low at 0.35%. The expected yield is 25% for this secondary product.

Together these products will be produced at a high overall washed yield (average laboratory yield of 75-80%). Target products will be comparable to those produced in neighbouring mines and sold into established markets including Japan, South Korea, Taiwan, China, India, and Europe. Similar hard coking coals from Gladstone port have been exported to steel plants world-wide and are well understood and accepted in the market place.



Encouraging Results Achieved in Aries Seam

In addition to the positive quality results achieved for the main target seams, results attained for the Aries seam are very encouraging. The Aries seam conformably overlies the Castor and Pollux seams and quality analysis on samples from hole CQBN0009 produced a CSN of 8.5 for the target coking product with a composite washing yield (primary HCC product plus secondary PCI product) in excess of 90%. The Company will continue to monitor the quality characteristics of the Aries seam and seek to maximise the mining potential through mine design options.

* * *

Nick Jorss, Stanmore's Managing Director said, "We continue to be very encouraged by the drilling and coking coal quality results at Belview. We would like to thank Taiheiyo, supported by the Japanese Government for their ongoing support of the Belview Project. Over the next year we plan to progress our feasibility studies in conjunction with work to support the Environmental Impact Statement as we move towards production at one of the very few independently owned major coking coal projects remaining in the Bowen Basin. Whilst coal market conditions remain challenging, the Company is well positioned for long term success with a strong cash balance, small but experienced team and high quality coal assets in some of Australia's best coal basins".

On behalf of the Board

D McAlpine

Joint Company Secretary



For further information, please contact:

Mr Nick Jorss Managing Director 07 3238 1000 Mr Doug McAlpine Company Secretary 07 3238 1000

Competent Persons Statement

The information in this report relating to the Belview Project exploration results and coal resources is based on information compiled by Mr Troy Turner who is a member of the Australian Institute of Mining and Metallurgy and is a full time employee of Xenith Consulting Pty Ltd. Mr Turner is a qualified geologist and has sufficient experience which is relevant 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 Turner consents to the inclusion in the report of the matters based on the information, in the form and context in which it appears.

About The Belview Coking Coal Project

The Belview Project is a large scale, metallurgical coal project located in the heart of Queensland's Bowen Basin. The Company has established a 342 Mt JORC Inferred Resource. Coal quality analysis completed to date confirms a high overall washed yield of between 73% and 83% with the ability to produce a Hard Coking Coal primary product and a secondary low volatile Pulverised Coal Injection product. Both products exhibit low ash, low volatile matter and low sulphur. The Company has submitted a Mining Lease Application and is progressing through key project development milestones.

About Stanmore Coal Limited (ASX code: SMR)

Stanmore Coal is a growth focused, pure play coal exploration and development company with a number of prospective coal projects and exploration areas within Queensland's Bowen and Surat Basins. Stanmore Coal is focused on the creation of shareholder value via the identification and development of coal deposits, with a focus on the prime coal bearing regions of the east coast of Australia.

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JORC CODE, 2012 EDITION – TABLE 1 REPORT

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	 For the Stanmore 2010 and 2013 and 2014 exploration programs all coal seams intersected greater than 0.10 m were sampled with a maximum sample length of 0.50 m of coal. Coal plies were sampled discretely on the basis of lithological characteristics and quality. All non-coal material and partings less than 0.10 m were included with the lower coal ply and noted in the lithological description. Non-coal interburden material greater than 0.10 m and up to a maximum of 2.0 m was sampled separately. The immediate 10 m of roof and 5 m of floor have been sampled and retained in core boxes for future geotechnical testing. All coal and roof and floor dilution samples were double bagged at site and marked with sample number, date, hole and project. These were refrigerated on site until geophysical corrections confirmed representative core recovery of the seam and samples. The qualified samples were then transported to the laboratory via courier. Coal Quality samples from the Stanmore Drilling program were sent to Bureau Veritas Laboratories in Brendale, Queensland. All coal quality samples were prepared and analysed using Australian Standard testing methodologies.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	 The 2013 / 2014 exploration program, CQBN0009 and CQBN0010 holes were partially cored using a HQ3 size core barrel producing a 61.1mm core diameter. Coal quality holes for the CQBN 2013 EPC1186 holes were cored (partially or fully) using a PQ size core barrel producing an 83.1 mm core diameter. The SCB series which used HQ3 size core producing a hole diameter of 96.1mm for the top of hole with PCD tails at



Criteria	JORC Code explanation	Commentary
		 99.0mm. Non cored holes were use in the model to define structure and stratigraphy but were not used as Points of Observation A full list of drill holes and drilling methods is available at the end of Table 1 in Appendix B – Drill Hole Data.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 An assessment of core recovery was completed by comparing the recovered thickness measured during geological logging and by the driller, to geophysical picked thicknesses from the geophysical logs. If there was less than 95% core recovery a redrill was required. Volumetric analysis of samples was conducted on all Stanmore exploration programs from 2011 SCB series, 2013 CQBN series and 2014 CQBN series and also for the Waratah 2012 BW series The analysis was based on sample mass received versus expected sample mass derived from sample length by core diameter by apparent Relative Density If sample mass was below 95% a separate exercise interrogating the linear recovery via photos and logs was undertaken to decide whether the sample could be included and not bias the results.
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 core was geologically logged, marked and photographed before sampling. Geological and geotechnical features were identified and logged. All chip holes were geologically logged. All drill holes have been geophysical logged with a minimum density, calliper, gamma and verticality unless operational difficulties prevented full or partial logging of the drill hole. A full list of the suite of geophysical logs that have been run on each drill hole can be found in Appendix B – Drill Hole Data. The calibration of the geophysical tools was conducted by the geophysical logging company. Coal Seam Wireline services and for holes CQBN0009 and CQBN0010 Weatherfords.



Criteria	JORC Code explanation	Commentary
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 technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of 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 core samples were double bagged on site and transported to the Laboratory for testing. Bureau Veritas Laboratories comply with Australian Standards for sample preparation and sub sampling. Large wash samples were pre-treated and dry sized and various sizes before sample splitting and analysis. Proximate analysis was completed on a portion of the original sample. Raw analysis procedure keeps ½ of the sample as reserve.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	 Bureau Veritas Laboratories comply with the Australian Standards for coal quality testing and are certified by the National Association of Testing Authorities Australia (NATA). Geophysical tools were calibrated by the logging company Coal Seam Wireline services and for holes CQBN0009 and CQBN0010 Weatherfords. The density measurement is calibrated to precise standards and where possible validated in a calibration hole.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Bureau Veritas Laboratories comply with the Australian Standards for coal quality testing and as such conduct the verifications for coal quality analysis outlined in the standards. Coal Quality results were verified by Xenith Personnel before inclusion into the geological model and resource estimate. Product Coal assessment has been undertaken by McMahon Coal Quality Resources and MResources for the 2014 exploration program.



Criteria	JORC Code explanation	Commentary
		No adjustments have been made to the Coal quality data.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Professional Survey of the coal quality boreholes for the Stanmore exploration programs was completed by Wilson Survey Group (2014) T.R. Baillie Consulting Surveyors (2013) and Klau Geomatics (2010). Datum GDA 94 and projection MGAZ55 was used. The topographic surface, topo_glomap was modelled from ASTER Global Digital Elevation Model ("ASTER GDEM") survey. It has been captured with 1.5 arc-second resolution, equivalent to approximately 32.0 m.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Inferred resources and exploration targets have only been reported in this resource estimate and reflect the low data density. The inclusion of boreholes from neighbouring areas has given the model a reasonable amount of lateral continuity in all directions. The applied data spacing is 4000 m between points of observation for the Inferred resource. (2000 m radius extended out from a POB). Multiple samples were obtained for some seams within the Belview Project area. As such, where appropriate, sample compositing has been completed. Samples were weighted against sample thickness and insitu RD.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	 Geological structure in the area is aligned with the Jellinbah Fault complex on a northwest to southeast orientation. One normal fault has been interpreted from drill hole data from the 2013 program as it was directly intersected. However, the current drill hole spacing is insufficient to resolve structure between drill holes. Data points have been obtained on either side of this identified fault to ensure there is no sampling bias associated with this structure. All drill holes are vertical to intersect the largely flat-lying coal bed stratigraphy.



Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample security.	Sample Security was ensured under a chain of custody between Stanmore Coal personnel on site and Bureau Veritas laboratory and ECE personnel on site and Bureau Veritas for the 2014 exploration program
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 Sampling was undertaken by ECE personnel. Bureau Veritas undertook internal audits and checks in line with the Australian standards and their NATA certification.



Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Comme	ntary					
Mineral tenement and land tenure	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,	Tenur Type	e Tenure Number	Date Lodged	Date Granted	Date Expires	Principal Holder	Number of Sub blocks
status	 historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	MLa	80199	4-Sep- 2013			Belview Coal Pty Ltd	
	any known impediments to obtaining a needed to operate in the area.	EPC	1186	03- Sep- 2007	12- Mar_2008	11- Mar- 2018	Belview Expansion Pty Ltd	23
		EPC	1114	14- Dec- 2006	28-Feb- 2008	27- Feb- 2018	Belview Coal Pty Ltd	38
			EPPEPPML:strijwoobeeBelv	1025 - BO 806 - OM 751 - CH4 1779 - Coc o of the wo ald limit re n taken in view Proje	E resources A I Pty Ltd ok Resources estern extent esource extra to account w	Mining Pt of EPC 11 ction in the	y Ltd (this ov 114 and EPC nis area. This nating resour	1186. This zone has ces in the
			e are no kno Belview proj		liments to ob	taining a	licence to op	erate in
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Belv	ew Project ł	ias been re	ted within ar eviewed as pa there are 23	art of this	report.	the



Criteria	JORC Code explanation	Commentary
		 2 Stanmore Coal partially cored drill holes drilled in 2013 and 2014 (CQBN series) (CQBN009 and CQBN0010) 7 Stanmore Coal partially cored drill holes drilled in 2013 (CQBN series) (CQBN0005 a redrill of CQBN0003 and CQBN0007 a redrill of CQBN0006) 6 Stanmore Coal partially cored drill holes drilled in 2011 (SCB series) (SCB005P a redrill of SCB005C) 2 BOW gas wells drilled in 2010 - 2012 (BOW series). 6 GWaratah Holes (BW Series) An additional 19 boreholes outside of the lease boundary were included to ensure adequate structural control of the resource model: 14 DME historical boreholes drilled in (Blackwater and Humboldt series). Two BOW gas wells drilled in 2010 - 2012 (BOW series). Three Hematite Petroleum Pty Ltd gas wells drilled in 1980 (Gemini series). There are 3 seismic surveys that have been completed over the project area: A regional 2D seismic survey was undertaken in 2013 by Belview Coal Pty Ltd, with survey lines that transect the Belview project area. The survey includes 10 lines of 10m spaced nodes. Two surveys were completed by the Bureau of Mineral Resources ('BMR') in 1960 and 1989 respectively and transect EPC1186. A regional 2D seismic survey was undertaken in 1992 by MIM Holdings Ltd, with survey lines that transect or run adjacent to the Belview Project area. The survey was carried out in two phases and was oriented to intersect the anticipated major fault direction of north to northwest trending structure.



Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	 The Belview Project area lies within the Central Bowen Basin. The Bowen Basin covers an area estimated at 60,000 Km² and is categorised as a back arc extensional foreland basin of Permo—Triassic age. The stratigraphy of the project area includes: Quaternary alluvial deposits distributed around the base of the elevated Blackdown tableland Plateau. These sediments are comprised of clay, silt and sand, alluvial fans, sheet wash, flood out sheets and alluvial floodplains. Tertiary aged sediments cover the majority of EPC1186 to the north. These sediments are comprised of deeply weathered coarse sandstone Breccia with a gravel and coarse sand matrix. Triassic aged Rewan group and Glenidal formation and Expedition sandstone in the elevated areas of the Blackdown Tableland Plateau and underlying the Quaternary and Tertiary sediments of EPC1186 and EPC1114. Permian aged Rangal coal measures underlie the Triassic aged Rewan group. The Rangal Coal measures are the stratigraphic equivalent of the Bandanna Formation and the Baralaba Coal measures. The Burngrove formation is beneath the Rangal coal measures and consists of mudstone, siltstone, sandstone, coal and Tuff. Coal seams occur within the Rangal Coal Measures which are Permian in age and dips gently at approximately 3 – 5 degrees to the east. The coal seams found within the Rangal Coal Measures are as follows:



Criteria	JORC Code explanation	Commentary
		 Pisces Seam At Belview the Gemini seam is found in the south and west of the Project area. The Gemini Seam is found when the Castor and Pollux Seams converge to form one seam.
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: Easting and Northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth Hole length. 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. 	 A detailed list of the drill holes used to define the resource in the Belview Project can be found in Appendix B. All drill holes have been modelled from vertical, although hole deviation (from vertical) has been recorded for all boreholes. A review and analysis of the deviation data will be considered in future model update
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. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	All seams where multiple coal quality samples were taken were given a composite coal quality value. This composite value was generated within the Ventyx Minescape software and was weighted on thickness and insitu RD. Insitu RD was only weighted against thickness.
Relationship between mineralisation widths and	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	 The inclusion of boreholes from neighbouring areas has given the model a reasonable amount of lateral continuity in all directions. Point of observation spacing has been extrapolated in a maximum of a 2000 m radius from the drill hole.
wiatiis and	 If it is not known and only the down hole lengths are reported, there 	 Resource shape to the south demonstrates a north south continuity but



Criteria	JORC Code explanation	Commentary			
intercept lengths	should be a clear statement to this effect (e.g. 'down hole length, true width not known').	 note further drilling is required to establish continuity to the east. Drill holes have been drilled vertically with minor deviations being recorded. The Permian sequence is relatively flat lying and dips gently to the east at an angle of 3 – 5 degrees. Seam thicknesses have been corrected to geophysics to ensure accuracy 			
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 of the report – Belview Coal Resource estimate 2013.			
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 exploration data for the Belview Project area has been collated and reported.			
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	No further exploration data was gathered and or utilised in the resource estimation.			
	•	•			
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 Validity of the exploration target will be tested by further drilling in the Belview Project area to attempt to infill the areas not covered by a coal resource. It is expected that drilling will continue in 2014 in this regard. 			

Section 3 Estimation and Reporting of Mineral Resources



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

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	 Data was validated by Stanmore and Xenith personnel and stored in internal databases Coal Quality data was validated by Chris McMahon of MCQR and Ross Stainley of MResources for the 2014 program Data is also validated by Xenith and internally by visual checks undertaken in the Minescape Software
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	 The last Site visit by the competent person was 21st October 2013 Troy Turner is familiar with the Blackwater area and stratigraphy. Review of the previous exploration data indicates that the Belview Project is typical of the area.
	•	•
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 One fault was included in the schema for this modelling process FU300ext. Only the FU300ext at this stage has been modelled in the Tenement area No further structure has been interpreted within the EPC lease areas of the Belview Project as drill hole spacing is not sufficient to delineate structure in detail. Seismic Surveying has identified other discontinuities interpreted as faulting but the extent and displacement of these is yet to be interpreted The resource Estimation was guided and controlled by the drill hole information attained through the various exploration programs. It is recommended that further drilling is undertaken to assist with the accurate determination of fault delineation and structural continuity.
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.	 Grid Spec; Belnth_50 Grid Spacing; 50 m Grid Origin; 684553.207 east, 7373405.692 north



Criteria	JORC Code explanation	Commentary
		 Number of Row and Columns in Grid; 448 Rows and 566 Columns Grid Dimensions; 22,350 m north south, 28,250 m east west
Estimation and modeling 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). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	 Estimations were undertaken on a first order inverse distance basis An extrapolation distance of 2000m from POBS was utilised for the estimate of the inferred resource, and greater than 2000m for the exploration target Schema; Bel120713 Thickness Interpolator; Finite element method (FEM) Trend Interpolator; FEM Surface Interpolator; FEM (First Order) Minimum Interval thickness; 0.1 m Seams Modelled; Aries, Castor, Pollux, Pisces Upper and Pisces Lower Seam Relationship; Conformable Seam Continuity; Pinch Compound Seams Modelled; Gemini (Castor and Pollux), Pisces (Pisces Upper and Lower) Compound Seam Continuity; Pinch Compound Seam minimum separation distance for coalescing; 0.5 m Additional Survey; GM_SPLITEXT (interpreted split line limits where Castor and Pollux coalesce to form the Gemini Seam Fault Modelled; FU300EXT Grid Spec Belnth_50 No previous estimation of resources exists for the EPC 1186 portion of the Belview Project area This Resource Estimate referred to the discrepancies that exist



Criteria	JORC Code explanation	Commentary
		with a previous resource estimate undertaken by Xenith Consulting in 2013 for the Castor and Pisces Upper seams in EPC1186
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	 Tonnages are estimated on a insitu moisture basis The moisture content was derived from the following formula. ISM = 0.348 + 1.1431 x MHC using the available moisture holding capacity values from the most recent Stanmore drilling.(ACARP report C10041)
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	 Maximum Raw Ash Percentage – A maximum raw ash percentage of 50%, air dried basis, has been applied to the resource estimate. This is a moot point as no value in the limited data attained this cut off.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	 It is Xenith's opinion that at this stage of the project that there are no limiting mining factors. It is recognised that the seams in this resource and exploration target, in the east of the project reach the maximum operating depth of current underground mines in Australia and therefore a maximum depth of resource of 800m from topography has been applied. Further to this, a minimum thickness of 1.5m was used across the resource to account for the potential underground mining method. This is seen to be reasonable assumptions in line with current operations.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made	It is Xenith's opinion that at this stage of the project that there are no limiting metallurgical factors. Nearby mines produce both thermal and coking coal products from the same seams.



Criteria	JORC Code explanation	Commentary
	when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	
	•	•
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. 	It is Xenith's opinion that at this stage of the project that there are no limiting environmental factors.
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 Preston Sanders Insitu Relative Density Estimation – The insitu density of the coal seams has been estimated using the Preston Sanders insitu relative density estimation equation. Sample were assigned an Insitu moisture value of 3.7% Bed moisture values were derived from the equation ISM = 0.348 + 1.1431 x MHC using the available moisture holding capacity values from the most recent Stanmore drilling.(ACARP report C10041)
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). 	 An inferred resource and an exploration target has been identified in the Belview Project area dependant on the level of confidence in the seam structure and continuity in addition to the level of variability in the coal quality data. The accepted spacing as per the coal guidelines between POB's of 4,000m, was utilised for this inferred estimation



Criteria	JORC Code explanation	Commentary
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The estimate of tonnage for the exploration target was based on actual exploration results from all available exploration data. The exploration tonnage could not be included in the resource estimate as the distance between POB's was greater than 4,000m. The quality ranges are based on actual laboratory results from exploration conducted so far with a +/- variance to reasonably account for the possible seam improvement or deterioration in future drillholes.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• No results for any 3 rd party audits or reviews have been completed.
Discussion of relative accuracy/confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 Xenith have assigned and inferred level of confidence to the Coal Resource Estimate depending on the seam and drill hole spacing, as described in the section 'Resource Estimation' of this report. No geostatistical modelling has been completed. Factors that could affect accuracy include unknown structures between completed boreholes, seam washouts in roof or inseam stone bands developing. No evidence exists as this point in time for these apart from three faults currently in the geological model



Appendix A. DRILL HOLE DATA

								Hole					
Company	Year	Borehole ID	Easting	Northing	Elevation	Total depth	Hole Type	size (mm)	Core Diameter	Geophysical logs	Dip	Azimuth	POB (seams)
Waratah Coal	2011	BW01	698996.0	7389981.0	200.0	512.0	Chip	120.0	-	DGCS	-	-	-
Waratah Coal	2011	BW05	700172.0	7388963.0	200.0	701.0	Chip	-	-	-	-	-	-
Waratah Coal	2011	BW06	702152.0	7390046.0	195.0	765.0	Core	122.6	-	DGCV	34.3	209.4	PL Only
BOW Energy	2009	BOW_BW_5	698426.0	7390661.0	206.8	626.4	Partial Core	96.1	HQ (63.5 mm)	DGCVS	17.2	90.0	AR,CA,PIU
BOW Energy	2009	BOW_BW_6	695886.1	7385337.5	173.1	600.3	Partial Core	97.1	HQ (63.5 mm)	DGCVS	8.4	58.0	-
BOW Energy	2010	BOW_BW8	701552.0	7384903.0	231.0	998.0				Nil	-	-	-
BOW Energy	2010	BOW_BW_7	701715.2	7398404.0	186.8	746.3	Partial Core	97.1	HQ (63.5 mm)	DGCVS	-	-	-
Stanmore Coal	2011	SCB001C	699251.4	7384866.0	199.7	667.0	Partial Core	96.1	HQ (63.5 mm)	DGC	-	-	AR,GM
Stanmore Coal	2011	SCB002C	699376.6	7382728.0	234.8	865.4	Partial Core	96.1	HQ (63.5 mm)	DGC	-	-	GM,PIU,PIL
Stanmore Coal	2011	SCB003C	698570.0	7379565.5	231.7	910.4	Partial Core	96.1	HQ (63.5 mm)	DGC	-	-	GM only
Stanmore Coal	2011	SCB004C	698406.7	7377540.0	221.2	877.6	Partial Core	96.1	HQ (63.5 mm)	DGC	-	-	GM only
Stanmore Coal	2011	SCB005P	698399.7	7374327.0	215.1	672.8	Partial Core	122.6	PQ (83.1 mm)	DGC	-	-	-
Stanmore Coal	2011	SCB005C	698393.3	7374331.0	214.9	702.7	Partial Core	96.1	HQ (63.5 mm)	DGC	-	-	-
Hematite Petroleum Pty							test		,				
Ltd	1980	GEMINI1	693771.8	7375313.0	220.8	609.6	production	216.0					-
Hematite Petroleum Pty Ltd	1980	GEMINI4	694139.5	7375277.5	222.4	477.0	test production	216.0					_
Hematite Petroleum Pty	2000		10.1200.0	137027710			test						
Ltd	1980	GEMINI3	694343.9	7375736.5	222.9	492.0	production	216.0					-



						Total		Hole size	Core	Geophysical			
Company	Year	Borehole ID	Easting	Northing	Elevation	depth	Hole Type	(mm)	Diameter	logs	Dip	Azimuth	POB (seams)
DME	1969	BLACKWATER120	689951.4	7382132.5	193.9	412.9	-	-	-	-	-	-	-
DME	1969	BLACKWATER121	692327.2	7381763.0	183.0	457.2	-	-	-	-	-	-	-
DME	1969	BLACKWATER115	689587.9	7386876.0	179.5	400.0	-	-	-	-	-	-	-
DME	1969	BLACKWATER124	692197.0	7384780.0	183.0	392.2	-	-	-	-	-	-	-
DME	1969	BLACKWATER118	692788.6	7386649.5	180.0	309.9	-	-	-	-	-	-	-
DME	1969	BLACKWATER116	691454.3	7388667.0	191.0	382.7	-	-	-	-	-	-	-
DME	1984	HUMBOLDT2334	696153.2	7394420.0	189.0	406.4	Partial Core		HQ	DGCR	_	-	-
DME	1968	BLACKWATER113	695052.9	7392742.0	168.0	330.0	-	-	-	-	_	-	-
DME	1983	HUMBOLDT2332	694204.5	7395061.0	166.0	326.4	Fully cored		HQ	DGCR	-	-	-
DME	1983	HUMBOLDT2333	695466.4	7396090.5	184.2	363.4	Partial Core		HQ	DGCR			
DME	1983	HUMBOLDT2326	693742.7	7396606.0	167.5	292.6	Core		HQ	DGCR	 -	-	_
DIVIE	1303	HOWBOLD12320	093742.7	7390000.0	107.5	292.0	Partial		пц	DGCK	 -	-	_
DME	1983	HUMBOLDT2331	698373.3	7397067.0	169.8	423.3	Core		HQ	DGCR	-	-	-
DME	1983	HUMBOLDT2330	696593.3	7397614.0	175.0	260.9	Partial Core		HQ	DGCR	-	-	-
DME	1983	HUMBOLDT2328	696012.0	7399198.0	160.0	258.8	Core		HQ	DGCR	-	-	-
Stanmore Coal	2013	CQBN0001	698867.3	7390118.5	209.7	515.6	Partial Core	122.6	PQ (83.1 mm)	DGCNRIA	19.2	12.0	PL Only
Stanmore Coal	2013	CQBN0002	700107.3	7386491.0	204.3	685.0	Partial Core	122.6	PQ (83.1 mm)	DGCNRIA	10.4	75.51	AR,CA,PL
							Partial		PQ (83.1				
Stanmore Coal	2013	CQBN0003	700432.1	7392910.5	190.3	565.0	Core	122.6	mm)	DGCNRIA	4.9	315.22	CA,PL
							Partial		PQ (83.1				
Stanmore Coal	2013	CQBN0004	702461.2	7389119.1	220.7	847.0	Core	122.6	mm)	DGCNRIA			
Stanmore Coal	2013	CBQN0006	699194.4	7392896.4	195.1	452.0	Partial Core	122.6	PQ (83.1 mm)	DGCNRIA			CA, PIU



Company	Year	Borehole ID	Easting	Northing	Elevation	Total depth	Hole Type	Hole size (mm)	Core Diameter	Geophysical logs	Dip	Azimuth	POB (seams)
							Partial		HQ3				
Stanmore Coal	2013	CQBN0009	699208.2	7391298	206.14	503.8	Core	96	(61.1mm)	DGCNRIA			AR, CA
							Partial		HQ3				
Stanmore Coal	2014	CQBN0010	699483.6	7387536	207.5	648.7	Core	96	(61.1mm)	DGCNRIA			CA,PL



Appendix B. POINTS OF OBSERVATION SUMMARY TABLE

			Suitability for Poir	nt of Observation	n By Seam	ı		
Series	Hole Name	Aries	Castor	Pollux	Gemini	Pisces Upper	Pisces Lower	Comment
					Parent			
					seam			Chip hole unsuitable as Point of
Waratah	BW01				split			observation
					Parent			
					seam			Chip hole unsuitable as Point of
	BW05				split			observation
		Too thin. Outside			Parent			
	D14/06	recommended distance for	Good High RD High Ash plies	Acceptable for	seam			
	BW06	resource classification	close enough full Castor	POB	split	No geophysics	No geophysics	
		Good but outside			Danish			
		recommended distance for		To a Alaba alama	Parent	A	At-l-l- f	
Da France.	DOW DW F	inferred resource	Assessable for DOD	Too thin due to	seam	Acceptable for	Acceptable for	
Bow Energy	BOW_BW_5	classification	Acceptable for POB	core loss	split	POB	РОВ	
		Good but outside			Davant	I and the m		
		recommended distance for inferred resource			Parent	Less than required		
	BOW BW8	classification			seam	thickness of 1.5m		No geophysics no photos
	BOW_BW6	Good but outside			split	thickness of 1.5iii		No geophysics no photos
		recommended distance for						
		inferred resource		Parent seam	Faulted			
Stanmore 2011	SCB001C	classification	Parent seam coalesces	coalesces	repeat	No quality data	No quality data	
Stanniore 2011	300010	Classification	raient seam coalesces	coalesces	тереат	Good but outside	NO quanty data	
						recommended		
					Accepta	distance for		
		Less than required thickness		Parent seam	ble for	inferred resource	Less than required	
	SCB002C	of 1.5m	Parent seam coalesces	coalesces	POB	classification	thickness of 1.5m	
		Good but outside						
		recommended distance for			Accepta			
		inferred resource		Parent seam	ble for			
	SCB003C	classification	Parent seam coalesces	coalesces	РОВ	No quality data	No qual	
		Good but outside					,	
		recommended distance for			Accepta			
		inferred resource		Parent seam	ble for		Less than required	
	SCB004C	classification	Parent seam coalesces	coalesces	POB	No quality data	thickness of 1.5m	

Stanmore Coal Belview Project –Table 1



	SCB005C		Hole repeat not correlatable									
	SCB005P		Unable to use not correlatable with twin									
Stanmore 2013	CQBN0001	Faulted Out	Faulted Out	Acceptable for POB	Parent seam split	Poor recovery no analysis	Poor recovery no analysis					
	CQBN0002	Heat Effected	Less than required thickness of 1.5m	Acceptable for POB	Parent seam split	Too thin 0.8m core loss	Too thin core loss					
	CQBN0003	Less than required thickness of 1.5m	Core loss see CQBN0005	Acceptable for POB	Parent seam split	Core loss too thin	Less than required thickness of 1.5m					
	CQBN0004	Less than required thickness of 1.5m	No quality results at time of report	Too thin due to core loss	Parent seam split	Core loss too thin	Less than required thickness of 1.5m	No quality in time for model run only Castor sampled				
	CQBN0005	Less than required thickness of 1.5m	Redrill of Castor CQBN0003	Not drilled	Parent seam split	Not drilled	Not drilled					
	CQBN0006	Less than required thickness of 1.5m	Core loss Redrill in CQBN0007 acceptable recovery	Core loss see CQBN0007	Parent seam split	Acceptable for POB	Less than required thickness of 1.5m	Pisces Upper only at this model run				
	CQBN0007	Less than required thickness of 1.5m	Redrill of Castor CQBN0006	Redrill of Pollux CQBN0006	Parent seam split	Not drilled	Not drilled	No quality in time for model run				
	CQBN0009	Acceptable for POB	Acceptable for POB	Possible faulting Less than required thickness of 1.5m	Did not intersect	Possible faulting Less than required thickness of 1.5m	Possible faulting Less than required thickness of 1.5m					
	CQBN0010	Less than required thickness of 1.5m	Acceptable for POB	Acceptable for POB	Did not intersect	Did not intersect	Did not intersect					



Appendix C. REPRESENTATIVE GEOPHYSICS SIGNATURE CQBN0003

