MALABAR COAL

11 NOVEMBER 2013

INVESTMENT HIGHLIGHTS

- Large underground coking coal project
- High quality products, from well-known coal seams
- Proximity to infrastructure
- Competitive operating costs
- Experienced board and management

BOARD OF DIRECTORS & CEO

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Chairman

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Non-executive Director

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Non-executive Director

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Maiden Reserves Estimate for the Spur Hill Underground Coking Coal Project

- **Malabar is pleased to report the maiden Reserves Estimate for the Spur Hill Underground Coking Coal Project ("Project").**
- **This Probable Reserves Estimate of 91 million tonnes has been calculated based on two seams that will be mined in the initial years of the mine's life.**
- **In addition, we report an updated Resources Estimate for the Project. Total Resources (inclusive of Reserves) are 626 million tonnes including an increase in Indicated Resources from 334 million tonnes to 394 million tonnes.**
- **The Reserves Estimate and the updated Resources Estimate are prepared to the JORC Code (2012).**
- **As further field-work and studies are undertaken, more Resources are expected to be converted into Reserves so underpinning the Project beyond 20 years.**

Resources Estimate Upgrade and Maiden Reserves Estimate

- The completion of a further 4 drill holes has led to an updated Resources Estimate of 626 million tonnes. Of particular importance is the increased Indicated Resources from 334 million tonnes to 394 million tonnes which reflects increased geological confidence.
- Malabar has undertaken the necessary technical, engineering and other studies to support our JORC Reserves Estimate for the Project.
- This Probable Reserves Estimate is calculated for the Whynot and Bowfield seams. These are two of the seams targeted for initial mining.

Table 1: Reserves and Resources as at November 2013

100% BASIS	RESERVES		RESOURCES				
	Western (Underground) Zone		Western (Underground) Zone			Eastern Zone	**Total**
Seam	**Probable Coal Reserve (Mt)**	Probable Marketable Coal Reserve (Mt)	Indicated (Mt)	Inferred (Mt)	Total (Mt)	Inferred (Mt)	**Mt**
WL2			0.0	46.8	46.8	0.0	46.8
WL1			0.0	22.0	22.0	0.0	22.0
Whybrow			58.5	1.2	59.7	1.8	61.5
Redbank Creek Upper			0.0	0.0	0.0	3.8	3.8
Redbank Creek Middle			0.0	0.0	0.0	3.7	3.7
Redbank Creek Lower			51.3	0.7	52.0	6.2	58.2
Wambo			38.1	4.3	42.4	16.0	58.4
Whynot	78	59	104.5	5.3	109.8	23.0	132.8
Glen Munro			14.7	0.5	15.2	1.6	16.8
Arrowfield			14.6	0.0	14.6	0.0	14.6
Bowfield	13	10	34.0	2.5	36.5	21.7	58.2
Warkworth			78.7	26.6	105.3	23.4	128.7
Mount Arthur			0.0	9.3	9.3	11.1	20.4
Total	**91**	**69**	**394.4**	**119.2**	**513.6**	**112.3**	**625.9**

- *The Resources and Reserves Estimates have been prepared in accord with the JORC Code 2012*
- *The Reserves Estimate has been prepared by MineCraft Consulting Pty Ltd.*
- *The Resources Estimate has been prepared by Geological and Mining Services Australia Pty Ltd.*
- *The Resources in the above Table are inclusive of Reserves*
- *The Probable Marketable Coal Reserve is derived from the Probable Coal Reserve based on an average yield of 76% from the Whynot seam and 79% from the Bowfield seam. These average yields are derived from laboratory yields ranging from 80% to 85% adjusted for mining dilution and moisture adjustments.*

- **Further exploration and technical studies are expected to progressively convert an increasing proportion of the remaining Resources to Reserves.**

- A comparison table of the Resources Estimates of July 2013 and November 2013 is presented in Appendix 2.
- The drill hole locations from the 2012/2013 exploration programme are shown in Appendix 3.

Summary of Material Information

- *The information in this report relates to the Spur Hill Underground Coking Coal Project (SHUCCP), a proposed underground mine located within EL7429. EL7429 is located in the Upper Hunter Valley of New South Wales.*
- *EL 7429 is held by Spur Hill No. 2 Pty Ltd (a wholly owned subsidiary of Malabar Coal Limited) and Spur Hill U.T. Pty Ltd. The tenement holders comprise the Joint Venture partners of the Spur Hill Joint Venture (SHJV).*
- *The SHJV owns properties which account for approximately 13 % of the EL area.*
- *This Maiden Reserves Statement estimates Ore Reserves in only two of the potentially mineable seams at the Spur Hill Project, namely the Whynot Seam and the Bowfield Seam.*
- *The information in this report that relates to Mineral Resources is based on information compiled or reviewed by Mr Darryl Stevenson. The information in this report that relates to Ore Reserves is based on information compiled or reviewed by Mr Jeremy Busfield.*

Material assumptions & outcomes from studies

- *Preliminary Feasibility Studies (PFS) have been undertaken to support the maiden estimate of Ore Reserves for the SHUCCP.*
- *The PFS are based on mining two of the initial target seams, the Whynot and Bowfield Seams. Future studies would be expected to bring other seams into the ore reserves for the SHUCCP.*
- *The mine plan for the PFS is based on a single retreat longwall producing 6 to 8 Mtpa and averaging 6.4 million tonnes per annum (Mtpa)*
- *The SHUCCP will include a coal preparation plant (CPP), and facilities to directly load product coal onto the main Hunter Valley rail network.*
- *The PFS was based on production of semisoft and thermal coals for export markets due to the ready availability of benchmark pricing for these coals. The marketing and CPP studies also support the production of a premium (low ash) soft coking coal. Future mine optimisations will consider the product mix to include low ash soft coking coal.*
- *The capital expenditure to build the SHUCCP to the commencement of longwall mining is in the range A$800 million to A$920 million dollars.*
- *The expected life of mine (LOM) operating costs will be A$57/tonne FOB (excluding Government royalties).*

- *Future coal sales prices are based on the median of broker consensus long term forecasts resulting in A$135/tonne for semi-soft and A$117/tonne for export thermal coal.*

- *The long term foreign exchange rate used in the economic evaluation is AUD:USD 0.85, based on broker consensus.*

- *The economic evaluation provides a positive NPV for the base case, with the NPV remaining positive across a range of sensitivities (+/- 20% range) to coal price, operating costs, and capital costs.*

Geology

- *The SHUCCP is located within the Hunter Coalfield in the northern part of the Sydney Basin, which is the southernmost part of the Sydney-Gunnedah-Bowen Basin system. Three coal measures sequences are developed within the Hunter Coalfield, which are in chronological order, the Greta, Wittingham and Newcastle Coal Measures.*

- *The SHUCCP is proposed for the area within EL7429 to the west of the Mount Ogilvie monocline. A number of seams within the Wittingham Coal Measures have potential for extraction by underground mining, including the Whybrow, Wambo, Whynot, Bowfield and Warkworth seams. This Maiden Reserves statement only estimates Ore Reserves in the Whynot and Bowfield Seams. Further exploration and technical studies are required to add other seams to the reserves.*

- *A number of igneous intrusions have been recorded in borehole intersections and surface mapping. These have generally been sill structures located at depth and not impacting on the key target seams to any great extent. Faulting in the area to the west of the Mount Ogilvie monocline appears to be limited.*

Drilling Techniques

- *The SHUCCP database includes structural and coal quality data obtained from several drilling programmes carried out between 1949 and 2013. These data include English and graphic logs, downhole geophysics, seam correlations, laboratory analyses, company reports and Government reports.*

- *The database includes information from over 100 historical drillholes and 26 drillholes completed by the SHJV in 2012-13.*

- *All drillholes are nominally vertical. The historical drillholes are probably all NQ size. The 2012/2013 SHJV drillholes were mostly HQTT fully cored drillholes, except for the weathered zone and strata above the target seams which was non-cored and cased. Two holes (SHD008 and SHD012) were cored in PQTT down to the main Target Seam, and then HQTT from there to the total depth. Due to drilling difficulties SHD024 was only cored to 219.13 m and then non-cored to TD (528 m).*

Core Recovery, Drillhole Logging, Sampling and Assaying

- *Core recovery for both historical and SHJV drillholes generally exceeded 95%.*

- *The historical drill holes have generally been logged in fine detail to 1 cm definition and occasionally 1 mm definition. The logging used the same terminology used today and therefore there is no ambiguity in recognising and understanding the data.*

- *All SHJV drill cores were lithologically logged by experienced geologists. All drill holes were logged using downhole geophysical logging sondes and the cores were photographed as a permanent record. Basic geotechnical logging was also undertaken. The entire core of coal (and/or parting) was sampled, for each sampled interval. The core samples were analysed at a NATA registered coal laboratory (ALS Global)*

Interpretation

- *The geometry of the deposit is essentially flat lying on the western side of the Mount Ogilvie monocline, dipping at < 2 degrees.*

- *For Resources that have been given Indicated status there is a very high confidence in seam correlations. Given the dataset there is no other possible general interpretation for this typical Hunter Valley coal sequence.*

Database

- *Maptek transcribed the original Spur Hill data from information obtained from the NSW Department of Mineral Resources in 2010. Maptek then created a Geological model from these data. After Maptek completed the modelling GMSA reviewed the model, estimated the resources and produced the 2010 JORC Resources Estimate. In 2013 SHJV contracted McElroy Bryan Geological Services (MGBS) to take control of the database and modelling. In September 2013 MBGS remodelled the data after the completion of the last four (4) drillholes in the first phase of the drilling programme.*

- *It is not possible to verify if the original historical company data are correct, and it is not possible to guarantee that there are no errors in the entire Spur Hill dataset. However, it is considered unlikely that anything other than very minor errors would be present on the western side of the Mount Ogilvie monocline which is the current exploration target area.*

Estimation and Modelling Techniques

- *The deposit was modelled by MBGS using Minex Geological and Mine Planning Software. A 100 m grid cell size was chosen as appropriate for the data spacing. The resultant structural and quality grids were provided to GMSA to build a Vulcan Block Model. The Vulcan Advanced Reserves Function was then used to estimate the Resources. The Block Model cell size used was also 100 m so that it was coincident with the grid cell size. In order to validate the resource values from the Block Model the Vulcan Polygon Volumes method was also used. The resultant volumes were the same.*

- *The Ore Reserves were estimated using the MineCraft Longwall Reserves Module, applying a mine plan to the geological model incorporating the modifying factors, and estimating reserves where the resource was classified as Indicated by the Resource Estimator.*

- *Inferred Resources have not been included in the estimation of the Ore Reserves.*

- *The Mineral Resources are inclusive of the Ore Reserves estimated.*

Cut-off Parameters

- *Cut-off parameters for underground Resources include a minimum seam thickness of 1.5 m, greater than 35% raw ash contours (40% for the WL2 Seam), and barriers around intruded drill holes and the EL borders.*

- *A cut-off parameter for underground Ore Reserves of a practical minimum mining height of 1.8m has been applied.*

Classification

- *The Resources Estimate for the SHUCCP is classified in accordance with JORC guidelines 2012. It is considered that all relevant factors have been taken into account when determining the resource classification. The Resources Estimate reported is inclusive of the Ore Reserves.*

Mining Assumptions

- *The mining assumptions for the SHUCCP are based on design and cost analysis undertaken as part of the pre-feasibility studies undertaken in 2013. The mining method proposed for the SHUCCP is conventional retreat, full seam longwall extraction with two heading gate roads coming off a set of main headings. Utilising this method of extraction will maximise the overall recovery of the resource and therefore maximise the available ROM tonnes. Longwall mining is the most common method of underground coal extraction due to its high productivity, high resource recovery, low cost, and safety aspects.*

- *The mining recovery factor applied is 100%.*

- *It has been assumed that the entire seam height will be extracted along with a combined total of 100mm of stone dilution from the floor and roof. Mining losses are expected to be 3% of the seam. This is to account for coal that is left on the floor of the mine;*

Metallurgical Assumptions

- *Metallurgical assumptions for the SHUCCP are based on testwork and studies undertaken as part of the pre-feasibility studies completed in 2013. The marketing study indicates that the SHUCCP is capable of producing highly desirable products including premium (low ash) soft coking, semi-soft coking and export thermal coals.*

- *A coal preparation plant using Dense Medium Cyclones and Spirals is proposed.*

- *The coal recovery factors have been calculated by Spur Hill using the simulation derived coal yields at a cut point of 1.8 density and adjusted for dilution and moisture;*

- *The average yields accounting for the proposed coal processing are 76% for the Whynot seam, and 79% for the Bowfield seam. This includes dilution and moisture adjustments.*

Environmental Assumptions

- *The SHUCCP will be subject to approval under State and possibly Commonwealth legislation. The SHJV has been undertaking the necessary studies to: complete an application for a Gateway Certificate under the NSW Strategic Regional Land Use Plan; and to prepare an Environmental Impact Statement (EIS) and Development Application for approval as a State Significant Development. Following approval under the State legislation, if required .approval would be sought under the Commonwealth legislation.*

Ore Reserves

- *The partial conversion of the Resources to Reserves for the SHUCCP was part of PFS completed in October 2013. The conversion of the Resources to Reserves is achieved by imposing a detailed mine design onto the Resources outline after taking into account all economic, metallurgical, geotechnical and mining factors.*

The JORC code requires the competent person(s) to assess a range of criteria when estimating resources and reserves. The criteria are listed in the JORC code as "*Table 1, sections 1, 2, 3, and 4*", and these are attached in Appendix 1 to this ASX release.

Conclusion

Commenting on the Reserves Estimate, Chairman Wayne Seabrook said: "*This maiden Reserves Estimate confirms that the deposit supports a profitable underground coking coal project with low environmental impact. As further field work and studies are undertaken, we will progressively convert more Resources into Reserves so underpinning the Project well beyond 20 years".*

For additional information, please contact:

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Competent Persons Statements

The information in this ASX Release that relates to JORC Mineral Resources for the Spur Hill Underground Coking Coal Project is based on information compiled by Mr Darryl Stevenson. Mr Darryl Stevenson is the Principal Geologist and employee of Geological and Mining Services Australia Pty Ltd, an independent consultancy group specialising in mineral resource estimation, evaluation and exploration. Mr Darryl Stevenson is a Member of The Australasian Institute of Mining and Metallurgy. He 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 a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". The relationship between the Estimator and the Project owner is that of independent consultant. Mr Darryl Stevenson consents to the inclusion in ASX Release of the matters based on his information in the form and context in which it appears.

The information in this ASX Release that relates to JORC Mineral Reserves for the Spur Hill Underground Coking Coal Project is based on a Reserves Estimate that has been prepared by Mr Jeremy Busfield, Principal Mining Consultant of MineCraft Consulting Pty Ltd. Mr Busfield holds a Bachelor of Mining Engineering degree from the University of Queensland, is a Chartered Professional Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and is a Registered Professional Engineer of Queensland (Mining) (RPEQ 10285). Mr Busfield has worked in various planning, operational and consulting roles for the underground coal industry for 27 years and as such qualifies as Competent Person under the JORC Code 2012. The relationship between the Estimator and the Project owner is that of independent consultant. Mr Busfield consents to the inclusion in this report of the matters based on his information and in the form and context in which it appears.

Appendix 1

Table 1 Checklist of Assessment and Reporting Criteria

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques - historical drill holes	• *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.*	Maptek obtained the historical pre-SHJV quality data from information held by the NSW Department of Mineral Resources. The coal quality data comprised sheets presenting analysed ply and composite data. The data on these sheets were transposed into electronic format by Maptek. The sampling method appears to follow the modern technique of dividing the seam into coal and non-coal plies, which were then analysed separately. The ply samples were then combined either through compositing the ply samples and analysing the composite or by determining the composite quality by calculation.
Sampling techniques - 2012 / 2013 drill holes		The potential working sections (mineable interval) of coal seams were sampled in the 2012 / 2013 drill holes. All coal seams thicker than 1.0 m were sampled, and only where core recovery exceeded 90 % was sampling undertaken for analysis of the coal and/or stone partings. Some coal seams were sampled in several plies where this would enable alternate working sections to be accessed.

Criteria	JORC Code explanation	Commentary
Drilling techniques - historical drill holes	• *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 majority of the drill holes were cored. Some of the older shallow drill holes appear to be open holes, although the English logs often don't specify either way. The core size is not always specified, however, when it is, NQ is the size stated. The orientation is not always specified, however, when it is, the orientation is either described as 90 degrees or vertical.
Drilling techniques - 2012 / 2013 drill holes		The 2012 / 2013 drill holes were mostly HQTT fully cored drill holes, except for the weathered zone and strata above the target seams which was non cored and cased. Two holes (SHD008 and SHD012) were cored in PQTT down to the main Target Seam, and then HQTT from there to the total depth. Due to drilling difficulties SHD024 was only cored to 219 m and then non-cored to TD (528 m). The drill holes were drilled vertically.
Drill sample recovery - historical drill holes	• *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.*	When the recovery is stated it is generally between 95 % and 100 %. There does not appear to be any analyses used in the modelling that have poor recoveries.
Drill sample recovery - 2012 / 2013 drill holes		The drill core recovery for coal seams was generally more than 95 %, for 2012 / 2013 drill holes. The core recovery was determined using density logs, and only coal seams with more than 90 % core recovery were sampled for analysis during the 2012 / 2013 exploration programme.
Logging - historical drillholes	• *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.*	The historical drill holes have generally been logged in fine detail to 1 cm definition and occasionally 1 mm definition. The logging uses the same terminology used today and therefore there is no ambiguity in recognising and understanding the data.

Criteria	JORC Code explanation	Commentary
Logging - 2012 / 2013 drill holes		All drill cores were lithologically logged by experienced geologists. All drill holes were logged using downhole geophysical logging sondes and the cores were photographed as a permanent record. Basic geotechnical logging was also undertaken. In most drill holes an acoustic scanner was used to detect and model structures, fractures, joints and other planar defects that intersect the boreholes for later interpretation.
Sub-sampling techniques and sample preparation - historical drill holes	• *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.*	From the information available it appears as if the entire seam, including coal and non-coal was sampled. The quality data in most cases is a table that has been created from the original laboratory data, however, the laboratory is mostly not specified and the original laboratory sheets are mostly not available. There are a small number of original data sheets for some of the Carpentaria Exploration Company drill holes. These show that the samples were analysed at the Thiess Brothers Limited Materials Laboratory at Archerfield, QLD, Australia.
Sub-sampling techniques and sample preparation - 2012 / 2013 drill holes		For the 2012 / 2013 drill holes the entire core of coal (and/or parting) was sampled, for each sampled interval. The core samples were analysed at a NATA registered coal laboratory (ALS Global, Maitland, NSW, Australia). All testing was done to Australian standards, and the testing involved sub-sampling by the laboratory in accordance with standard procedures.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests - historical drill holes	• *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.*	This is not determinable for the historic drill holes, apart from stating that there are some original laboratory sheets from the Thiess Brothers Limited Materials Laboratory at Archerfield QLD.
Quality of assay data and laboratory tests - 2012 / 2013 drill holes		The 2012 / 2013 coal analyses were carried out at the NATA registered laboratory of ALS Global in Maitland, NSW, to Australian standards. The samples were delivered to the laboratory within one week of completion of each drill hole and the testing was undertaken within 3 months of the samples being delivered. The analysis data are of the highest standard.
Verification of sampling and assaying - historical drill holes	• *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.*	This cannot be determined for the historical drill holes.
Verification of sampling and assaying - 2012 / 2013 drill holes		The laboratory (ALS) carries out checks of sample weights and lengths of core to verify that the sample intervals are correct. The NATA laboratory has procedures in place for internal auditing of analyses, and to ascertain repeatability of analysis results.

Criteria	JORC Code explanation	Commentary
Location of data points - historical drill holes	• *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.*	The original drill hole locations were obtained from the NSW Department of Mineral Resources. The drill hole logs also recorded the drill hole location coordinates. The location description ranges from a location identified by an angle and distance from a survey mark or Portion boundary to Surveyor measured ISG coordinates. The locations were then converted to MGA by Maptek. Maptek stated that some minor adjustments to the drill hole collars were made to align boreholes with the topography. During 2012 and 2013 Pegasus Technical Pty Ltd located and resurveyed the majority of the older boreholes. These results were then used to confirm or improve the accuracy of boreholes that could not be found. Notwithstanding this work it is likely that the true position of some of the older pre-ISG drill holes could be incorrect by up to a few tens of metres. However, these older drill holes have little or no influence on the resource estimations.
Location of data points - 2012 / 2013 drill holes		The 2012 / 2013 drill holes were surveyed by Pegasus Technical Pty Ltd to a survey accuracy of 1 cm. The grid system used was MGA.
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.*	Drill hole spacing ranges from a few metres for redrills to > 2 km. Structural Points of Observation from seams quantified and given a resource status range from 27 for the Mount Arthur seam to 78 for the Woodlands Hill seam. Raw composite quality analytical Points of Observation range from seven (7) for the WL1 seam to fifty one (51) for the Whynot seam. CF1.60 composite quality analytical Points of Observation range from four (4) for the WL1 seam to forty nine (49) for the Whynot seam. Borehole spacing is sufficient for the stated classifications of Indicated and Inferred.
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.*	All drill holes were drilled vertically from the surface and intersected the seams at close to perpendicular. This is considered to be the optimal intersection orientation in coal exploration; therefore it is considered that no sampling bias has occurred.
Sample security	• *The measures taken to ensure sample security.*	For the 2012 / 2013 drill holes, the sampling of coal cores was undertaken by the Supervising Geologist, and delivered the same day to the laboratory.

Criteria	JORC Code explanation	Commentary
		At the laboratory the samples were received and placed in a secure cool room for subsequent testing. The coal samples were safe and secure at all times. It is not possible to determine sample security for the historical drill holes.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	The sampling and testing of coal samples from the 2012 / 2013 drilling programme has been reviewed at two workshops attended by experienced coal quality experts and mining engineers. The testing of the coal cores has involved extensive testing of a very wide range of coal quality parameters, and the sampling and test work has been endorsed by the review workshops. With regard to the historical drill holes, the quality data entered into the Vulcan modelling database has been selectively checked against the original data supplied by the Department of Mineral Resources. This has taken place several times during the iterative modelling process. Some errors were detected and adjusted by Maptek in 2010, by GMSA in 2012 and by MBGS and GMSA in July and September 2013. Further drilling is needed on the eastern side of the Mt Ogilvie Fault before the stratigraphy can be given any increased resource status in that area. Uncertainty increases to the east of the fault and will remain so until further drilling takes place. It should be noted that the data used in areas given Indicated status are considered to be very accurate.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national 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.*	The SHJV currently holds EL7429. The Tenement was granted in December 2009. The Tenement has a five year term, which will be up for renewal in December 2014. SHJV has acquired two properties within the EL boundary. These properties account for approximately 13 % of the EL area. With the exception of a small state-owned 'travelling stock reserve', the properties within the EL boundaries are privately owned. Existing land uses within the EL area are predominantly cattle grazing with some irrigated pastures on the south east and south west margins and a small vineyard owned by SHJV on the north western edge on the corner of Denman Road and the Golden Highway. There are no known impediments to obtaining a Mining Lease to operate in the area.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Previous exploration was carried out within the Spur Hill area between 1949 and 1983. The main contribution to the dataset was from Carpentaria Exploration Company which drilled 119 cored holes between 1976 and 1983. This exploration and subsequent studies identified a considerable resource potential within the Wittingham Coal Measures.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The deposit comprises a Coal Measures sequence that developed within the northern Sydney Basin during the Permian. Peat swamps formed during terrestrial to brackish periods during a time of increased tectonic activity in the New England Fold Belt. Three Coal Measures sequences formed during this period of which the Newcastle and Wittingham Coal Measures are represented within the Spur Hill area.

Criteria	JORC Code explanation	Commentary
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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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.*	See table below.
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.*	The cut-off parameters are the method used to estimate a resource. For example the 35 % or 40 % ash contours, the 0.3 m or 1.5 m thickness contours and the presence of igneous intrusions.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	The geometry of the deposit is essentially flat lying on the western side of the Mount Ogilvie Fault, dipping at < 2 degrees. All depths stated are downhole depths not true depths. However, as the bores are vertical and the seam is almost horizontal the difference between apparent and true depth is minimal. The eastern side of the fault is structurally complex, comprising a combination of faulting and folding. Data to date indicate that the maximum dip on the eastern side of the fault is about 20 degrees.

Criteria	JORC Code explanation	Commentary
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.*	Diagrams comprising both plan and section view are presented in the Appendix.
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 relevant data have been reported. Some data are missing from the historical information; however, there are sufficient data to build a robust geological and coal quality model. It should be noted that where a resource has been given Indicated status, this resource is only present in areas where boreholes have been drilled during the 2012 / 2013 SHJV Coal Drilling Programme.
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.*	A seismic survey was carried out by the NSW Department of Industry and Investment in 2010. The results of this survey were further analysed and interpreted by Velseis Pty Ltd in September 2011. An earlier seismic survey was undertaken by AGL in 2007.
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 SHJV has now completed the first phase of its exploration programme within EL7429. To date, twenty six (26) boreholes have been drilled and sampled.

Section 3 Estimation and Reporting of Mineral Resources

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.*	Maptek transcribed the original Spur Hill data from information obtained from the NSW Department of Mineral Resources in 2010. Maptek then created a Geological model from these data. GMSA and Spur Hill personnel spot checked the data and found a few minor errors. These were relayed to Maptek which adjusted the data and re-modelled the deposit. After Maptek completed the modelling GMSA reviewed the model, estimated the resources and produced the 2010 JORC report. In 2012 the SHJV commenced a drilling programme within EL7429. McElroy Bryan Geological Services (MGBS) were the supervising Geological company and provided GMSA with English logs and graphic logs from nine (9) boreholes and quality data from five (5) of these boreholes. These data were added to the Geological database, the deposit remodelled and resources estimated.
		In 2013 SHJV contracted MBGS to take control of the database and modelling. This was logical, as MBGS is supervising the exploration programme and acquiring the data. This also separates the modelling from the resource estimates, thereby adding an additional level of quality assurance. At the conclusion of this work, twenty six (26) drillholes from the 2012/2013 programme had been added to the database.
		GMSA received the MBGS database and modelled grids in June 2013. Some errors were identified and relayed to MBGS. MBGS made the changes and re-generated the grids. In September 2013 MBGS remodelled the data after the completion of the last four (4) drillholes in the first phase of the drilling programme. It is believed that some seam pick errors are still likely to be present on the eastern side of the Mount Ogilvie Fault as some contour" bullseyes" are present in the easternmost parts of that region. This zone is structurally complex and cannot be reinterpreted with any degree of certainty without further drilling taking place. This zone is not targeted for underground mining.
		It is not possible to verify if the original historical company data are correct, and it is not possible to guarantee that there are no errors in the entire Spur Hill dataset. However, it is considered unlikely that anything other than

Criteria	JORC Code explanation	Commentary
		very minor errors would be present on the western side of the Mount Ogilvie Fault which is the target mining area.
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 Competent Person visited the licence area on three occasions. On one visit the Competent Person worked with the Supervising Geologist to ensure that stratigraphic logging and gas testing methods being used were correct. The work carried out by the Supervising Geologist was of a high standard.
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.*	It is considered possible that some mis-correlations and minor working section errors may be present in the dataset; however, this is thought to be mainly confined to the eastern parts of the EL, where all resources have been given Inferred status. This, however, cannot be confirmed until further drilling takes place within or close to those areas. It is the recent drilling which includes downhole geophysics that allows verification of seam picks and working sections within an area. MBGS identified a diatreme in SHD011 and decided on a 200 m diameter mask. MBGS stated that the morphology was similar to other diatremes present in the Hunter Coalfield and were confident of its limited extent. Their reasoning was strengthened up by the drilling of SHD018 about 270 m to the southeast of SHD011. For resources that have been given Indicated status there is a very high confidence in seam correlations. Given the dataset there is no other possible general interpretation for this typical Hunter Valley coal sequence.
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.*	The underground resource has an east-west north-south extent of about 3 km by 9 km respectively. The lower limit of the resource is about 600 m depth of cover
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral*	The deposit was modelled by MBGS using Minex Geological and Mine Planning Software. Ten (10) dummy boreholes were placed just outside the northeast EL boundary to control the structure as it approached the Mount Ogilvie Fault. A 100 m grid cell size was chosen as appropriate for the data spacing. MBGS provided the resultant structural and quality grids to GMSA. These grids were used to build a Vulcan Version 8.2 Block Model. The Vulcan Advanced Reserves Function was then used to estimate the resources. The Block Model cell size used was also 100 m so that it was coincident with the grid cell size. In order to validate the

Criteria	JORC Code explanation	Commentary
	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.*	resource values from the Block Model the Vulcan Polygon Volumes method was also used. The resultant volumes were the same.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	All modelling and results are based on Air Dried Moisture. Air Dried Moisture content has been determined by a NATA registered laboratory using AS 1038.3 “Proximate analysis of higher rank coal”.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	Cut-off parameters for resources included a minimum seam thickness of 1.5 m (underground) and 0.3 m (open cut), the 35% or 40% raw ash contours, 18 m depth of weathering, 10:1 strip ratio contour for potential opencut resources, barriers around intruded drill holes and the EL borders. However, it is noted that it is SHJV's stated intention to develop solely an underground mine. The boundary between an intruded drill hole and a non-intruded drill hole was placed half way between the two drill holes. There is also a 200 m diameter barrier around a diatreme identified in SHD011.
Mining factors or	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if*	Early stage conceptual mine planning has been carried out. At this stage it is envisaged that a high productivity longwall producing potentially up to 8

Criteria	JORC Code explanation	Commentary
assumptions	*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.*	Mtpa ROM can commence in late 2017 or early 2018.
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 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.*	Malabar Coal Limited commissioned MinAxis Pty Ltd to provide an independent market report on the Spur Hill Underground Coal Project. MinAxis concluded that the underground project will produce three (3) products over the mine life. Namely: 1. An ultra-low ash, premium Soft Coking Coal principally from the Whynot seam. 2. A standard/typical semi-soft coking coal ("SSCC") from other seams. 3. A benchmark export thermal coal "Spur Hill Thermal Coal".
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 greenfield 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 expected that the project will be processed as a State Significant Development under Division 4.1 of Part 4 of the NSW EP&A Act. This process entails several steps including the preparation of an EIS which will identify and address any environmental issues.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used,*	Bulk density is generally not applicable to an underground mine. Relative Density (RD) has been determined in the laboratory for every sampled

Criteria	JORC Code explanation	Commentary
	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.*	interval in the 2012 / 2013 programme. These laboratory measured RD results were used to generate density grids for all the potentially mineable coal seams. For historical data the quoted RD's have been used as inputs to the density grids.
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).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The criteria used to determine the status of the resources were as follows: Indicated Resources having structural and quality Points of Observation <1.3 km apart, extrapolated a maximum distance of 650 m, the majority of boreholes required to be from the 2012 / 2013 programme, and cut-off by the licence boundary. Inferred Resources were estimated to approximately 1 km and cut-off by the licence boundary. In converting volumes to tonnage, laboratory determined Relative Density results were used to generate density grids. These density grids were then used to calculate the resource tonnages. It is considered that all relevant factors have been taken into account when determining the resource classification.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	BehreDolbear Australia Pty Limited reviewed the Project and authored an Independent Technical Report for the purpose of inclusion in the Malabar Coal prospectus of March 2013. Since that time, reviews have been carried out by project staff, MBGS, and MineCraft (the latter in preparing the maiden JORC Reserves Estimate).
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 Resource Estimate is based on a Minex geological model produced by MBGS from both historical and recent data. MBGS converted the Minex grids to Vulcan grids and forwarded them to GMSA. These grids were loaded into Vulcan, contoured and viewed. Inaccuracies can come from several sources: incorrect logging and sampling by the field geologist, errors in laboratory analyses, transcribing errors from the field and laboratory sheets to the final logs and transcribing errors from the final logs to the Minex database.
		The historical pre 2012 data cannot be verified, however, the work undertaken and processes appear to be industry standard. It also appears that the data obtained from the NSW Department of Mineral Resources has

Criteria	JORC Code explanation	Commentary
	• *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.*	been transcribed correctly into the Maptek database and subsequently to the MBGS Minex database. As discussed very minor errors may still be present on the western side of the Mount Ogilvie Fault, however, this is becoming considerably less likely as more data are acquired. There are likely to be some errors on the eastern side of the Mount Ogilvie Fault, an area which is structurally complex and for this reason potential resources have only be given Inferred Status. The stratigraphy has been checked and in some cases adjusted by Maptek in 2010. MBGS identified the stratigraphy in the recent 2012 / 2013 drill holes. GMSA checked and in some cases adjusted the stratigraphy based on the 2012 / 2013 drill holes. During the creation of the 2010 Maptek model, 2012 GMSA model, June 2013 MBGS model and the September 2013 MBGS model a small number of suspect boreholes were selected out of the modelling process to minimise errors.
		Finally the resource status is based on data confidence. Indicated resources are only present where recent 2012 / 2013 drill holes are present; therefore the Indicated resource tonnages are given a high confidence level. The Inferred resources are present primarily in areas where the majority of the data are historical; hence they are given a lower confidence level.

Table of drill hole information

Drill hole	Easting	Northing	Collar RL	Orientation	Hole Size	Total Depth	Year
BMRBFS7	288850	6415830	200.00			245.57	1953
CEC1	289546.57	6409949.73	153.80	vertical	NQ	430.21	1976
CEC2	291086.34	6409954.66	142.00			426.50	1976
CEC3	289473.14	6411456.52	186.70			500.10	1976
CEC4	291192.65	6411441.49	141.90			410.30	1976
CEC7	291006.27	6408178.82	95.40	vertical	NQ	450.32	1976
CEC8	289493.91	6408328.24	132.70	vertical	NQ	441.00	1976
CEC9	289565.52	6413228.22	207.10	vertical	NQ	443.08	1976
CEC10	287929.06	6408316.14	138.50			546.00	1976
CEC11	287878.02	6409951.00	168.80			455.62	1976
CEC12	289569.76	6416435.18	238.89	vertical	NQ	428.28	1976
CEC15	288017.21	6416379.74	165.28		NQ	451.48	1977
CEC16	286379.02	6416420.74	120.55	vertical	NQ	445.60	1977
CEC17	287519.91	6413471.14	189.87	vertical	NQ	405.12	1977
CEC18	286369.63	6413339.87	202.90	vertical	NQ	400.39	1977
CEC19	286271.10	6409988.73	158.13	vertical	NQ	396.92	1977
CEC20	284493.13	6409890.81	129.67	vertical	NQ	368.49	1977
CEC24	287770.00	6406600.00	100.00			429.70	1977
CEC25	286110.23	6405239.2	146.60			424.12	1977
CEC26	284597.94	6405169.43	109.10			483.63	1977
CEC27	286329.86	6414861.41	131.90			431.60	1977
CEC28	287917.35	6414931.72	198.30	vertical	NQ	446.68	1977
CEC29	284649.64	6413297.58	107.90		NQ	399.59	1977
CEC30	286277.97	6411614.79	155.80	vertical	NQ	393.54	1977
CEC31	284699.59	6411633.86	116.90		NQ	361.68	1977
CEC32	286183.10	6408374.17	140.50		NQ	381.19	1977
CEC33	284647.71	6408330.38	135.30	vertical	NQ	449.40	1977
CEC34	284297.00	6414939.64	109.90		NQ	406.98	1977
CEC35	284528.10	6416452.75	112.90		NQ	397.98	1977
CEC36	284545.61	6407292.47	99.70			400.50	1978
CEC43	290218.26	6412341.59	184.13		NQ	454.18	1979
CEC44	290259.28	6410759.27	195.70		NQ	429.40	1979
CEC45A	290278.17	6409141.54	137.90			61.40	1979
CEC45B	290283.14	6409143.63	137.80			411.30	1979
CEC47	291818.27	6412371.54	187.50			227.39	1979
CEC54	291048.22	6410756.55	139.80			379.65	1979
CEC57	290648.21	6410749.06	156.20	vertical	NQ	205.60	1981
CEC58	290663.19	6409949.04	157.70	vertical	NQ	397.60	1980
CEC59	291078.18	6409156.52	104.10			391.60	1979
CEC67	290293.16	6408341.52	96.30		NQ	346.00	1980
CEC68	290262.59	6409941.44	168.70		NQ	397.70	1980

Drill hole	Easting	Northing	Collar RL	Orientation	Hole Size	Total Depth	Year
CEC69	289870.67	6409534.05	139.40		NQ	179.00	1980
CEC70	289898.33	6410348.77	202.20		NQ	247.00	1980
CEC71	289840.71	6411134.08	229.60		NQ	247.20	1980
CEC73	290640.72	6411149.06	169.60	vertical	NQ	205.00	1981
CEC74	290655.70	6410349.04	162.10	vertical	NQ	205.00	1981
CEC75	290670.68	6409549.03	124.50	vertical	NQ	201.00	1981
CEC76	290685.67	6408749.03	101.10	vertical	NQ	211.00	1981
CEC77	291440.73	6411164.04	130.00			187.45	1981
CEC100	291463.20	6409964.02	106.40			202.40	1982
CEC101	291877.35	6409574.53	106.40			205.60	1982
CEC109	291055.71	6410356.53	135.10			192.00	1982
CEC110	291070.69	6409556.52	118.40			205.60	1982
CEC111	290678.18	6409149.03	115.20			208.60	1982
CEC121	291026.63	6408763.97	93.77			205.00	1983
DMDEN11	288486.07	6411354.82	139.04			609.74	1971
DMDEN6	285532.62	6412565.00	134.47			609.58	1971
DUM01	288900	6413000	213.24				
DUM02	288800	6413500	228.32				
DUM03	288750	6414000	265.7				
DUM04	288650	6414500	308.57				
DUM05	288600	6415000	262.72				
DUM06	288650	6415500	206.59				
DUM07	288600	6416000	201.64				
DUM08	288600	6416500	188.59				
DUM09	288300	6417000	175.38				
DUM10	288100	6417700	142.84				
FROG1	287417.18	6417691.22	131.07			575.64	1977
FROG9	289357.15	6417571.43	193.80			435.96	1978
MANG01	284780	6418590	116.00			229.20	1970
SHD001	287094.65	6416430.82	135.61	vertical	HQ	447.80	2012
SHD002	287967.53	6415633.07	180.71	vertical	HQ	468.20	2012
SHD003	287943.68	6417264.55	140.75	vertical	HQ	416.80	2012
SHD004	286954.37	6415629.20	162.40	vertical	HQ	471.10	2012
SHD005	286139.44	6415822.02	128.34	vertical	HQ	443.86	2012
SHD006	288799.98	6408420.01	130.83	vertical	HQ	456.63	2012
SHD007	288753.83	6410251.13	122.06	vertical	HQ	456.40	2012
SHD008A	288766.97	6409413.75	125.14	vertical	HQ	474.46	2012
SHD009	285931.46	6412231.25	142.60	vertical	HQ	453.77	2012
SHD010	286873.74	6412265.34	169.52	vertical	HQ	474.11	2012
SHD011	288044.57	6409541.42	160.44	vertical	HQ	227.39	2012
SHD012	287817.24	6411173.41	171.15	vertical	HQ	464.79	2012
SHD013	287808.73	6410309.65	155.52	vertical	HQ	452.58	2012
SHD014	286006.94	6411340.24	167.10	vertical	HQ	456.26	2012

Drill hole	Easting	Northing	Collar RL	Orientation	Hole Size	Total Depth	Year
SHD015	287116.28	6409180.07	295.62	vertical	HQ	594.04	2012
SHD016	286754.71	6411269.29	184.61	vertical	HQ	422.03	2012
SHD017	287032.47	6408365.04	275.70	vertical	HQ	595.07	2012
SHD018	288264.59	6409370.91	154.31	vertical	HQ	467.61	2012
SHD019	288744.82	6411504.51	149.77	vertical	HQ	429.00	2013
SHD020	288961.73	6412542.36	233.76	vertical	HQ	498.00	2013
SHD021	286812.38	6410304.56	183.14	vertical	HQ	424.50	2013
SHD022	288024.17	6412271.63	287.35	vertical	HQ	517.26	2013
SHD023	285966.00	6413935.41	138.30	vertical	HQ	445.01	2013
SHD024	286898.94	6414880.01	148.28	vertical	HQ	447.00	2013
SHD025	286952.03	6413949.93	193.22	vertical	HQ	486.50	2013
SHD026	287935.14	6413945.57	275.29	vertical	HQ	564.50	2013

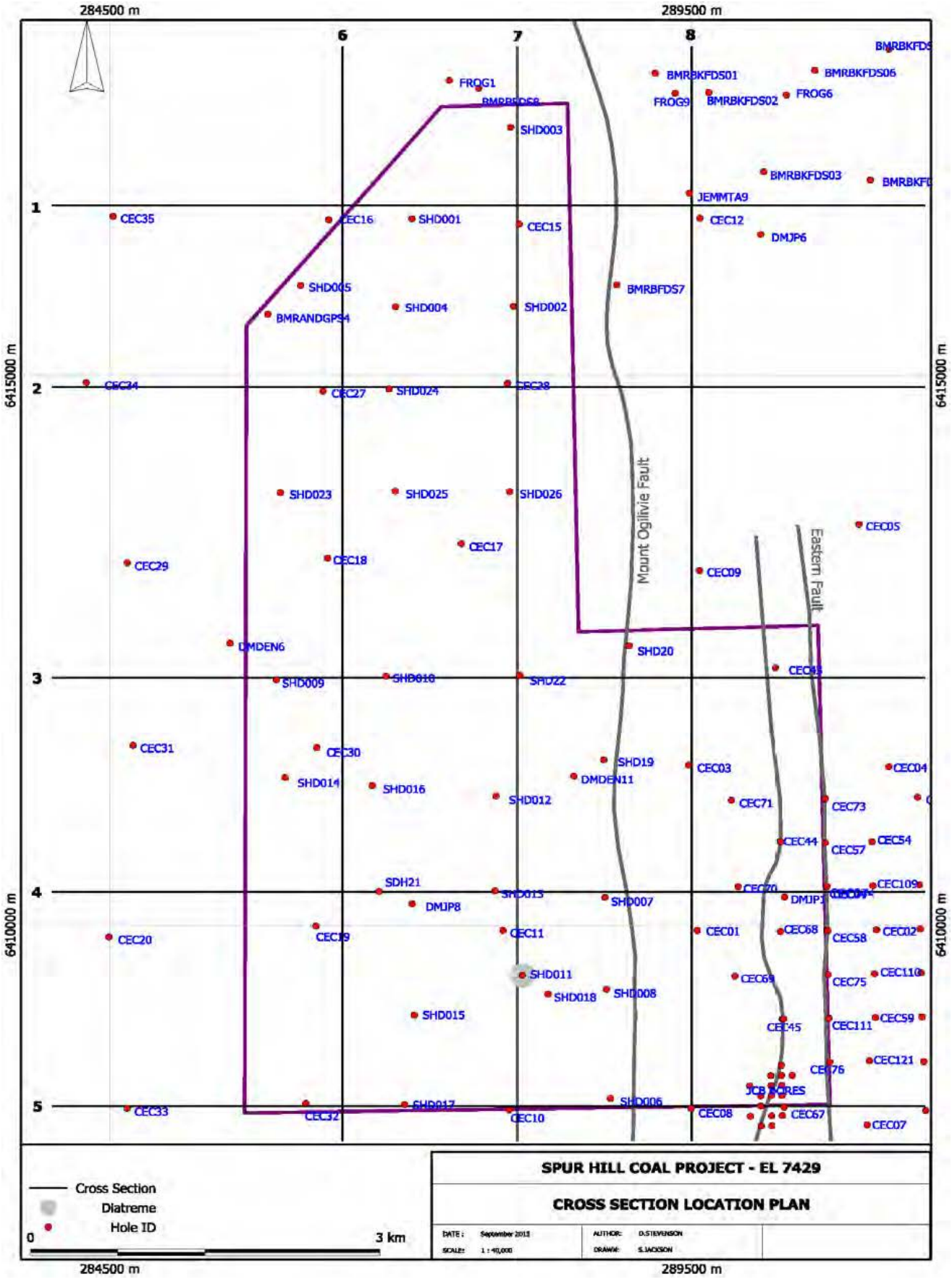
These are the drillholes used by MBGS to produce the geological model

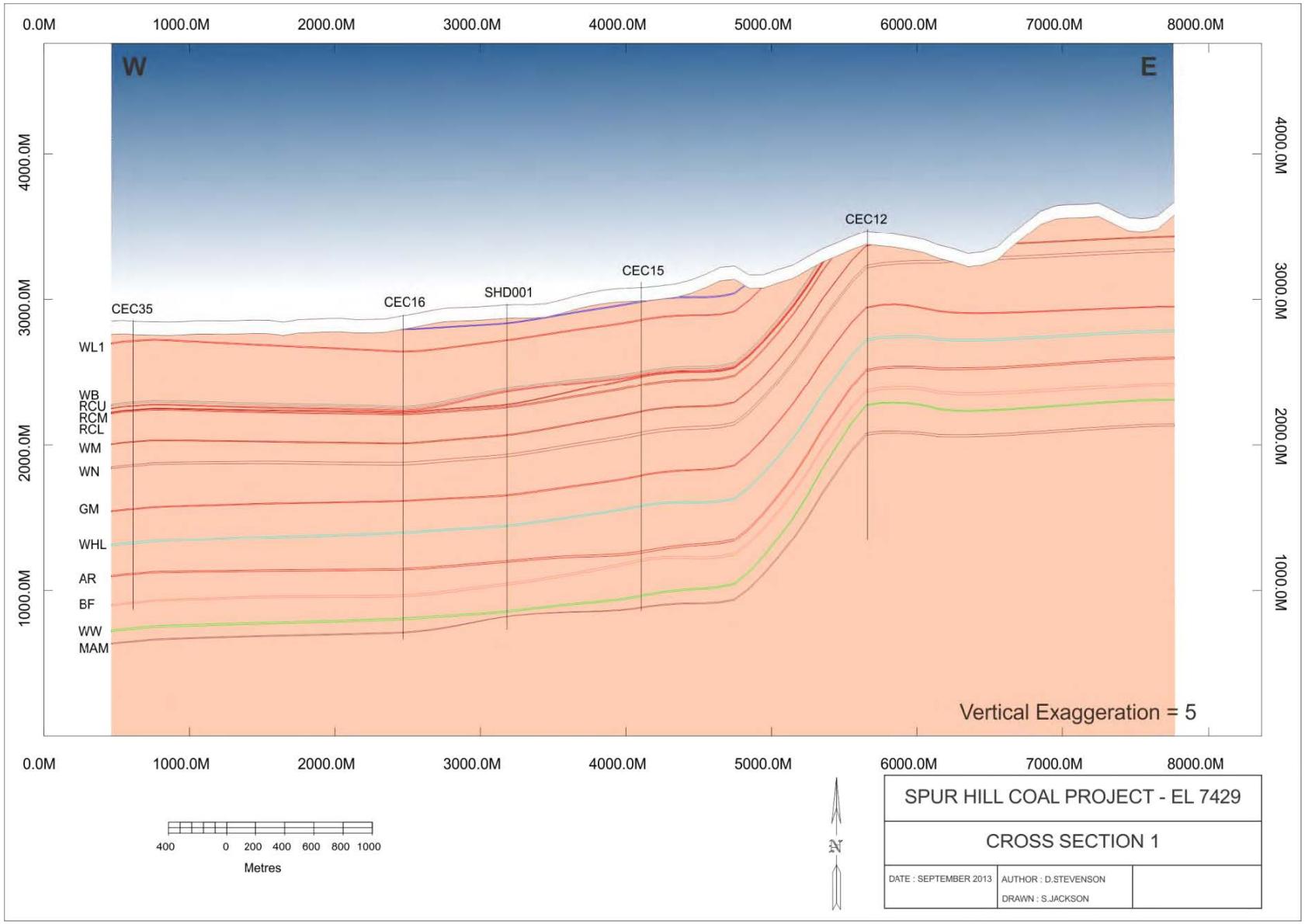
Drill Hole information - data entered when available

Re orientation - the drillholes will all be vertical

Re size - the historical holes are probably all NQ

Cross Section Location Plan and Section Diagrams

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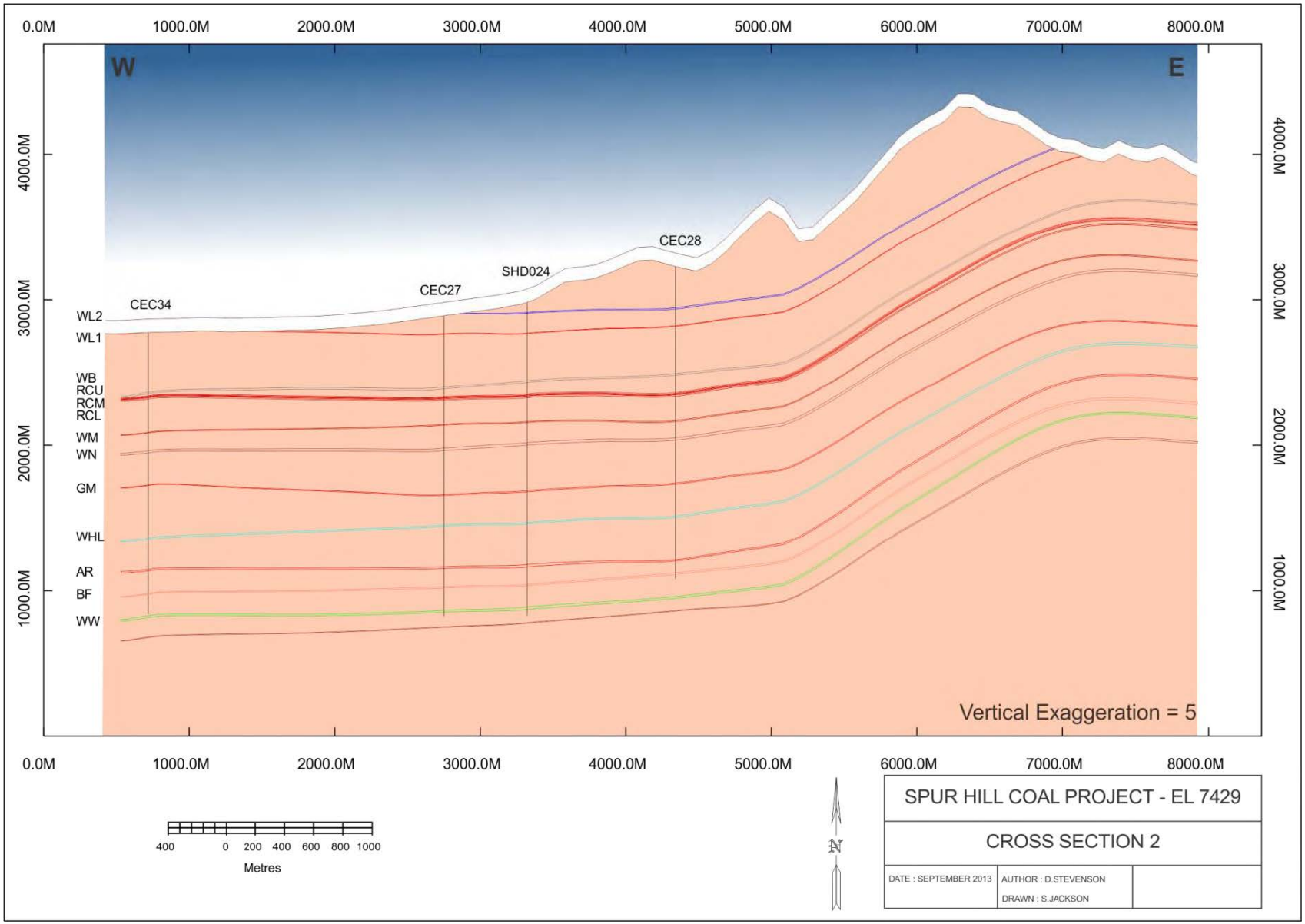
DATE : SEPTEMBER 2013
AUTHOR : D.STEVENSON
DRAWN : S.JACKSON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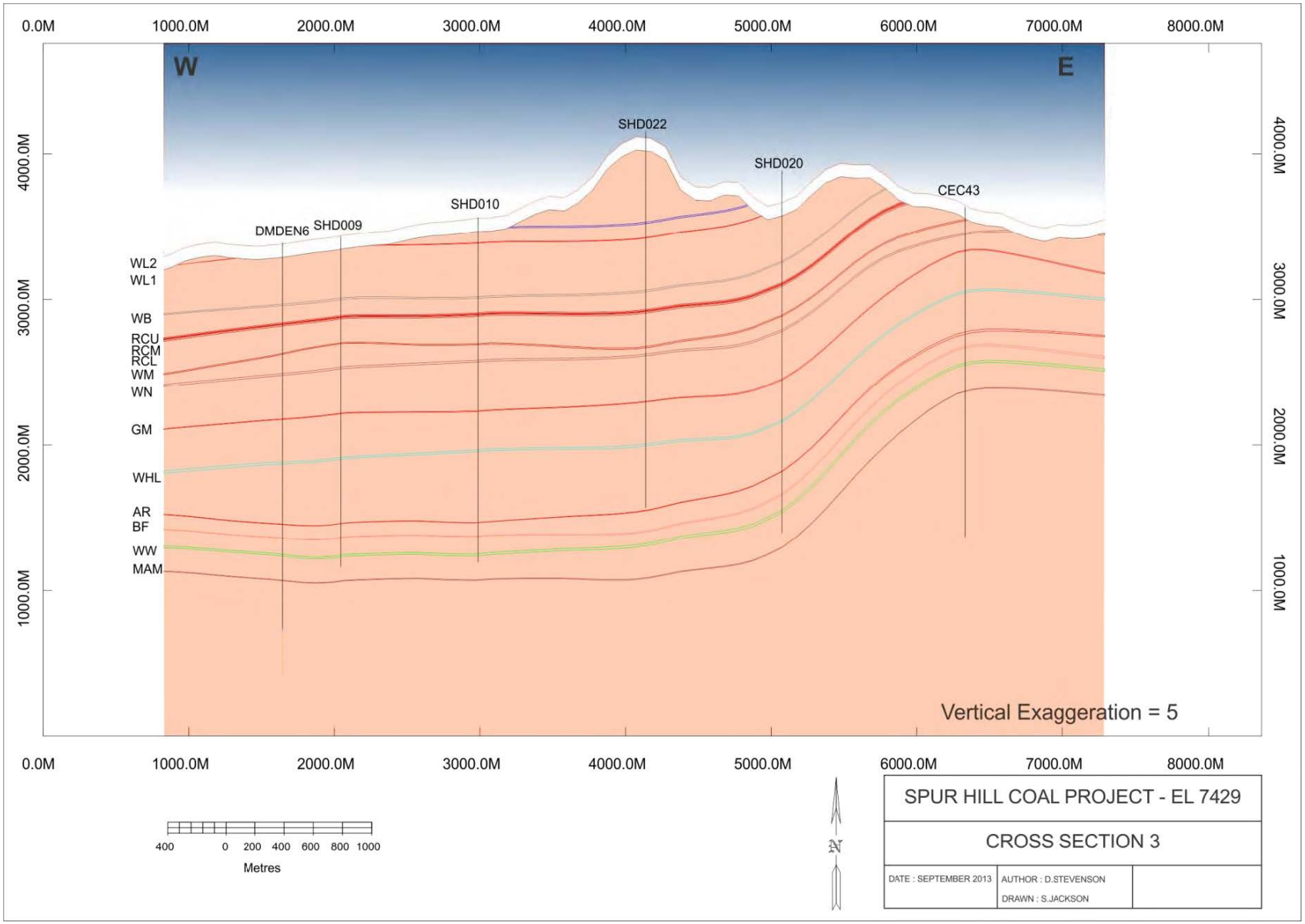
DATE : SEPTEMBER 2013
AUTHOR : D.STEVENSON
DRAWN : S.JACKSON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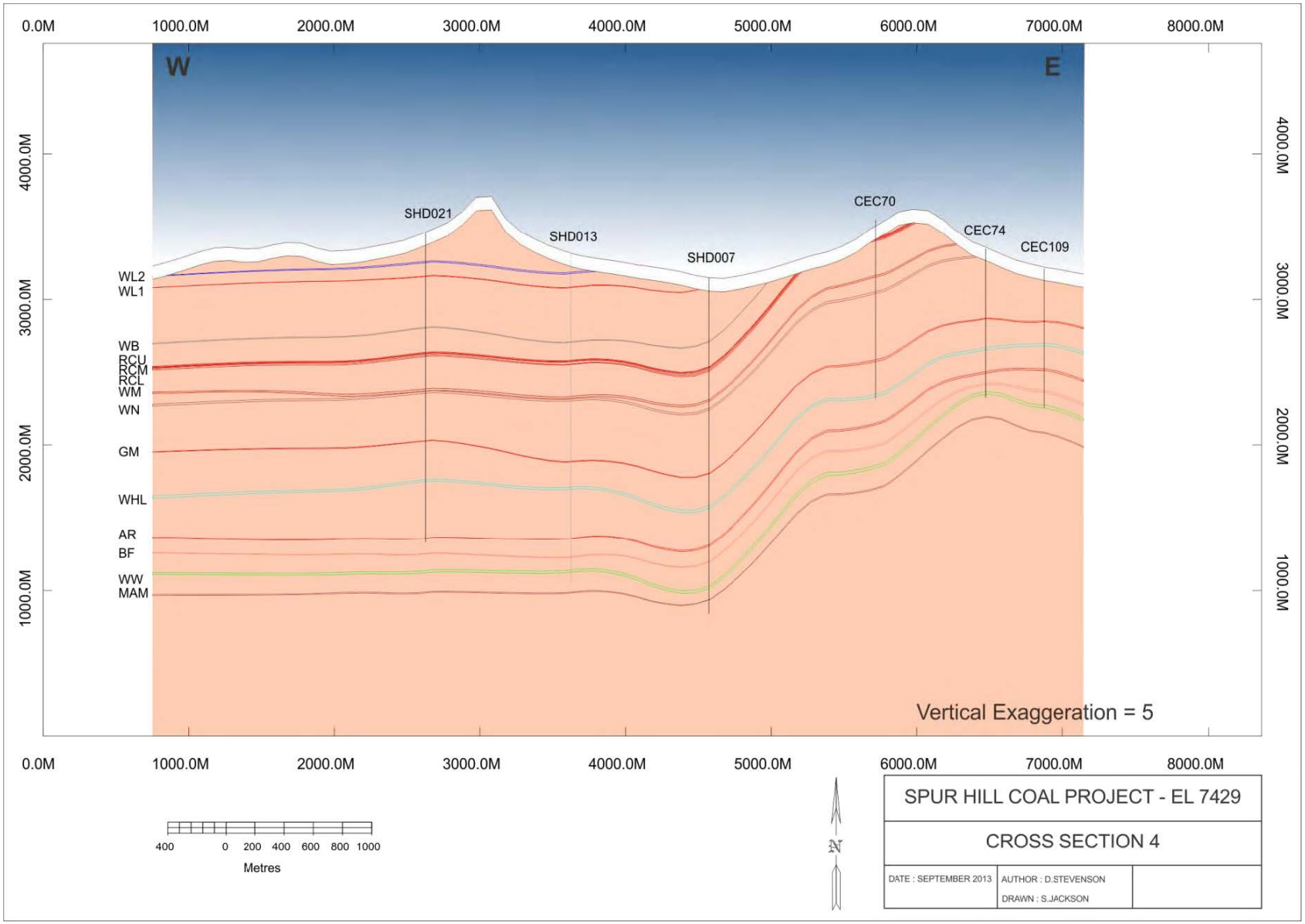
SPUR HILL COAL PROJECT - EL 7429
CROSS SECTION 3
DATE : SEPTEMBER 2013
AUTHOR : D.STEVENSON
DRAWN : S.JACKSON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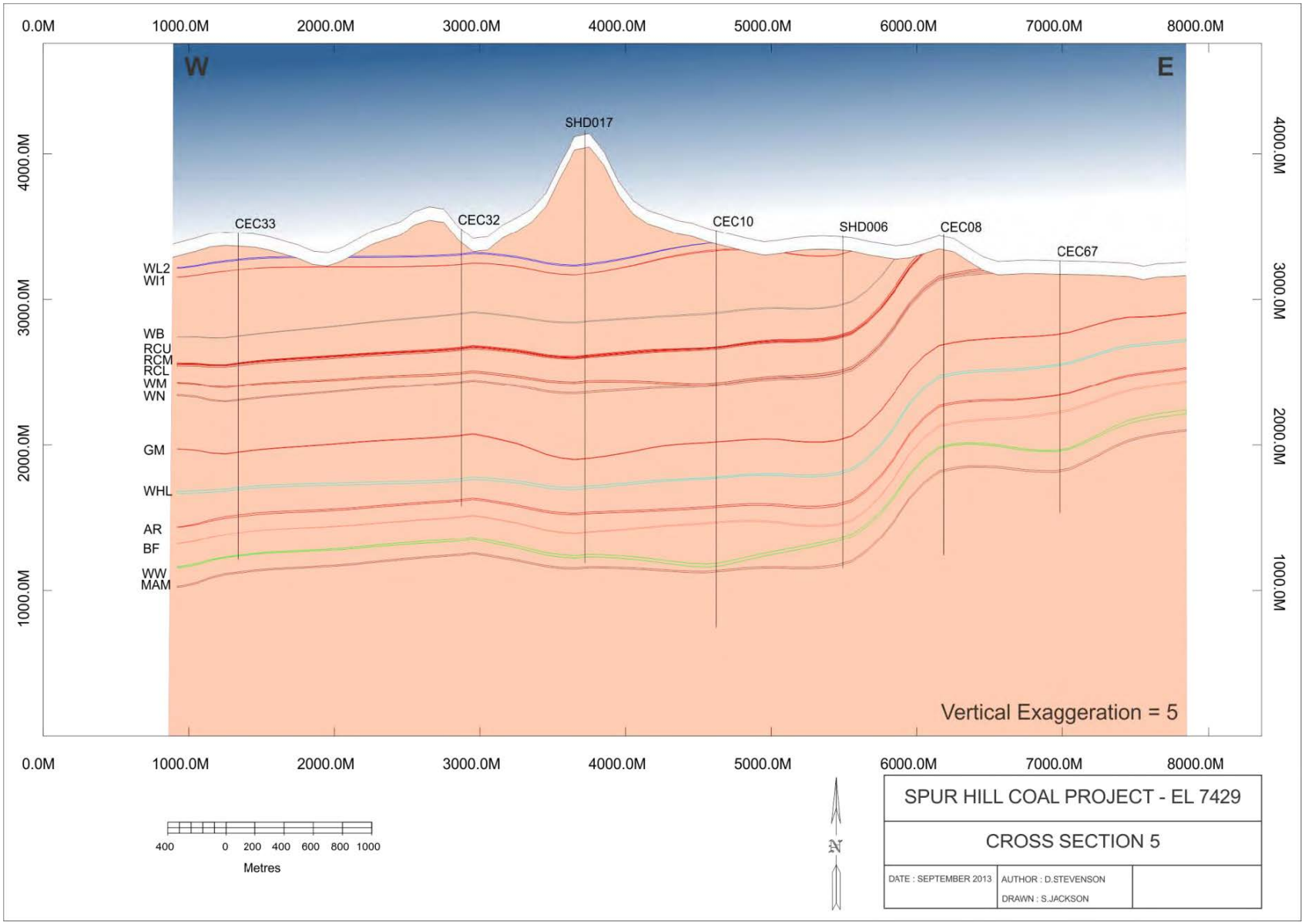
SPUR HILL COAL PROJECT - EL 7429
CROSS SECTION 4
DATE : SEPTEMBER 2013
AUTHOR : D.STEVENSON
DRAWN : S.JACKSON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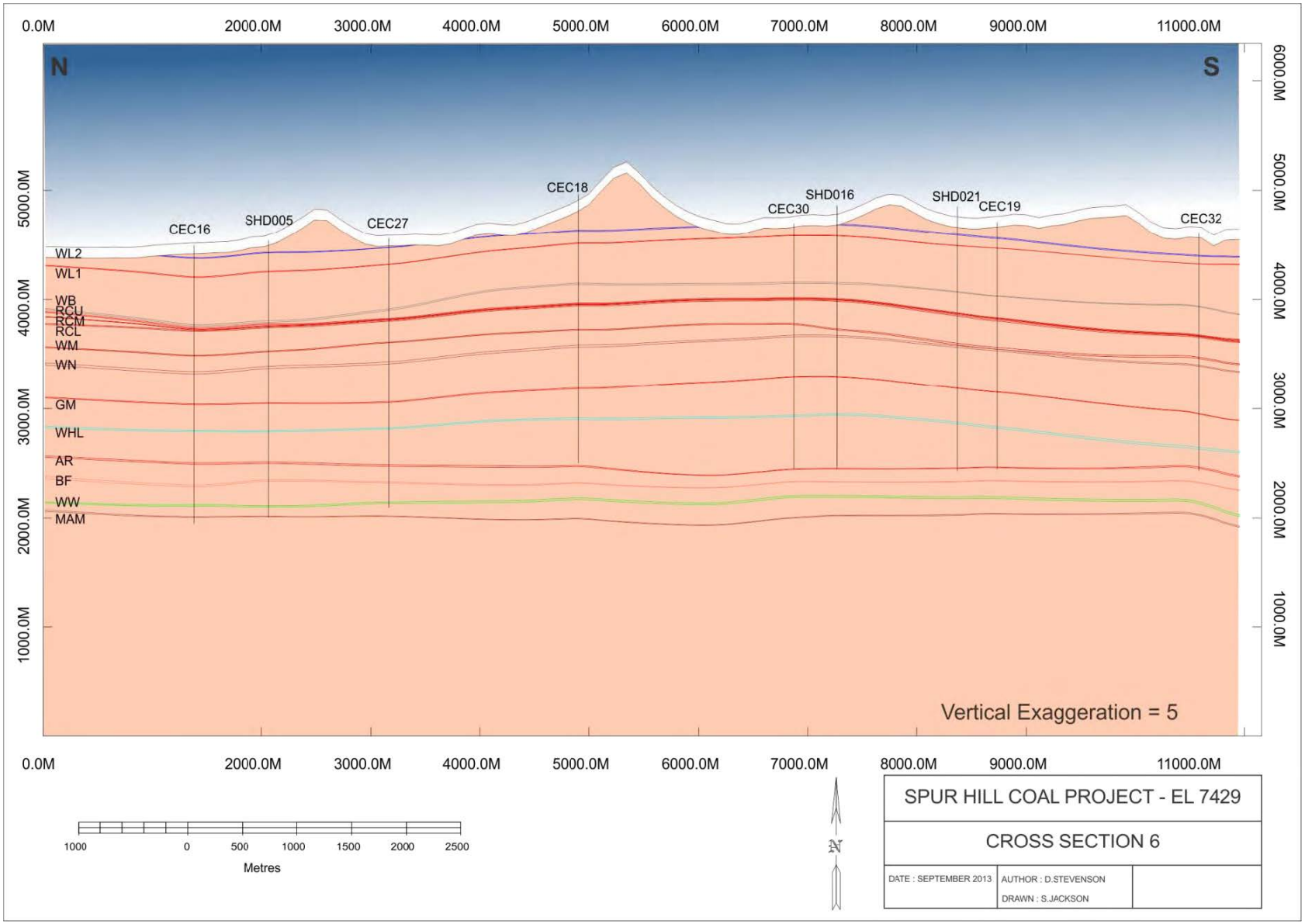
SPUR HILL COAL PROJECT - EL 7429
CROSS SECTION 5
DATE : SEPTEMBER 2013
AUTHOR : D.STEVENSON
DRAWN : S.JACKSON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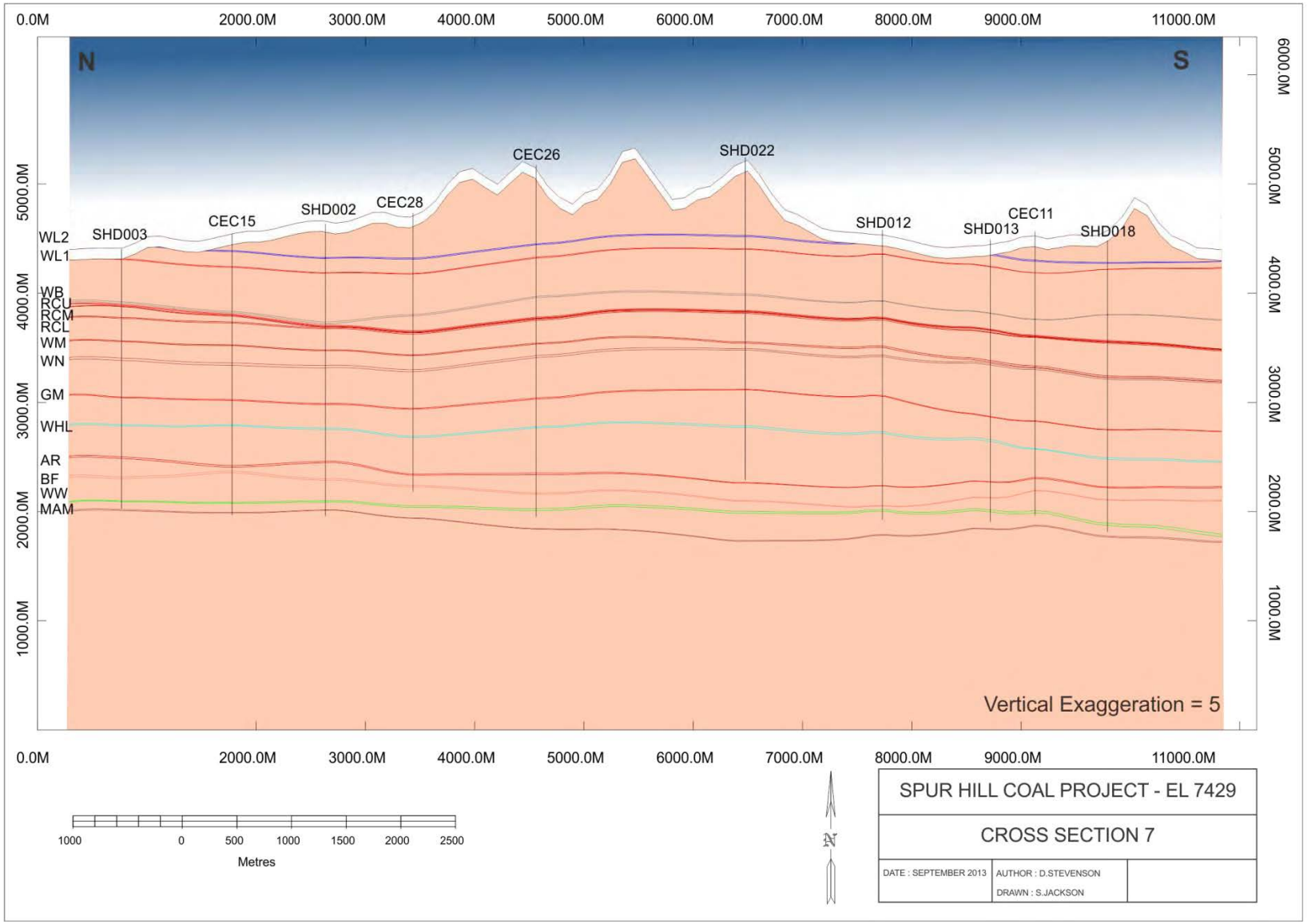
DATE : SEPTEMBER 2013
AUTHOR : D.STEVENSON
DRAWN : S.JACKSON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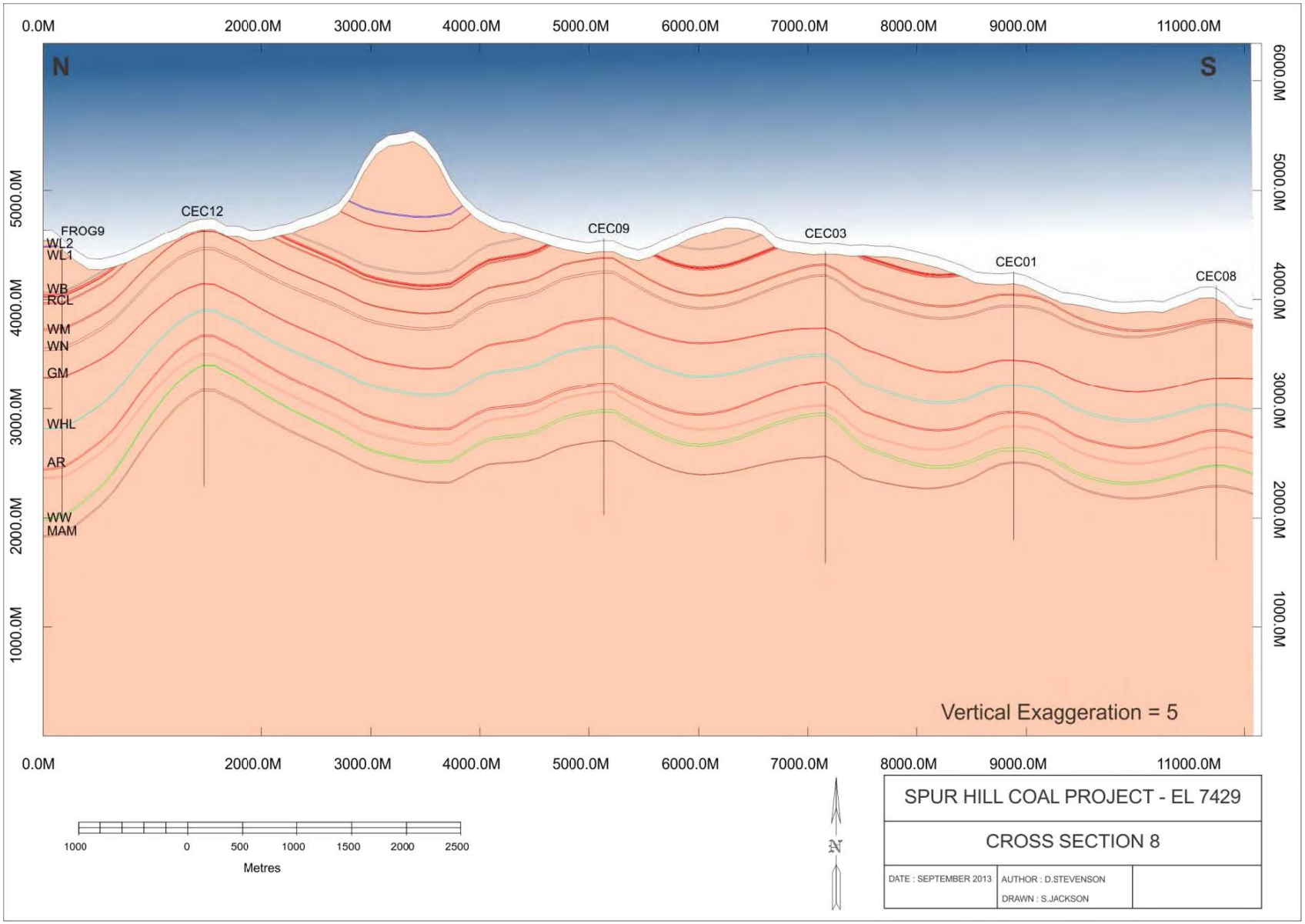
SPUR HILL COAL PROJECT - EL 7429
CROSS SECTION 7
DATE : SEPTEMBER 2013
AUTHOR : D.STEVENSON
DRAWN : S.JACKSON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SPUR HILL COAL PROJECT - EL 7429
CROSS SECTION 8
DATE : SEPTEMBER 2013
AUTHOR : D.STEVENSON
DRAWN : S.JACKSON

Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	▪ Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve; ▪ Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	▪ The Resources estimate used as a basis for the Reserves estimate has been provided by Geological and Mining Services Australia Pty Ltd and has been completed in accordance with the 2012 JORC Code; ▪ The JORC Coal Resources are inclusive of the JORC Coal Reserves stated in this report.
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.	▪ A site visit was undertaken by Mr Jeremy Busfield in August 2013 to assess the suitability and location of the surface infrastructure area and portal entry location; ▪ During this site visit, physical bore core samples were reviewed along with the surrounding regional area.
Study status	▪ The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves; ▪ The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	▪ Spur Hill has undertaken numerous studies during 2012 and 2013 which have focused on the key enablers for a greenfield underground coal project. The topics studied include: ▪ Geology; ▪ Geotechnical; ▪ Mineability; ▪ Coal quality and washability; ▪ Coal marketing and sales forecasting; ▪ Coal handling and preparation; ▪ Surface coal handling; ▪ Mine planning, mine access, productivity and scheduling; ▪ Environmental background surveys and monitoring; ▪ Rail Access; ▪ Power and water supply; ▪ Economic evaluation. ▪ The work to date has been collated in a report compiled by Spur Hill (October 2013); ▪ The work to date is considered to be in pre-feasibility and is considered a Class 4 estimate in accordance with estimating guidelines of the Australian Cost Engineers Society.
Cut-off parameters	▪ The basis of the cut-off grade(s) or quality parameters applied.	▪ No cut-off parameters have been applied to the resource based on coal quality; ▪ The predominant factors that have been used to limit the mine plan layout are major faulting, seam thickness and tenement boundary; ▪ A minimum seam extraction height of 1.8m has been applied to the mine layout design as a practical minimum mining height.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Mining factors or assumptions</td><td>▪ The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design);
▪ The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc;
▪ The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling;
▪ The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate);
▪ The mining dilution factors used;
▪ The mining recovery factors used;
▪ Any minimum mining widths used;
▪ The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion;
▪ The infrastructure requirements of the selected mining methods.</td><td>▪ The mining method proposed for Spur Hill is conventional retreat, full seam longwall extraction with two heading gate roads coming off a set of main headings. Utilising this method of extraction will maximise the overall recovery of the resource and therefore maximise the available ROM tonnes;
▪ Longwall mining is the most common method of underground coal extraction due to its high productivity, high resource recovery, low cost and safety aspects;
▪ It has been assumed that the entire seam height will be extracted along with a combined total of 100mm of stone dilution from the floor and roof. Mining losses are expected to be 3% of the seam. This is to account for coal that is left on the floor of the mine;
▪ Geotechnical factors including pillar design, joint orientation and likely roof support methods have been incorporated into the mine design and economic assumptions;
▪ A mining recovery factor of 100% is applied. That is, it is assumed that all of the estimated reserves will be recovered and/ or that any losses in the estimated reserves will be offset by future additions of reserves which are converted in status from the current Inferred Resources and may include resources from other seams. Details regarding mining recovery risks specific to underground coal projects are described elsewhere in this table;
▪ Inferred Resources have not been included in the calculation of the reserves however the mine layout has been extended over areas which are at Inferred Resource status.
<table>
<tr><th colspan="2">Reserves Calculation Assumptions – Whynot Seam</th></tr>
<tr><td>Parameter</td><td>Value</td></tr>
<tr><td>Inherent Moisture Content</td><td>4.5%</td></tr>
<tr><td>ROM Moisture Content</td><td>9.5%</td></tr>
<tr><td>Product Moisture Content</td><td>10.5%</td></tr>
<tr><td>Coal Density (ad)</td><td>1.43t/m3</td></tr>
<tr><td>Stone Density (ad)</td><td>2.30t/m3</td></tr>
<tr><td>Roof Dilution (stone)</td><td>50mm</td></tr>
<tr><td>Floor Dilution (stone)</td><td>50mm</td></tr>
<tr><td>ROM Density (ad)</td><td>1.46t/m3</td></tr>
<tr><td>Development Roadway Width</td><td>5.2m</td></tr>
<tr><td>Development Roadway Height</td><td>3.2m</td></tr>
<tr><td>Installation Roadway Dimensions</td><td>8m x 3.2m</td></tr>
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<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th colspan="2">Commentary</th></tr>
<tr><td rowspan="15"></td><td rowspan="15"></td><td>Longwall Panel Width</td><td>300 m (centres)</td></tr>
<tr><td colspan="2"></td></tr>
<tr><td colspan="2">Reserves Calculation Assumptions – Bowfield Seam</td></tr>
<tr><td>Parameter</td><td>Value</td></tr>
<tr><td>Inherent Moisture Content</td><td>3.1%</td></tr>
<tr><td>ROM Moisture Content</td><td>8.1%</td></tr>
<tr><td>Product Moisture Content</td><td>10.1%</td></tr>
<tr><td>Coal Density (ad)</td><td>1.44t/m3</td></tr>
<tr><td>Stone Density (ad)</td><td>2.30t/m3</td></tr>
<tr><td>Roof Dilution (stone)</td><td>50mm</td></tr>
<tr><td>Floor Dilution (stone)</td><td>50mm</td></tr>
<tr><td>ROM Density (ad)</td><td>1.47t/m3</td></tr>
<tr><td>Development Roadway Width</td><td>5.2m</td></tr>
<tr><td>Development Roadway Height</td><td>3.2m</td></tr>
<tr><td>Installation Roadway Dimensions</td><td>8m x 3.2m</td></tr>
<tr><td>Longwall Panel Width</td><td>300 m (centres)</td></tr>
<tr><td>Metallurgical factors or assumptions</td><td>▪ The metallurgical process proposed and the appropriateness of that process to the style of mineralisation;
▪ Whether the metallurgical process is well-tested technology or novel in nature;
▪ The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied;
▪ Any assumptions or allowances made for deleterious elements;
▪ The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole;
▪ For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the</td><td colspan="2">▪ A coal preparation study has been conducted by QCC Resources Pty Ltd;
▪ Spur Hill proposes that the majority of the ROM coal will be beneficiated via a CPP to produce semi soft coking coal. A portion of coal may bypass the CPP and be blended into the washed coal product and/or sold as export thermal coal;
▪ The proposed coal washing process is Dense Medium Cyclones for processing the coarse coal (+2mm) which is well proven technology that offers flexibility of cut point density to manage product ash and yield. Spirals are proposed for the treatment of the fine coal which again is proven technology;
▪ The metallurgical test work is at an early stage and is based primarily on slim core testing and simulation modeling;
▪ The coal recovery factors have been calculated by Spur Hill using the simulation derived coal yields at a cut point of 1.8 density and adjusted for dilution and moisture;
▪ The average yields accounting for the proposed coal processing are 76% for the Whynot</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	specifications?	seam, and 79% for the Bowfield seam. This includes dilution and moisture adjustments. No allowances have been made for potential deleterious elements as the marketing evaluation conducted by MinAxis Pty Ltd considers the Spur Hill product will be well regarded due to its strong quality parameters including low ash and low sulphur; ▪ A bulk sample has not been taken.
Environmental	▪ The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	▪ The environmental approval process for the development of the Spur Hill Underground Coking Coal Project is governed by the provisions of NSW State planning legislation and Federal environmental protection legislation; ▪ The Spur Hill Underground Coking Coal Project will be regarded as a State Significant Development (SSD) under the Environmental Planning and Assessment Act NSW (1979) and later amended in 2011 (Part 3A repeal) (EP&A Act); ▪ As a SSD, the project will be assessed under Part 4 of the EP&A Act by the NSW Minister for Planning and Infrastructure; ▪ A separate referral will be prepared for the Spur Hill Project under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act). This will determine if the project is a 'Controlled Action', that is, if it is likely to have a significant impact on matters of national environmental significance. If the Spur Hill Project is declared a 'Controlled Action', the development could be assessed through bilateral provisions under the EP&A Act process. Following the assessment and determination of the development under the EP&A Act process, the Federal Minister for the Environment, (or his delegate) will determine the development of the Spur Hill Project under the EPBC Act; ▪ The project team is currently undertaking work in preparation for an Environmental Impact Statement (EIS) which will accompany a Development Application under the EP&A Act approval process. Spur Hill estimates a time period of approximately 24 months is required for preparation, lodgement, assessment and approval of the application; ▪ Separate to the Development Application, Mining Lease Application(s) will be lodged for areas of underground mining and infrastructure for the development of the Spur Hill Project under the Mining Act. If consent for the development of the Spur Hill Underground Project is granted under the SSD provision of the EP&A Act, the Mining Lease Application(s) cannot be refused and must be substantially consistent with the consent under the EP&A Act; ▪ In September 2012, the NSW Government introduced its Strategic Regional Land Use Plan. This plan details a "Gateway" process that will apply to state-significant mining projects that are located within lands that are deemed to require additional levels of protection; ▪ The project will be one of the first in NSW to progress through the Gateway Process and continue onto and through the EIS process. From the Gateway Process, either an unconditional certificate will be issued (where the assessment panel deems the project has met all Gateway criteria) or a conditional certificate (conditions deemed to have not been met) and must be addressed in the Development Application when lodged.

Criteria	JORC Code explanation	Commentary

		▪ The primary concerns for the NSW Strategic Regional Land Use Plan are the equine industries and viticulture. It is noted that in the project area no horse studs currently exist, and the only small-scale vineyard is owned by the project.
		▪ Once assessed, a Gateway Certificate (with or without conditions) will be issued to the project at which time the Department of Planning can issue the Director General's requirements for an EIS;
		▪ A Development Application, supported by an EIS and a Mining Lease Application are expected to be lodged by mid-2014, with relevant approvals expected by H2 2015;
		▪ Background environmental monitoring and baseline studies have commenced for the project to support the Gateway application and EIS preparation. These include:
		  ▪ Air quality baseline monitoring;
		  ▪ Ground water baseline monitoring;
		  ▪ Agricultural impact assessment;
		  ▪ Surface water monitoring;
		  ▪ Flora and fauna surveying;
		  ▪ Aboriginal and Cultural Heritage;
		  ▪ Contaminated Land Assessment and Geochemical Assessment of waste rock (particularly from the excavation of shafts and the drift during construction, and from reject material from coal beneficiation).
		▪ The initial reject from beneficiation activities will be emplaced in a dedicated Reject Emplacement Area. The site criteria includes; minimizing the distance to transport reject, and, selecting a site where the emplacement can be contoured to conform with the existing landform;
		▪ Following the establishment of stable longwall operations, rejects will be pumped underground and disposed of within the longwall goaf.

Infrastructure	▪ The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	▪ Two major roads run within close proximity to the tenement boundary. These include the Golden Highway, and the Denman Road. These roads provide transport links to the cities of Singleton in the east and Muswellbrook in the north; ▪ The major cities of Newcastle and Sydney are within driving proximity offering the full range of services including air transport, community and health; ▪ The tenement is located close to the Sandy Hollow-Gulgong Rail Line which leads to the ports of Newcastle via the broader Hunter Valley Coal Chain; ▪ Coal is proposed to be railed from site from a dedicated rail loop. Several options have been evaluated into a means of transporting product coal to the rail loop with the proposed method of an overland conveyor connecting the CPP to the train load-out facility; ▪ Power supply options for the project have been undertaken by Ausgrid, the regional supplier of electricity and a suitable option has been determined;

Criteria	JORC Code explanation	Commentary
		▪ For raw water supply, Spur Hill has purchased water licenses however further water balance studies will be required to determine the final requirements; ▪ Labour is expected to be generally available in the regional area as the project is within a long-established mining area. It is expected the workforce will locate their own accommodation within the regional towns in accord with the current custom and practice in the Hunter Valley; ▪ Coal will be exported via the nearby Port of Newcastle where there are currently two operators, Port Waratah Coal Services (PWCS) and Newcastle Coal Infrastructure Group (NCIG). Detailed port discussions are proposed as the Project advances; ▪ Original equipment manufacturers servicing the underground coal mining sector have advanced facilities in the lower Hunter Valley/Lake Macquarie area.
Costs	▪ The derivation of, or assumptions made, regarding projected capital costs in the study; ▪ The methodology used to estimate operating costs; ▪ Allowances made for the content of deleterious elements; ▪ The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products; ▪ The source of exchange rates used in the study; ▪ Derivation of transportation charges; ▪ The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc; ▪ The allowances made for royalties payable, both Government and private.	▪ Capital costs estimates for mine surface and transportation infrastructure items have been obtained from project pre-feasibility studies. Other capital cost estimates have been developed by Spur Hill with assistance from various consultants and advisors. The class of estimate is considered a Class 4, with an expected accuracy range of between -15% to +30%; ▪ The operating cost estimate for the project was developed by Spur Hill based on unit rates built up from a combination of first principles and industry standards. This cost was compared to benchmark data held by Spur Hill and its consultants; ▪ There is no allowance for deleterious elements; ▪ Future coal sales prices are based on the median of broker consensus Long Term forecasts of A$135/tonne for SSCC and A$117/tonne for export thermal coal. The SSCC prices are adjusted to account for low product ash where applicable; ▪ The broker consensus long term forex rate used in the economic evaluation was AUD:USD 0.85; ▪ Rail transportation costs are based on an industry general rate; ▪ Port costs are based on estimates provided by PWCS; ▪ The surface coal handling and washing cost was developed by Spur Hill based on rates from other operations. Penalties for failure to meet specification are typically not included for coal projects since a tolerance is generally applied to product specifications, hence are not included; ▪ The rate for NSW Government Royalties is based on 7.2% of the value of underground coal. A deduction of $3.50/t applies for coal that is subject to washing.
Revenue factors	▪ The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc; ▪ The derivation of assumptions made of metal or commodity price(s), for	▪ The derivation of sale price is covered above.

Criteria	JORC Code explanation	Commentary
	the principal metals, minerals and co-products.	

Market assessment	▪ The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future;
	▪ A customer and competitor analysis along with the identification of likely market windows for the product;
	▪ Price and volume forecasts and the basis for these forecasts;
	▪ For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.
		▪ A market assessment specific to Spur Hill was undertaken by MinAxis in January 2013. This study included demand of coking and thermal coal from overseas markets, competitors and overall demand;
		▪ The potential products for the initial years of the project include a "unique quality soft coking coal" produced from the Whynot Seam. Other seams are expected to produce benchmark semi-soft coking coal and thermal coal;
		▪ The study concluded that the project could produce a range of products over the life of the mine including:
		  ▪ An ultra-low ash, premium Soft Coking Coal;
		  ▪ A standard/typical Semi-Soft Coking Coal;
		  ▪ A benchmark export thermal coal.
		▪ The report outlines that the growth in demand for metallurgical coal will be driven largely by the developing economies of India and China and to a lesser extent, the economies of Brazil, Germany and Japan. MinAxis report that these economies are expected to drive up total demand (seaborne and overland) by almost 100% (increase from 285Mt in 2011 to 516Mt in 2025). Of this amount, the increase in seaborne demand is expected to amount to an increase from 188Mt (2011) to 437Mt (2025);
		▪ MinAxis report that the trend of blending coking coal types to support the increasing size of blast furnaces will continue, principally due to the limited availability of Hard Coking Coal. This in turn will support the demand for the other metallurgical coal types. MinAxis report that the environment of increasing demand and concurrent reduction in quality parameters will have a positive impact on the future marketability of the ultra-low ash Spur Hill Soft Coking Coal;
		▪ MinAxis report that the demand for thermal coal is forecast to grow from 839Mt (2011) to 1,272Mt (2025) with the greatest region of influence for such an increase in demand being Asia. The Asian region imported 572Mt in 2011 which is approximately 68% of the total demand for imported thermal coal. It is expected that Asia will remain the main consumer of thermal coal and is expected to be consuming up to 926Mt by 2025;
		▪ The forward sale prices are covered above.

Economic	▪ The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc;
	▪ NPV ranges and sensitivity to variations in the significant assumptions and inputs.
		▪ The key inputs to the economic evaluation include:
		  ▪ ROM production forecasts averaging 6.4Mtpa from a single longwall;
		  ▪ LOM average operating costs of $57/t pre-royalties;
		  ▪ Annual sales volumes averaging 4.6Mtpa of semi-soft coking coal and 0.1Mtpa of thermal coal
		  ▪ Sale pricing and forex as described above;
		  ▪ Company tax rate of 30%;

Criteria	JORC Code explanation	Commentary
		▪ Real discount rate of 10%pa. ▪ The NPV is most sensitive to coal price, then volume, operating costs, and capital costs in decreasing order; ▪ The NPV ranges and project capital costs are considered commercially sensitive and hence are not disclosed; ▪ The economic evaluations provide a positive NPV for the base case analysis which in the view of the Competent Person is comparable with other similar projects. In addition, the NPV remains positive NPV across a range of sensitivities (+/-20% range) to the base parameters.
Social	▪ The status of agreements with key stakeholders and matters leading to social license to operate	▪ Spur Hill has purchased a number of properties which covers the proposed mine infrastructure area, mine access location, and initial mining domain; ▪ Land access agreements have been negotiated with landowners that are proximate to the Project, or whose lands are required to be accessed for the purposes of exploration, background testing and monitoring; ▪ Negotiations have commenced with landowners to establish long-standing access agreements for the operation of Spur Hill. As the Project is an underground mine, operation of the mine is not contingent upon these proposed agreements; ▪ Spur Hill has established a Community Contribution Fund which provides financial support to local organisations and causes.
Other	▪ To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: ▪ Any identified material naturally occurring risks; ▪ The status of material legal agreements and marketing arrangements; ▪ The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre- Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	▪ Unidentified geological structures and intrusions will likely pose the largest risk to the final mine plan design and may impact upon reserves, mine production levels and mine operating costs; ▪ Difficult geological conditions encountered in the mine development stage may delay mine production and increase early mine operating costs ; ▪ No marketing agreements have been reached which is considered normal for this early stage of the project. Due to the forecast increased demand for the Spur Hill product, this is not considered inappropriate at this stage of the Project; ▪ The Government statutory approval processes for obtaining the necessary approvals and have commenced. On the basis that both the State and Federal Governments publicly state their support for new mining projects and given the Project is located in a renowned mining area with existing mines to the north and east, there are reasonable grounds to expect all Government approvals will be received.
Classification	▪ The basis for the classification of the Ore Reserves into varying confidence categories; ▪ Whether the result appropriately reflects the Competent Person's view of the deposit; ▪ The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	▪ Two levels of geological confidence exist within the Project which are Indicated Resources and Inferred Resources. At this time, no Measured Resources exist in the Project area. The resource classifications extend across eight seams; ▪ This Reserve report only includes the Whynot and Bowfield seams as these are the initial mining targets and have been subject to greater study. In time, and subject to more exploration and study, it is reasonably expected that additional Indicated and Inferred

Criteria	JORC Code explanation	Commentary
		Resources may be included in the future. ▪ It is the opinion of the competent person that only the Indicated Resources will be classified as Probable Reserves; ▪ Probable Reserves derived from Indicated Resources in the Whynot and Bowfield seams amounts to 91Mt.
Audits or reviews	▪ The results of any audits or reviews of Ore Reserves Estimate.	▪ There has been no external audit of the Ore Reserves Estimate. An internal review has been conducted as part of the QA procedures of the Competent Person.

Discussion of relative accuracy/confidence	▪ Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserves Estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate;
	▪ The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used;
	▪ Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserves viability, or for which there are remaining areas of uncertainty at the current study stage;
	▪ It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.
		▪ The accuracy and confidence level of the Ore Reserves Estimate are considered appropriate to the current stage of the project in that the reserve category is declared as Probable Reserves by the Competent Person;
		▪ The following geological and mining related factors may have a future impact upon the Ore Reserves Estimate:
		  ▪ Identification of undetected faults posing future mining constraints thus causing loss of reserves;
		  ▪ Identification of undetected volcanic intrusions (diatremes, sills, dykes or plugs) thus causing loss of reserves;
		  ▪ Identification of areas of seam thinning thus causing loss of reserves;
		  ▪ Refinement of mine layout for practical considerations causing loss of reserves;
		  ▪ Refinement of geological model causing adjustment to seam cut-off boundaries;
		  ▪ Increase in borehole coverage and data analysis to the western edge of the tenement to prove up the remaining pocket of Inferred Resource to Indicated Resource status in the Whynot seam thus causing an increase in reserves;
		  ▪ Increased evaluation of other target mining seams (by exploration, data sampling and mining studies) thus causing an increase in reserves.

Appendix 2 - Comparison of the JORC Resource Reports of July 2013 and November 2013

	July 2013					November 2013				
	Western Zone			Eastern Zone	Total	Western Zone			Eastern Zone	Total
Seam	Indicated Mt	Inferred Mt	Total Mt	Inferred Mt	Mt	Indicated Mt	Inferred Mt	Total Mt	Inferred Mt	Mt
WL2	0.0	43.9	43.9	0.0	43.9	0.0	46.8	46.8	0.0	46.8
WL1	0.0	20.0	20.0	0.0	20.0	0.0	22.0	22.0	0.0	22.0
Whybrow	45.2	16.4	61.6	1.8	63.4	58.5	1.2	59.7	1.8	61.5
Redbank Creek Upper	0.0	0.0	0.0	3.0	3.0	0.0	0.0	0.0	3.8	3.8
Redbank Creek Middle	0.0	0.0	0.0	3.3	3.3	0.0	0.0	0.0	3.7	3.7
Redbank Creek Lower	39.9	12.0	51.9	6.0	57.9	51.3	0.7	52.0	6.2	58.2
Wambo	38.8	5.6	44.4	14.6	59.0	38.1	4.3	42.4	16.0	58.4
Whynot	98.5	13.6	112.1	22.2	134.3	104.5	5.3	109.8	23.0	132.8
Glen Munro	5.9	7.6	13.5	1.7	15.2	14.7	0.5	15.2	1.6	16.8
Arrowfield	14.5	0.0	14.5	0.0	14.5	14.6	0.0	14.6	0.0	14.6
Bowfield	28.0	8.4	36.4	19.8	56.2	34.0	2.5	36.5	21.7	58.2
Warkworth	62.7	40.4	103.1	22.7	125.8	78.7	26.6	105.3	23.4	128.7
Mount Arthur	0.0	12.3	12.3	13.8	26.1	0.0	9.3	9.3	11.1	20.4
Total	**333.5**	**180.2**	**513.7**	**108.9**	**622.6**	**394.4**	**119.2**	**513.6**	**112.3**	**625.9**

Appendix 3 - Past Exploration and recent drilling at the Spur Hill Underground Coking Coal Project