ANNUAL STATEMENT OF MINERAL RESOURCES AND ORE RESERVES - 30 JUNE 2016

Key Points

Kangala Mine Resource and Reserve Update

- Measured, Indicated and Inferred Mineral Resources of 131.7 million tonnes and a Proven Ore Reserve of 16.3 million tonnes
- The Mineral Resources and Ore Reserves decreased by 2.1 million tonnes and 500,000 tonnes respectively from the previous disclosure, dated 29 January 2016, due to depletion through production and remodelling and reclassification based on ongoing infill drilling

NCC Resource and Reserve Update

- Measured, Indicated and Inferred Mineral Resources of 144.7 million tonnes and a Proven Ore Reserve of 29.3 million tonnes
- The Mineral Resources increased by 14.3 million tonnes from the previous disclosure following re-evaluation of the geological model and resource estimate taking into consideration current coal price projections and trends likely to affect future coal supply and demand
- Universal Coal's shareholding in NCC decreased to an effective 49% following execution of the Subscription Agreement by Ndalamo Resources to comply with the Department of Mineral Resources and Eskom empowerment guidelines

Brakfontein Project Resource and Reserve Update

- Measured, Indicated and Inferred Mineral Resources of 75.8 million tonnes and a Proven Ore Reserve of 9.1 million tonnes
- There has been no change in estimates reported previously

Arnot South Project Resource Update

- Measured, Indicated and Inferred Mineral Resources of 206.6 million tonnes
- There has been no change in estimates reported previously

Berenice Cygnus Project Resource Update

- Measured, Indicated and Inferred Mineral Resource of 1,350.1 million tonnes
- There has been no change in estimates reported previously

Somerville Project Resource Update

- Somerville is a non-core project in an environmentally sensitive area and Universal Coal consequently decided to relinquish the project and remove the Inferred Mineral Resources of 274 million tonnes, previously attributed to the right, from the Company's resource inventory

SUMMARY OF INFORMATION

The information in the table below, relating to the Universal Group's Mineral Resources and Ore Reserves, has been extracted without amendment from the Resource and Reserve estimates relating to Universal's material assets:

Project	Reserves	Resources				
	Proved Mt	Measured Mt	Indicated Mt	Inferred Mt	Total Mt	Attributable to Universal Mt
Thermal Coal (Witbank)						
Kangala[1]	16.3	78.7	19.4	33.6	131.7	92.8
NCC[2]	29.3	96.8	41.8	6.0	144.7	70.9
Brakfontein[3]	9.1	31.7	39.4	4.7	75.8	38.1
Arnot South[4]	-	2.3	65.3	139.0	206.6	103.3
Total Thermal Coal	**54.7**	**209.5**	**165.9**	**183.4**	**558.8**	**305.1**
Coking Coal (Limpopo)						
Berenice[5] Cygnus[6]	-	424.9	800.9	124.3	1,350.1	675.1
Total Coking Coal	**-**	**424.9**	**800.9**	**124.3**	**1,350.1**	**675.1**
Total	**54.7**	**634.4**	**966.8**	**307.7**	**1,908.9**	**980.2**

Notes:

- Mineral Resources are stated on a gross in situ basis and inclusive of Ore Reserves
- Rounding (conforming to the JORC Code) may cause computational discrepancies

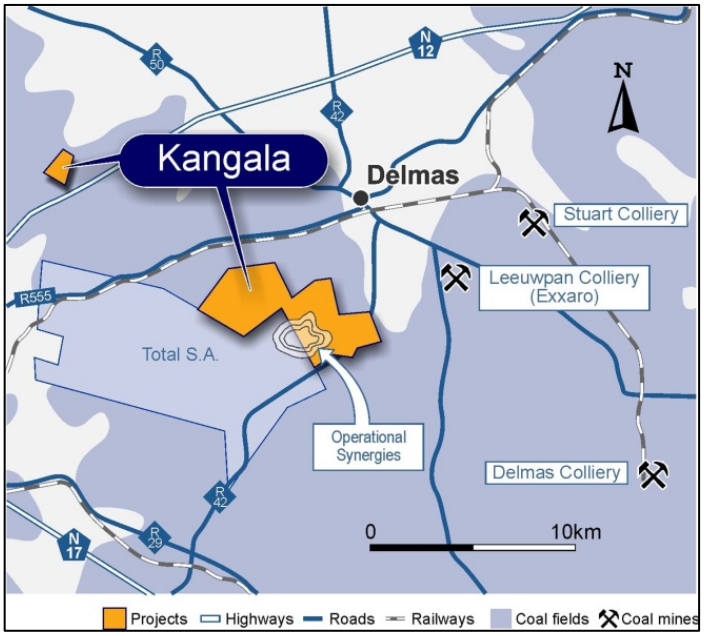
1. Universal has an attributable interest of 70.5 per cent. of the Kangala Project
2. Universal has an attributable interest of 49 per cent. in the NCC Project
3. Universal has an attributable interest of 50.29 per cent. in the Brakfontein Project and the right to negotiate to acquire up to a 74 per cent. interest upon completion of the BFS and award of a mining right and associated regulatory approvals
4. The acquisition of the Arnot South project is subject to the successful transfer of the prospecting right to Universal Coal, in accordance with Section 11 of the Mineral and Petroleum Resources Development Act, 2002. Universal will have an attributable interest of 50 per cent. in the Arnot South project upon granting of the Section 11 transfer
5. Universal has an attributable interest of 50 per cent. in the Berenice Project with an option to acquire up to a 74 per cent. interest
6. Universal has an attributable interest of 50 per cent. in the Cygnus Project with an option to acquire up to a 74 per cent. interest

Details of the key assumptions, parameters and methods used to estimate the Resources and Reserves are summarised in Annexures 1 to 5 (Table 1, JORC Code 2012).

KANGALA MINE MINERAL RESOURCE AND ORE RESERVE UPDATE

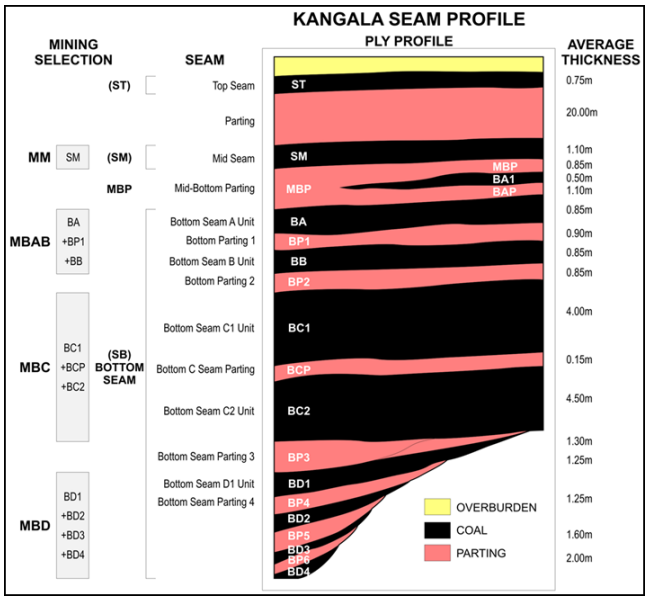
Locality

Kangala is an operating thermal coal mine located approximately 65km east of Johannesburg. First coal sales from Kangala occurred in April 2014, with steady state production subsequently achieved in October 2014. The entire project consists of three properties; Wolvenfontein (site of the Kangala Mine), Middelbult and Modderfontein located 65km due east of Johannesburg, in the Witbank coal field of South Africa, close to road and railway infrastructure and within a 70km radius of four coal-fired power stations.



Geology and Geological Interpretation

The Kangala project is located on the western margin of the Witbank Coalfield. The project area is mainly underlain by the coal-bearing Vryheid formation. The typical coal seam profile of the Kangala project consists of three coal seams. The Top seam is usually not present mainly due to the deep weathering profile. The Bottom seam consists of a number of coal plies and intra-seam partings as illustrated below.



The seams have a combine thickness of between 12.5m and 20m and are present at an average depth of 25m below surface.

JORC 2012 Mineral Resource and Ore Reserve Summary

Universal updated the Mineral Resources and Ore Reserves at Kangala prepared and reported on in January 2016. The estimation of the Mineral Resources was completed by Gemecs (Pty) Ltd and the estimation of the Ore Reserves by Mindset Mining Consultants (Pty) Ltd.

The following table provides a breakdown of the Resource and Reserve estimates at Kangala.

Seam	Reserve Proven Mt	Resource Measured Mt	Resource Indicated Mt	Resource Inferred Mt	Total Mt	Attributable to Universal Coal Mt
Wolvenfontein						
Mid Seam	1.0	1.0	-	1.2	2.2	1.6
Bottom Seam	15.2	19.2	-	30.9	50.2	35.3
Total	*16.2*	*20.2*	*-*	*32.1*	*52.4*	*36.9*
Middelbult						
Mid Seam	-	0.7	1.2	0.02	1.9	1.3
Bottom Seam	-	44.3	13.9	0.1	58.3	41.1
Total	-	*45.0*	*15.1*	*0.1*	*60.2*	*42.4*
Modderfontein						
Mid Seam	-	-	-	1.3	1.3	0.9
Bottom Seam	-	13.5	4.3	-	17.8	12.6
Total	-	*13.5*	*4.3*	*1.3*	*19.1*	*13.5*
TOTAL	**16.2**	**78.7**	**19.4**	**33.6**	**131.7**	**92.8**

- Mineral Resources are stated on a gross tonnes in-situ basis, inclusive of Ore Reserves
- The tonnages are quoted in metric tonnes and million tonnes is abbreviated as Mt
- Rounding (conforming to the JORC Code) may cause computational discrepancies

The update resulted in a net reduction in the total Mineral Resources from the previously reported 133.8Mt to 131.7Mt and a reduction in Proven Ore Reserves from 16.8Mt to 16.3Mt. The Mineral Resources and Ore Reserves decrease is the result of depletion through production and remodelling and reclassification based on ongoing infill drilling.

Coal Quality and Products

The Kangala project hosts bituminous coal suitable for the thermal coal market. The coal seams have raw quality that meets current domestic thermal coal quality requirements.

Coal Seam/ Mining Selection	RD	CV Mj/kg	Ash %	IM %	VM %	TS %
MM	1.51	23.5	22.9	3.8	28.4	2.37
MBAB	1.84	13.2	48.5	3.5	18.4	1.46
MBC1	1.61	19.6	30.3	4.4	20.6	1.23
MBC2	1.66	18.5	34.3	3.9	19.0	1.03
MD	1.65	18.6	34.0	3.8	20.4	0.81

- RD – relative density (as determined in lab), CV – calorific value, VM – volatile matter, IM – inherent moisture, S – sulphur
- Coal qualities quoted are for the current pit area at Kangala Mine, on a mineable tonnage in-situ and air-dried basis

The only exception is the MBAB unit, which has lower coal qualities. This is a result of the inclusion of the BP1 parting. Washing successfully upgrades this unit's coal qualities to marketable specifications. The Bottom seam produces thermal coal with a calorific value of 20.5 Mj/kg that is sold to Eskom under a long term Coal Sales Agreement and the Mid seam produces export thermal coal with an ash content of less than 15% that is sold to under an offtake agreement with Exxaro.

Exploration, Geological Modelling, Resource and Reserve Estimation

Core logging and sampling is completed on a lithological basis, by experienced and independent geologists and in accordance with the South African industry standard as required in SANS 10320:2004. All coal intersections are checked against downhole geophysical logs (wireline logs). Boreholes are all vertical core holes using conventional TNW size barrels (60.5 mm core diameter) with limited large diameter drilling for metallurgical test work purposes using a T6-146 size barrel (123mm core diameter). Borehole collars are surveyed by independent, qualified surveyors using high accuracy differential GPS systems. Regular site inspections and verification of exploration procedures and activities are undertaken by an independent Competent Person.

Coal analyses are outsourced to SANAS accredited laboratories in South Africa in accordance with the recognised International Standard ISO/IEC 17025:2005. All the exploration data and analytical results are imported into a Geobank database and subjected to independent validation routines and audits by Competent Persons.

Geological modelling and resource estimations are performed by Competent Persons using Geovia Minex™ software and by applying key mining, metallurgical and environmental factors and parameters as per JORC requirements. The Mineral Resource estimation is primarily guided by geology.

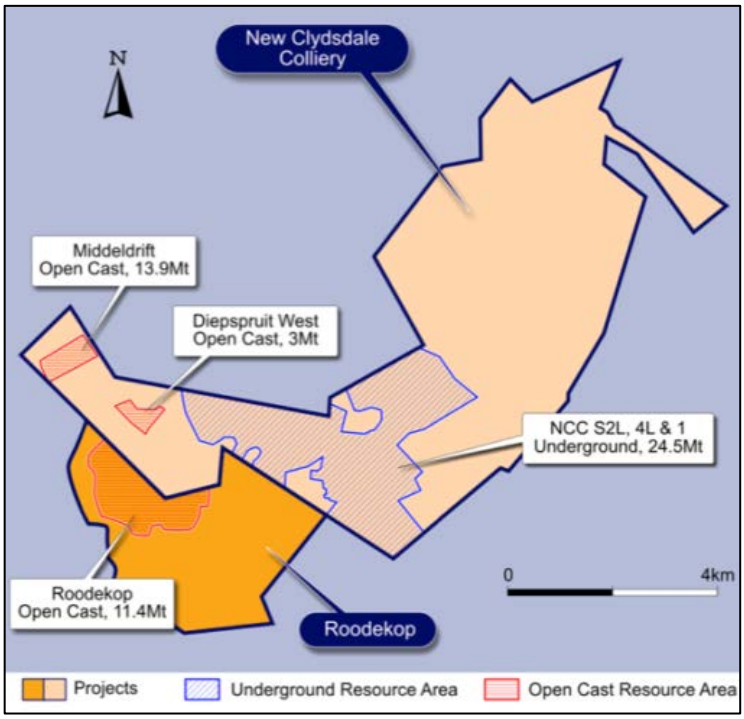
The Ore Reserve estimation is based on the feasibility study completed by Stefanutti and Stocks and reviewed and updated by Mindset Mining Consultants in the Competent Person's Report. The ore reserve estimate takes into consideration all key geological, mining, metallurgical, environmental, cost, infrastructure, revenue, market, economic and social factors and parameters relevant to the project.

Details of the drilling, sampling analytical methods, and key assumptions and parameters used in the updated Mineral Resource and Ore Reserve estimation for Kangala, as extracted from the Competent Person's Reports, are attached hereto as Annexure 1 (Table 1, JORC Code 2012).

NCC MINERAL RESOURCE AND ORE RESERVE UPDATE

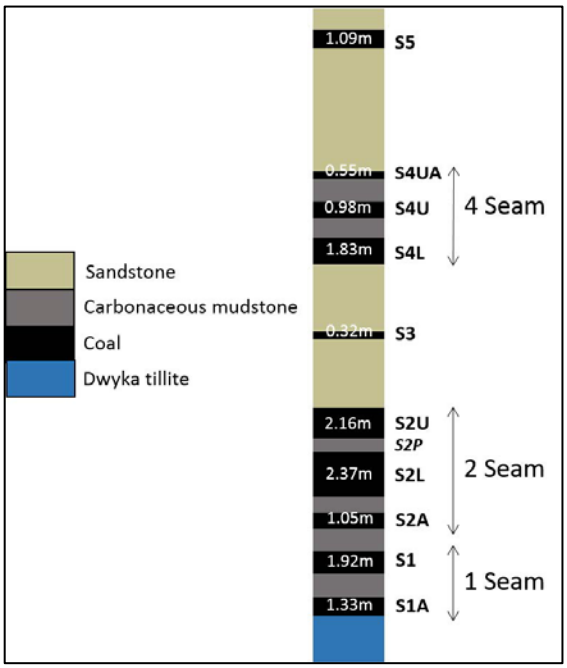
Locality

NCC is located 30km south of Middelburg and 70km east of Universal Coal's Kangala Mine.



Geology and Geological Interpretation

NCC is located centrally on the southern margin of the Witbank coalfield. The Ecca-aged coal seams are located in the Vryheid Formation and all five of the named Witbank Coalfield seams exist on the Project, named from top to bottom, 5 Seam (S5), 4 Seam (S4), 3 Seam (S3), 2 Seam (S2) and 1 Seam (S1). The S4, S2, and S1 are the most prominent seams present and the only seams considered economic to extract.



The seams are relatively flat-lying and the surface topography predominantly results in an increased depth to the top of the seams. One fault with minor displacement has been identified in the areas where future mining is planned.

JORC 2012 Mineral Resource and Ore Reserve Summary

Universal updated the Mineral Resources and Ore Reserves at NCC following a re-evaluation of the geological model prepared and reported on in January 2016. The adjusted tonnages represents the resources that are currently considered to have a reasonable prospect of eventual economic extraction taking into consideration current coal price projections and trends likely to affect future coal supply and demand. The estimation of the Mineral Resources was prepared by Universal Coal's in-house competent persons in collaboration with Gemecs (Pty) Ltd. The Ore Reserve estimate was prepared by Mindset Mining Consultants (Pty) Ltd.

The following table provides a breakdown of the Resource and Reserve estimates.

Seam	Reserve	Resource				
	Proven Mt	Measured Mt	Indicated Mt	Inferred Mt	Total Mt	Attributable to Universal Coal Mt
S4U		1.03	0.14	0.11	**1.28**	0.63
S4L		12.64	2.81	0.56	**16.01**	7.84
S2U		24.92	19.72	1.79	**46.43**	22.75
S2L		25.39	10.24	0.95	**36.58**	17.92
S1		6.32	3.71	0.59	**10.62**	5.20
S1A		26.53	5.18	2.03	**33.74**	16.53
Total	**29.30**	**96.82**	**41.80**	**6.04**	**144.66**	**70.88**

- Mineral Resources are stated on a gross tonnes in-situ basis, inclusive of Ore Reserves
- The tonnages are quoted in metric tonnes and million tonnes is abbreviated as Mt
- Rounding (conforming to the JORC Code) may cause computational discrepancies

The update resulted in a net increase in the total Mineral Resources from the previously reported 130.4Mt to 144.7Mt. The Ore Reserves remain unchanged at 29.3Mt. The adjusted resource tonnages represents the resources that are currently considered to have a reasonable prospect of eventual economic extraction taking into consideration current coal price projections and trends likely to affect future coal supply and demand.

Exxaro, the previous owner of NCC, conducted a Pre-Feasibility Study during 2012 and the study indicated that the Ore Reserves for the Middeldrift Resource area are between 11 Mt and 12 Mt of ROM coal. Universal opted to not compile a mine model and design for the Middeldrift Resource area at NCC at this stage and not to include the Middeldrift reserves in the Ore Reserve estimate. A full Ore Reserve estimation will be completed on the Middeldrift area as part of future life extension studies at NCC.

Coal Quality and Products

The raw coal quality for the different seams, present at NCC, is summarised in the Table below:

Seam	RD	CV Mj/kg	Ash %	VM %	IM %	S %
S4U	1.63	20.47	32.72	22.76	2.41	1.07
S4L	1.65	19.82	33.73	21.49	2.30	0.95
S2U	1.69	18.58	35.45	18.99	2.50	0.64
S2L	1.63	20.08	32.20	23.37	2.35	1.04
S1	1.59	21.37	29.86	21.33	2.43	1.06
S1A	1.59	22.02	29.30	23.72	2.04	0.84

- RD – relative density (as determined in lab), CV – calorific value, VM – volatile matter, IM – inherent moisture, S – sulphur
- Coal qualities are quoted on a gross tonnes in-situ and on an air-dried basis

For the Project, three products could be produced:

- Eskom 24 % Ash, 1 % Sulphur product.
- 18 % Ash, low Phos product for the metallurgical industry.
- 15 % Ash Export product.

The qualities and expected yields for these coal products are summarised in the table below:

Product Option	Primary Product (air dried basis)							Secondary Product (air dried basis)						Combined Product YL %
	YL %	ASH %	CV Mj/kg	VM %	IM %	S %	P %	YL %	ASH %	CV Mj/kg	VM %	IM %	S %	
Export Coal	32.2	14.2	27.5	27.9	2.7	0.55	-	45.4	32.44	20.2	20.6	2.4	1.02	77.6
Low Phos Met. Coal	72.7	16.8	26.5	28.6	2.8	0.5	0.006	-	-	-	-	-	-	72.7
Eskom Thermal Coal	75.1	24.5	23.4	23.6	2.6	0.6	-	-	-	-	-	-	-	75.1

- YL – theoretical borehole yield, CV – calorific value, VM – volatile matter, IM – inherent moisture, S – sulphur, P - phosphorus
- Coal qualities are quoted on a mineable tonnage in-situ and an air-dried basis

Exploration, Geological Modelling, Resource and Reserve Estimation

Core logging and sampling is completed on a lithological basis, by experienced and independent geologists and in accordance with the South African industry standard as required in SANS 10320:2004. All coal intersections are checked against downhole geophysical logs (wireline logs). Boreholes are all vertical core holes using conventional TNW size barrels (60.5 mm core diameter). Borehole collars are surveyed by independent, qualified surveyors using high accuracy differential GPS systems. Regular site inspections and verification of exploration procedures and activities are undertaken by an independent Competent Person.

Coal analyses are outsourced to SANAS accredited laboratories in South Africa in accordance with the recognised International Standard ISO/IEC 17025:2005. All the exploration data and analytical results are imported into a Geobank database and subjected to independent validation routines and audits by Competent Persons.

Geological modelling and resource estimations are performed by Competent Persons using Geovia Minex™ software and by applying key mining, metallurgical and environmental factors and parameters as per JORC requirements. The Mineral Resource estimation is primarily guided by geology.

The Ore Reserve estimation is based on the feasibility study completed by Mindset Mining Consultants as updated in the Competent Person's Report. The ore reserve estimate takes into consideration all key geological, mining, metallurgical, environmental, cost, infrastructure, revenue, market, economic and social factors and parameters relevant to the project.

Details of the drilling, sampling analytical methods, and key assumptions and parameters used in the updated Mineral Resource and Ore Reserve estimation for NCC, as extracted from the Competent Person's Reports, are attached hereto as Annexure 2 (Table 1, JORC Code 2012).

Change in shareholding

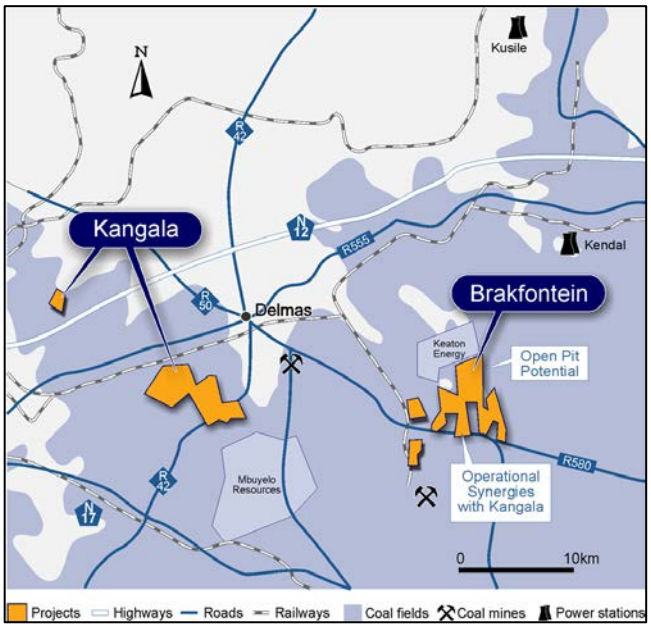
Universal Coal entered into a subscription agreement with Ndalamo Resources (Pty) Ltd (''Ndalamo'') on 3 March 2015 under which Ndalamo subscribed for 51% of the shares of UCD IV, for a subscription price of ZAR40,000,000. The subscription agreement was subject to the fulfilment or waiver of the conditions precedent under section 11(1) of the Mineral and Petroleum Resources Development Act (MPRDA), which has now been approved and as such Ndalamo's shareholding in UCD IV has increased from 26% to 51%.

Ndalamo settled the subscription price through effecting a draw down under a Term Loan Agreement entered into with Universal Coal and Energy Holdings South Africa (Pty) Ltd. The Term Loan is secured through a share pledge, bears interest at prime plus 7.5% per annum and is fully repayable by 30 June 2020 in varying capital instalments.

BRAKFONTEIN PROJECT MINERAL RESOURCE AND ORE RESERVE UPDATE

Locality

The Brakfontein project is located in the Delmas district, 20km east-southeast of the Kangala Mine. The area is well serviced by roads and railways and sizeable towns are located at Springs and Delmas in the west and Witbank and Middelburg to the east.



Geology and Geological Interpretation

The coal seams present in the Project area, which are typical Witbank Coalfield seams, are named from the top seam down, the S5, S4, S3, S2, and the S1. The S5 occurrence is limited due to the effect of surface

weathering. The S1, S2, and S4 are the most prominent seams present and the only seams considered economic to extract. The deposition of S1, S2, and S4 is however controlled by the palaeo-floor, and not all the seams are present throughout the prospect permit area.

JORC 2012 Mineral Resource and Ore Reserve Summary

There have been no changes to the JORC 2012 Mineral Resources and Ore Reserves for Brakfontein reported on in January 2016. The estimation of the Mineral Resources was completed by Gemecs (Pty) Ltd and the estimation of the Ore Reserves by Mindset Mining Consultants (Pty) Ltd.

The following table provides a breakdown of the Resource and Reserve estimates.

Seam	Reserve Proven Mt	Resource Measured Mt	Resource Indicated Mt	Resource Inferred Mt	Total Mt	Attributable to Universal Coal Mt
S5	-	-	1.8	-	1.8	0.9
S4U	1.6	6.4	3.2	3.7	13.3	6.6
S4L	3.0	9.6	8.0	0.2	17.8	8.9
S2	4.5	14.8	25.7	0.8	41.3	20.8
S1	-	1.0	0.9	0.1	1.8	0.9
Total	**9.1**	**31.7**	**39.4**	**4.7**	**75.8**	**38.1**

- Mineral Resources are stated on a gross tonnes in-situ basis, inclusive of Ore Reserves
- The tonnages are quoted in metric tonnes and million tonnes is abbreviated as Mt
- Rounding (conforming to the JORC Code) may cause computational discrepancies

The tonnages represent the resources that are currently considered to have a reasonable prospect of eventual economic extraction taking into consideration current coal price projections and trends likely to affect future coal supply and demand.

Coal Quality and Products

The Brakfontein project hosts bituminous coal that would have to be beneficiated to produce saleable products. The raw air dried qualities of the seams within the Ore Reserve area are summarised below.

Seam	RD	CV Mj/kg	Ash %	VM %	IM %	S %
S4U	1.78	14.33	44.95	15.52	3.75	1.04
S4L	1.56	21.53	26.92	19.55	3.90	1.14
S2	1.57	21.16	28.20	22.35	4.16	1.22

- RD – relative density (as determined in lab), CV – calorific value, VM – volatile matter, IM – inherent moisture, S – sulphur
- Coal qualities are quoted on a gross tonnes in-situ and an air-dried basis

For the Project, a single thermal coal product for domestic power generation, produced at a wash density of 1.80, is considered to be the most economic. The qualities (on an air dried basis) and expected yield for this product from the Ore Reserve area is summarised in the table below:

Seam	Primary Product (air dried basis)					
	YL %	ASH %	CV Mj/kg	VM %	IM %	S %
S4U	43.7	28.09	21.13	19.02	4.03	0.92
S4L	81.4	29.45	21.21	18.44	3.74	0.90
S2	89.9	30.79	20.56	21.40	4.01	1.10

- YL – theoretical borehole yield, CV – calorific value, VM – volatile matter, IM – inherent moisture, S – sulphur, P - phosphorus
- Coal qualities are quoted on a gross tonnes in-situ and on an air-dried basis

Exploration, Geological Modelling, Resource and Reserve Estimation

Core logging and sampling is completed on a lithological basis, by experienced and independent geologists and in accordance with the South African industry standard as required in SANS 10320:2004. All coal intersections are checked against downhole geophysical logs (wireline logs). Boreholes are all vertical core holes using conventional TNW size barrels (60.5 mm core diameter). Borehole collars are surveyed by independent, qualified surveyors using high accuracy differential GPS systems. Regular site inspections and verification of exploration procedures and activities are undertaken by an independent Competent Person.

Coal analyses are outsourced to SANAS accredited laboratories in South Africa in accordance with the recognised International Standard ISO/IEC 17025:2005. All the exploration data and analytical results are imported into a Geobank database and subjected to independent validation routines and audits by Competent Persons.

Geological modelling and resource estimations are performed by Competent Persons using Geovia Minex™ software and by applying key mining, metallurgical and environmental factors and parameters as per JORC requirements. The Mineral Resource estimation is primarily guided by geology.

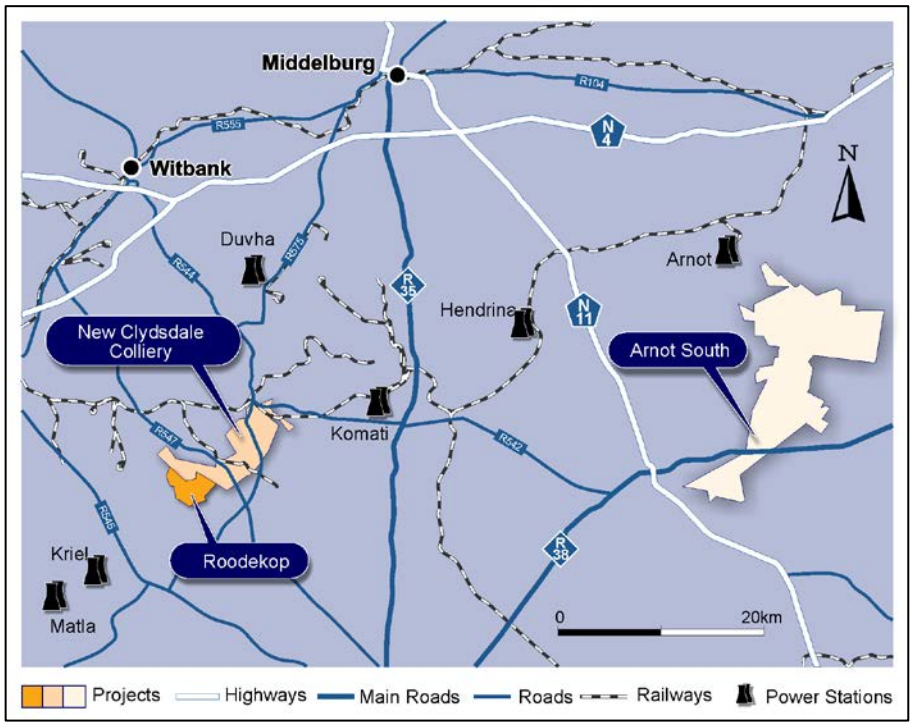
The Ore Reserve estimation is based on the feasibility study completed by Mindset Mining Consultants as updated in the Competent Person's Report. The ore reserve estimate takes into consideration all key geological, mining, metallurgical, environmental, cost, infrastructure, revenue, market, economic and social factors and parameters relevant to the project.

Details of the drilling, sampling analytical methods, and key assumptions and parameters used in the updated Brakfontein Mineral Resource and Ore Reserve estimations for Brakfontein, as extracted from the Competent Person's Reports, are attached hereto as Annexure 3 (Table 1, JORC Code 2012).

ARNOT SOUTH PROJECT MINERAL RESOURCE UPDATE

Locality

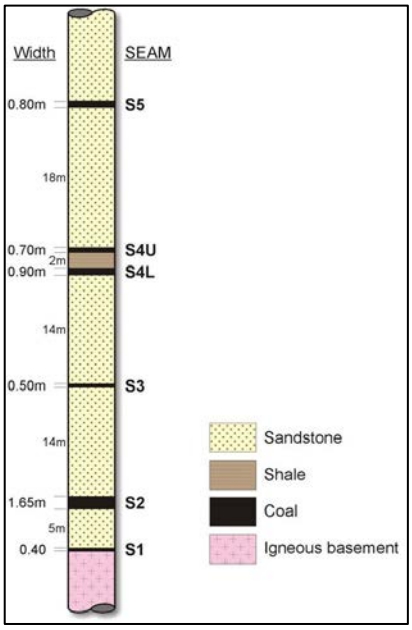
The Arnot South prospecting right is located approximately 65km east of Emalahleni and 50km northeast of Universal Coal's NCC project in the Witbank coalfield.



Geology and Geological Interpretation

Arnot South is located on the eastern margin of the Witbank Coalfield and is mainly underlain by the coal-bearing Vryheid formation. The distribution of the coal seams at Arnot South is largely controlled by a central NNE-SSW trending palaeo-low channel within the “Arnot Valley”. In general the No’s 5, 4, 3 and 2 seams are present. The No.2 seam is the main economic seam constituting more than 90% of the in situ coal resource. The depth to the top of the No. 2 Seam is determined by the basement floor and local surface topography varies from 10-20m to 110m.

The typical stratigraphic succession of the Vryheid Formation at Arnot South is illustrated below.



JORC 2012 Mineral Resource and Ore Reserve Summary

There have been no changes to the JORC 2012 Mineral Resources and Ore Reserves for Arnot South completed by Gemecs (Pty) Ltd and reported on in January 2016.

The following table provides a breakdown of the Resource estimate.

Seam	Resource Measured Mt	Resource Indicated Mt	Resource Inferred Mt	Total Mt	Attributable to Universal Coal Mt
S4U	-	-	0.13	0.13	0.06
S4L	-	0.42	0.55	0.97	0.49
S3	-	6.16	8.01	14.17	7.08
S2	2.28	58.73	130.32	191.33	95.67
Total	**2.28**	**65.31**	**139.00**	**206.60**	**103.30**

- Mineral Resources are stated on a gross tonnes in-situ basis, inclusive of Ore Reserves
- The tonnages are quoted in metric tonnes and million tonnes is abbreviated as Mt
- Rounding (conforming to the JORC Code) may cause computational discrepancies

The tonnages represent the resources that are currently considered to have a reasonable prospect of eventual economic extraction taking into consideration current coal price projections and trends likely to affect future coal supply and demand.

Coal Quality and Products

The raw qualities (on an air dried basis) of the seam present at Arnot South are summarised in the table below.

Seam	Raw Quality (air dried basis)					
	RD	ASH %	CV Mj/kg	VM %	IM %	S %
S4U	1.48	18.80	26.00	28.60	2.90	1.15
S4L	1.45	15.5	26.50	28.00	3.20	1.10
S3	1.59	27.80	22.20	22.80	2.90	0.86
S2	1.57	24.90	22.80	22.60	3.30	0.95

- RD – relative density (as determined in lab), CV – calorific value, VM – volatile matter, IM – inherent moisture, S – sulphur
- Coal qualities are quoted on a gross tonnes in-situ and an air-dried basis

Exploration, Geological Modelling, Resource and Reserve Estimation

All the drilling data used in the Arnot South Resource estimation is historic and no record of the logging, sampling, analyses and collar survey procedures is available, however, after independent examination the data is considered to have been collected by experienced geologists using acceptable industry procedures and standards. After examination of the available data it is reasonable to assume that all past drilling was vertical core drilling using conventional equipment and TNW core size (60.5mm core diameter). This is borne out by the mass of coal sample reported which corresponds to standard TNW core.

All the available historical data and analytical results was imported into a Geobank database by Gemecs (Pty) Ltd and subjected to validation routines and audits by the Competent Person.

Geological modelling and resource estimations are performed by the Competent Person using Geovia Minex™ software and by applying key mining, metallurgical and environmental factors and parameters as per JORC requirements. The Mineral Resource estimation is primarily guided by geology. Due to the high degree of uncertainty with regards to the quality of the historical data, as well as expected dolerite intrusions the resource was classified as Inferred.

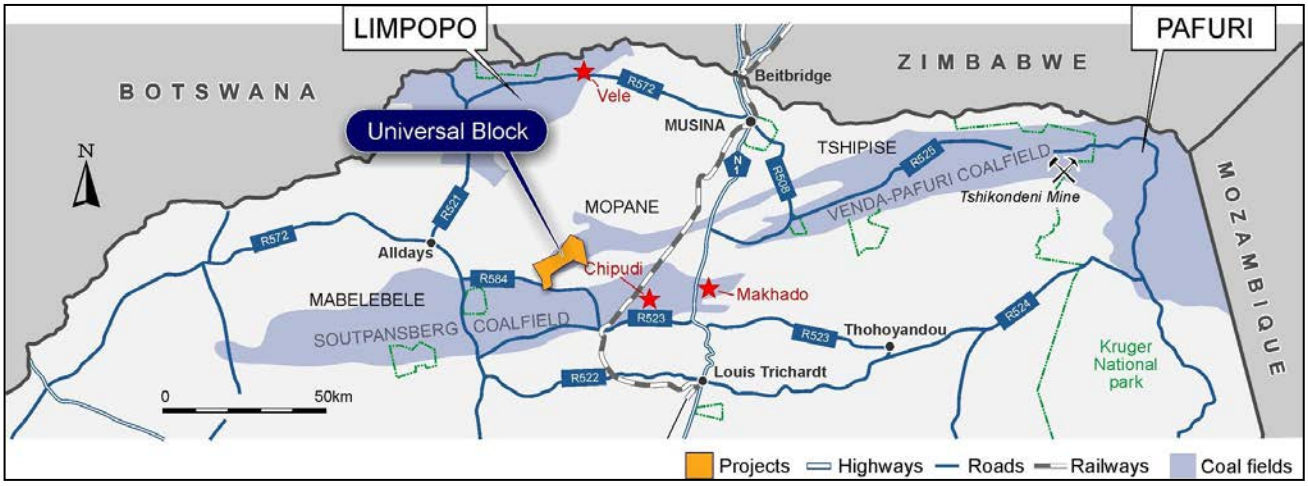
Details of the drilling, sampling analytical methods, and key assumptions and parameters used in the updated Mineral Resource estimation, as extracted from the Competent Person's Report, are attached hereto as Annexure 4 (Table 1, JORC Code 2012).

BERENICE CYGNUS PROJECT MINERAL RESOURCE UPDATE

Locality

The Berenice Cygnus project is located in the Limpopo Province of South Africa, some 120km to the North of Polokwane and to the east-southeast of the settlement of Alldays. The project may be reached via an all-weather gravel road which branches off from the tar road between Alldays and Waterpoort. The project area is approximately 50km by road from Alldays and about 30km by road from Waterpoort. The nearest sizeable town is Makhado (Louis Trichardt) some 80km by road to the south-east. The nearest accessible railway siding is at Waterpoort, approximately 30km south-east.

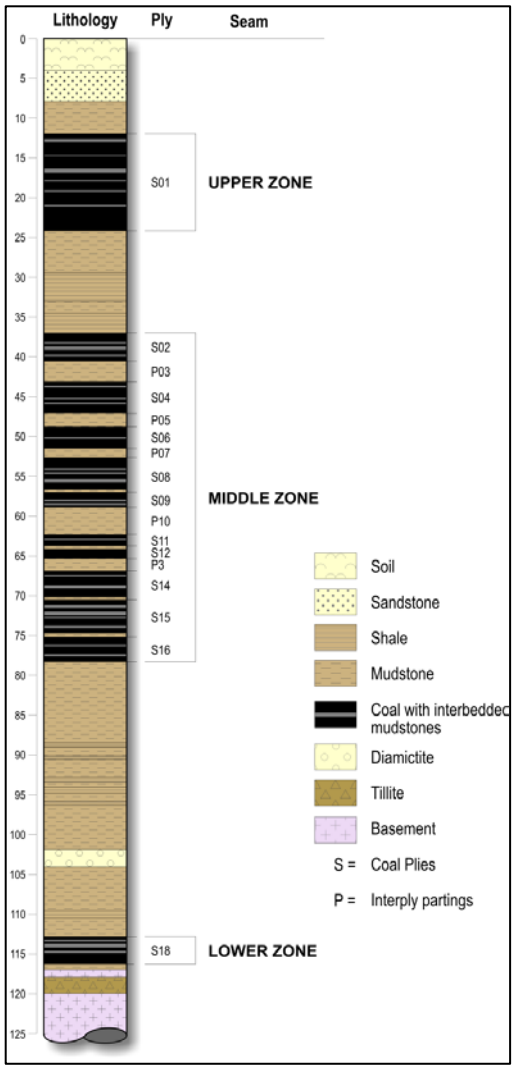
The location of the property in relation to the settlements and infrastructure is illustrated below.



Geology and Geological Interpretation

The Berenice Cygnus project is located within the “B”-block of the Mopane sector of the Soutpansberg coalfield. The coal-bearing strata dips at 1.5°-6° northwards and are deposited in a half-graben, fault-bounded toward the north-west and sub-outcropping towards the south-east. The strata represent Karoo-aged sediments deposited within smaller Limnic Karoo basins located outside of the main Karoo basin. The Soutpansberg coal field is characterised by intensive faulting. Dislocations both parallel to strike and at a high angle thereto are common and sub-divide the coalfield into numerous irregular-sized blocks. Displacements vary between 20m and 200m.

The coal deposits of this locality consist typically of bright coal/carbonaceous mudstone associations, forming a series of composite coal ‘zones’. Three coal zones can be identified and are named the Upper, Main and Lower Coal Zones. The coal zones locally consist of up to eighteen “coal plies”(S) as illustrated below that sub-outcrop in the south and reach depths of up to 260m along the northern fault-bounded graben limit.



The average thickness of the coal plies is 3.4m for the S2 ply, 1.3m for the S4 ply, 4.1m for the S6 ply, 3.5m for the S8 ply, 2.6m for the S9 ply, 1.9m for the S11 ply, 1.7m for the S12 ply, 2.9m for the S14 ply, 1.9m for the S15 ply and 4.7m for the S18 ply, with a combined thickness of approximately 27m.

JORC 2012 Mineral Resource and Ore Reserve Summary

There have been no changes to the JORC 2012 Mineral Resources and Ore Reserves for Berenice-Cygnus completed by Gemecs (Pty) Ltd and reported on in January 2016.

The following table provides a breakdown of the Resource estimate and raw qualities (on an air dried basis).

Ply Name	JORC Category	Ply Thickness (m)	Gross Tonnes In-Situ (Mt)	Attributable to Universal Coal Mt	Raw Coal Qualities (Air-Dried)					
					CV MJ/kg	Ash %	VM %	FC %	IM %	S %
S2	Measured	3.51	58.98	29.49	10.9	61.2	17.2	19.7	2.0	1.82
	Indicated	3.31	125.99	62.99						
	Inferred	3.29	7.42	3.71						
	Subtotal	***3.37***	***192.39***	***96.20***						
S4	Measured	1.12	5.37	2.69	12.8	55.6	19.9	22.5	2.0	2.32
	Indicated	1.52	4.65	2.33						
	Inferred	1.54	0.021	0.011						
	Subtotal	***1.31***	***10.04***	***5.02***						
S6	Measured	4.96	107.01	53.51	11.7	58.8	18.1	21.0	2.0	1.40
	Indicated	3.67	189.85	94.93						
	Inferred	3.48	23.69	11.85						
	Subtotal	***4.09***	***320.55***	***160.28***						
S8	Measured	3.40	70.22	35.11	16.1	46.9	22.4	28.9	1.9	1.76
	Indicated	3.62	162.14	81.07						
	Inferred	3.30	36.19	18.10						
	Subtotal	***3.52***	***268.54***	***134.27***						
S9	Measured	2.93	48.89	24.45	10.7	60.5	17.3	20.3	1.9	0.74
	Indicated	2.35	45.20	22.60						
	Inferred	1.54	4.56	2.28						
	Subtotal	***2.60***	***98.65***	***49.33***						
S11	Measured	1.76	28.39	14.20	12.2	57.0	19.4	22.1	1.6	0.78
	Indicated	1.98	57.78	28.89						
	Inferred	2.04	6.64	3.32						
	Subtotal	***1.92***	***92.81***	***46.41***						
S12	Measured	1.70	34.55	17.28	15.0	48.8	22.4	27.1	1.6	0.85
	Indicated	1.68	78.97	39.49						
	Inferred	1.37	10.73	5.37						
	Subtotal	***1.66***	***124.25***	***62.13***						
S14	Measured	3.09	60.01	30.01	11.8	57.0	19.9	21.5	1.6	0.75
	Indicated	2.86	96.15	48.08						
	Inferred	2.46	15.47	7.74						
	Subtotal	***2.90***	***171.63***	***85.82***						
S15	Measured	2.77	3.20	1.6	11.5	58.8	19.5	20.3	1.5	0.62
	Indicated	1.81	16.73	8.37						
	Inferred	1.59	2.88	1.44						
	Subtotal	***1.92***	***22.81***	***11.41***						
S18	Measured	4.77	8.29	4.15	14.0	50.7	17.9	29.4	2.0	0.15
	Indicated	4.16	23.46	11.73						
	Inferred	5.52	16.70	8.35						
	Subtotal	***4.73***	***48.45***	***24.23***						
TOTAL	**Measured**	**-**	**424.91**	**212.46**	**12.8**	**55.3**	**19.5**	**23.3**	**1.9**	**1.26**
	Indicated	**-**	**800.92**	**400.46**						
	Inferred	**-**	**124.29**	**62.15**						
	Total	**-**	**1350.12**	**675.10**						

- Mineral Resources are stated on a gross tonnes in-situ basis
- The tonnages are quoted in metric tonnes and million tonnes is abbreviated as Mt
- Rounding (conforming to the JORC Code) may cause computational discrepancies
- CV – calorific value, VM – volatile matter, IM – inherent moisture, S – sulphur
- Coal qualities are quoted on an air-dried basis

Coal Washability and Indicative Products and Yields

The following parameters were applied in estimating and reporting coal quality information from the slim diameter drill samples:

- Laboratory-scale washability tests and analysis were undertaken on the +0.5mm fraction for all coal plies.
- Coal qualities were modelled and reported on an air-dried basis.
- Compositing of qualities was done on a density weighted basis across the total thickness of the coal ply.

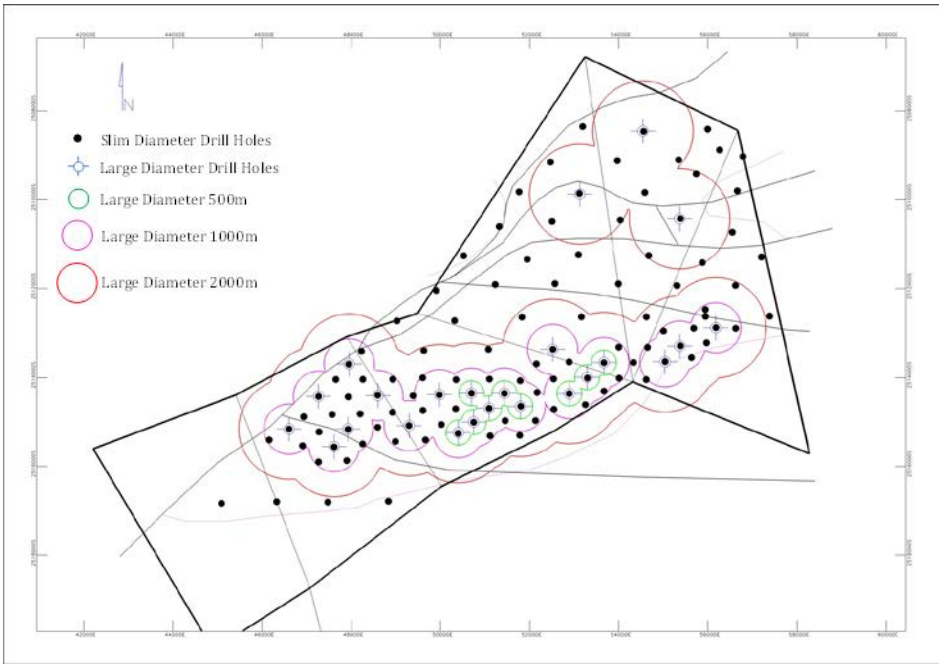
An indicative primary and secondary coal product quality simulation was done for each coal ply in the Southern Opencast Area at Berenice Cygnus.

Ply	Air-dried Washed Qualities @ Cumulative RD = 1.40 (Primary)							
	YL (%)	CV (MJ/kg)	Ash (%)	VM (%)	IM (%)	S (%)	P (%)	FSI
S2	refer to Table below	29.6	refer to Table below	35.5	2.3	1.04	0.005	6
S6		29.4		35.5	2.2	0.94	0.006	6
S8		29.7		36.2	2.2	1.10	0.006	6
S9		29.5		35.0	2.3	0.90	0.009	7
S11		29.7		34.5	2.3	0.96	0.009	7
S12		30.2		34.6	2.3	0.89	0.014	6
S14		30.2		34.4	2.3	1.03	0.022	6

Ply	Air-dried Washed Qualities @ Cumulative RD 1.45-1.80 (Secondary)					
	YL (%)	CV (MJ/kg)	Ash (%)	VM (%)	IM (%)	S (%)
S2	28.4	21.8	32.0	28.8	2.1	1.22
S6	23.7	22.4	30.1	29.0	2.1	1.30
S8	35.0	22.4	30.4	28.9	2.0	1.57
S9	21.2	22.3	29.5	29.7	2.1	1.11
S11	34.3	22.4	29.5	29.7	2.0	0.97
S12	38.4	22.2	29.7	29.7	1.9	0.87
S14	27.3	22.5	28.9	29.8	2.0	1.02

- YL – theoretical borehole yield, CV – calorific value, VM – volatile matter, IM – inherent moisture, S – sulphur, P – phosphorus, FSI – free swelling index
- Coal qualities are quoted on an air-dried basis

It is generally accepted that reliable estimates of coking coal yields are often not achievable from laboratory testing of slim core (HQ) samples and that results obtained from large diameter core samples are considered more realistic. Universal therefore completed a 24-hole large diameter (123mm diameter) drilling programme, twinning 20% of the slim diameter holes, focussing largely on the southern open cast resource area (refer to the diagram below).



The table below compares theoretical coking coal yields and ash contents for the Southern Opencast Area based on the analysis of samples from the large diameter and duplicated (twin) slim diameter boreholes.

Ply	Theoretical Coking Coal Yield %			Ash Content %		
	Slim diameter	Large Diameter	% Difference	Slim diameter	Large Diameter	% Difference
S2L	14.5	22.2	+53%	11.4	10.0	-15.8%
S6L	15.4	21.2	+38%	11.8	10.4	-15.4%
S8	24.0	29.1	+21%	11.4	10.4	-12.1%
S9	7.2	11.0	+54%	11.6	9.6	-8.4%
S11	10.2	11.8	+15%	10.6	9.2	-16.9%
S12	12.7	12.8	+1%	9.4	8.5	-13.1%
S14	8.5	14.5	+71%	9.7	8.7	-9.7%
Average	**13.8**	**18.8**	**+40%**	**11.0**	**9.7**	**-12%**

- Coal qualities are quoted on an air-dried basis

Theoretical coking coal yields obtained from the large diameter samples are 40% higher than those obtained from the slim diameter samples and the ash content 12% lower, averaging 9.7%.

Detailed analyses conducted on samples obtained during the 2011 drilling programme indicate that the Berenice coking coal could be classed as a Medium Rank C, high vitrinite (82-85%), medium ash (9.5-10.5%), coking coal (according to ISO 11760: 2005 Classification of Coal by Rank) with high volatile content (+34% volatile matter), good caking properties (FSI (5-9), Roga (77-92), Grey King (G8-G11)) and high Fluidity (± 20,000ddpm).

Exploration, Geological Modelling, Resource and Reserve Estimation

Core logging and sampling is completed on a lithological basis, by experienced and independent geologists and in accordance with the South African industry standard as required in SANS 10320:2004. All coal intersections are checked against downhole geophysical logs (wireline logs). Boreholes are all vertical core holes using conventional TNW and wireline HQ size barrels (60.5 mm core diameter) with limited large diameter drilling for metallurgical test work purposes using a T6-146 size barrel (123mm core diameter).

Borehole collars are surveyed by independent, qualified surveyors using high accuracy differential GPS systems. Regular site inspections and verification of exploration procedures and activities are undertaken by an independent Competent Person.

Coal analyses are outsourced to SANAS accredited laboratories in South Africa in accordance with the recognised International Standard ISO/IEC 17025:2005. All the exploration data and analytical results are imported into a Geobank database and subjected to independent validation routines and audits by Competent Persons.

Geological modelling and resource estimations are performed by the Competent Person using Geovia MinexTM software and by applying key mining, metallurgical and environmental factors and parameters as per JORC requirements. The Mineral Resource estimation is primarily guided by geology.

Details of the drilling, sampling analytical methods, and key assumptions and parameters used in the updated Mineral Resource estimation for Berenice Cygnus, as extracted from the Competent Person's Reports, are attached hereto as Annexure 5 (Table 1, JORC Code 2012).

SOMERVILLE PROJECT MINERAL RESOURCE UPDATE

Somerville is a non-core project within the environmentally sensitive proposed buffer zone to the Mapungupwe National Park, located 30km to the east. Extractive industrial activities may be restricted within the buffer zone, once promulgated, and Universal Coal decided that such risks do not justify the planned exploration expenditure at the prospect and consequently decided to relinquish the project and remove the Inferred Mineral Resources of 274 million tonnes, previously attributed to the project, from the Company's resource inventory.

COMPETENT PERSON'S STATEMENTS

Kangala Mine - Mineral Resources and Ore Reserves

The Coal Resource estimate for Kangala was prepared by Messrs. Nico Denner, Simon Mokitimi and Daniel Zulu who are registered natural scientists and members of the South African Council for Natural Scientific Professions (a Recognised Overseas Professional Organisation). Mr Denner is employed by Gemecs (Pty) Ltd and Messrs Mokitimi and Zulu are employed by Universal Coal. They have sufficient experience which is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined by the JORC Code and consent to the inclusion in this document of this information in the form and context in which it appears.

The Kangala Coal Reserve estimate was prepared by Mr Michael Vertue who is a mining consultant associate of Mindset Mining Consultants (Pty) Ltd. Mr Vertue is a registered Professional Certified Mining Engineer and has over 30 years' experience in the mining industry. He is a member of the Engineering Council of South Africa (ECSA) (a Recognised Overseas Professional Organisation) and the South African Collieries Managers Association (SACMA). Mr Vertue has sufficient experience which is relevant to the type of mineralisation and the Kangala deposit and to the activity which he is undertaking to qualify as Competent Persons Person as defined by the JORC Code. Mr Vertue consents to the inclusion in this document of this information in the form and context in which it appears.

NCC Project - Mineral Resources and Ore Reserves

The Coal Resource estimate for NCC was prepared by Messrs. Nico Denner, Simon Mokitimi and Pogiso Rantao who are registered natural scientists and members of the South African Council for Natural Scientific Professions (a Recognised Overseas Professional Organisation). Mr Denner is employed by Gemecs (Pty) Ltd and Messrs. Mokitimi and Ratao are employed by Universal Coal. They have sufficient experience which is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined by the JORC Code and consent to the inclusion in this document of this information in the form and context in which it appears.

The NCC Coal Reserve estimate was prepared by Messrs. Piet van der Linde and Michael Vertue from Mindset Mining Consultants (Pty) Ltd. Mr van der Linde is a registered Professional Certified Mining Engineer and has over 30 years' experience in the mining industry. Mr Vertue is a registered Professional Certified Mining Engineer and has over 30 years' experience in the mining industry. He is a member of the Engineering Council of South Africa (ECSA) (a Recognised Overseas Professional Organisation) and the South African Collieries Managers Association (SACMA). Messrs. van der Linde and Vertue have sufficient experience which is relevant to the type of mineralisation and the NCC deposit and to the activity which they are undertaking to qualify as Competent Persons Person as defined by the JORC Code. Messrs van der Linde and Vertue consent to the inclusion in this document of this information in the form and context in which it appears.

Brakfontein Project - Mineral Resources and Ore Reserves

The Coal Resource estimate for Brakfontein was prepared by Mr Nico Denner, who is a registered natural scientist and a member of the South African Council for Natural Scientific Professions (a Recognised Overseas Professional Organisation). Mr Denner is employed by Gemecs (Pty) Ltd and has sufficient experience which is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the JORC Code. Mr Denner consents to the inclusion in this document of this information in the form and context in which it appears.

The Brakfontein Coal Reserve estimate was prepared by Mr. Michael Vertue who is a mining consultant associate of Mindset mining Consultants (Pty) Ltd. Mr Vertue is a registered Professional Certified Mining Engineer and has over 30 years' experience in the mining industry. He is a member of the Engineering Council of South Africa (ECSA) (a Recognised Overseas Professional Organisation) and the South African Collieries Managers Association (SACMA). Mr Vertue has sufficient experience which is relevant to the type of mineralisation and the Kangala deposit and to the activity which he is undertaking to qualify as Competent Persons Person as defined by the JORC Code. Mr Vertue consents to the inclusion in this document of this information in the form and context in which it appears.

Arnot South and Berenice Cygnus Projects - Mineral Resources

The Coal Resource estimates for Arnot South and Berenice-Cygnus were prepared by Mr Nico Denner, who is a registered natural scientist and a member of the South African Council for Natural Scientific Professions (a Recognised Overseas Professional Organisation). Mr Denner is employed by Gemecs (Pty) Ltd and has sufficient experience which is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the JORC Code. Mr Denner consents to the inclusion in this document of this information in the form and context in which it appears.

Forward-Looking Statements

This Announcement, including information included or incorporated by reference in this Announcement, may contain "forward-looking statements" concerning Universal that are subject to risks and uncertainties. Generally, the words "will", "may", "should", "continue", "believes", "expects", "intends", "anticipates" or similar expressions identify forward-looking statements. These forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements. Many of these risks and uncertainties relate to factors that are beyond Universal's ability to control or estimate precisely, such as future market conditions, changes in regulatory environment and the behaviour of other market participants. Universal cannot give any assurance that such forward-looking statements will prove to have been correct. The reader is cautioned not to place undue reliance on these forward looking statements. Universal assumes no obligation and does not undertake any obligation to update or revise publicly any of the forward-looking statements set out herein, whether as a result of new information, future events or otherwise, except to the extent legally required.

ENDS

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ABOUT UNIVERSAL COAL

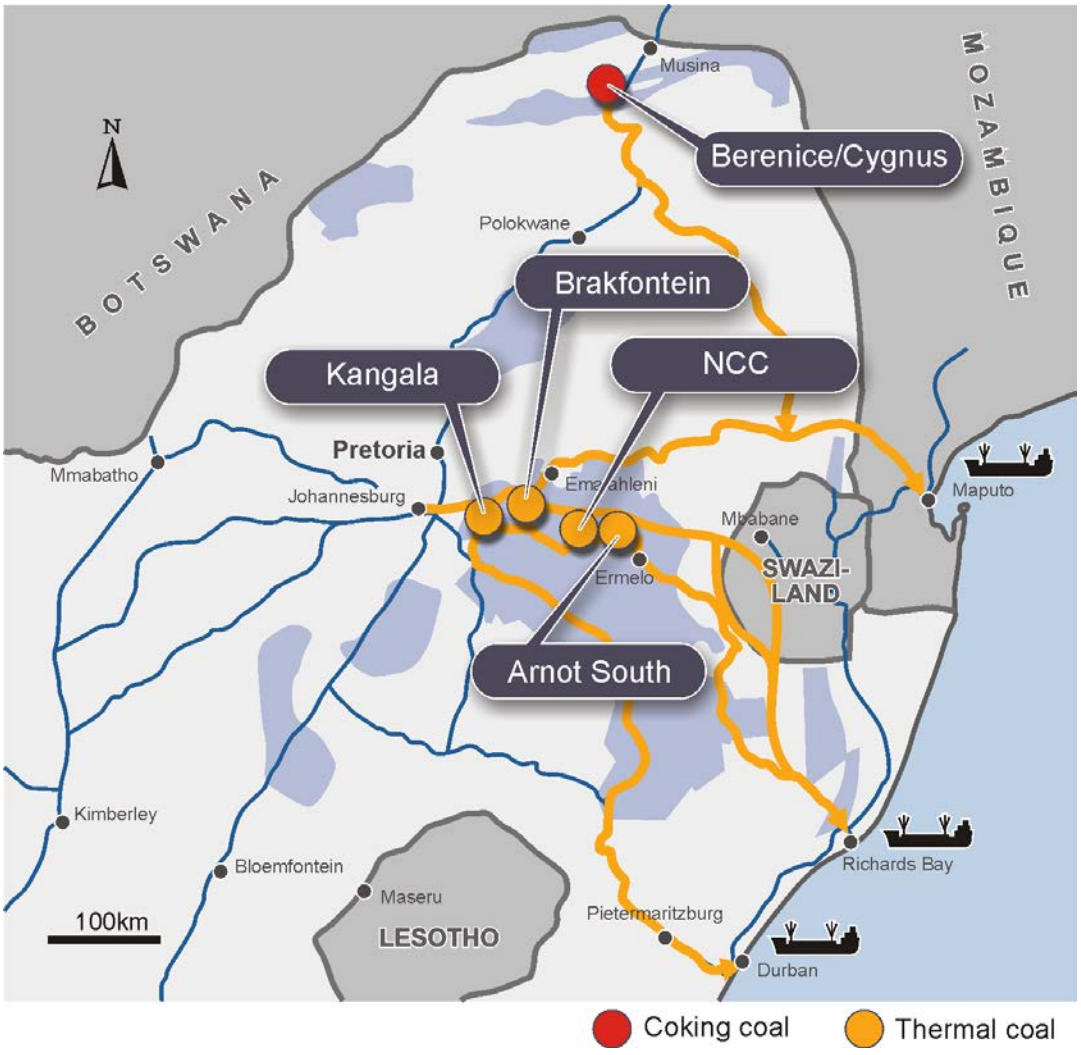
ASX-listed Universal Coal (ASX: UNV) is focused on becoming a leading mid-tier coal company.

Universal has a portfolio of producing, development and exploration assets located across South Africa's major coal fields.

The Kangala mine in the Witbank coalfield commenced first production in February 2014. Kangala produces 2.8 million tonnes of run of mine thermal coal per annum, primarily for the domestic market.

The New Clydesdale Colliery (NCC), Universal's second mine, was commissioned in September 2016, fast-tracking the company's progress towards becoming a multi-mine producer.

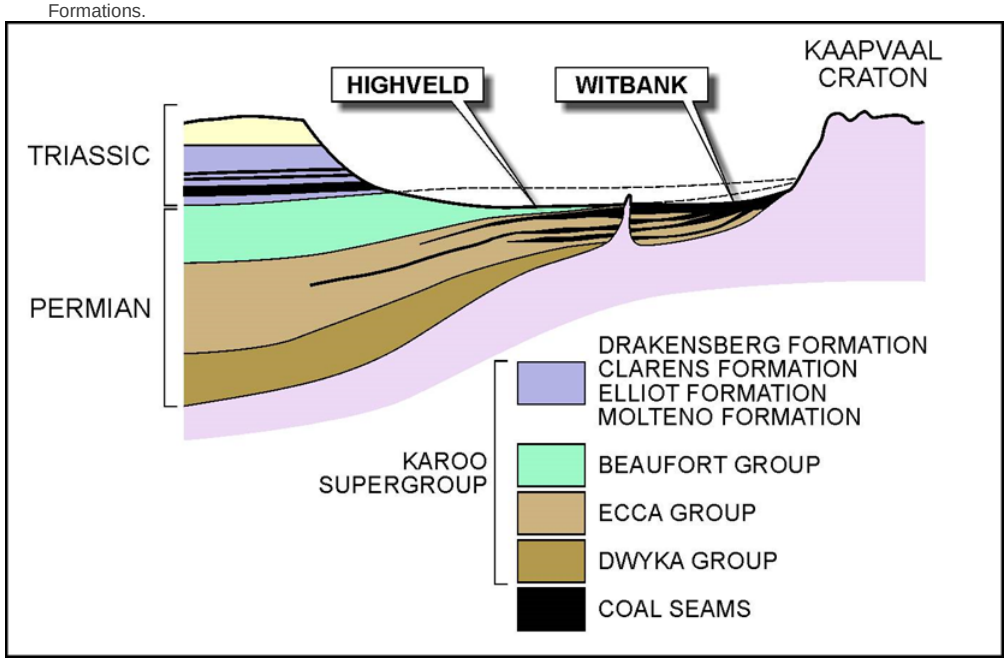
Besides its thermal coal projects (including Brakfontein), the company has completed earn-in agreements over two coking coal projects (Berenice Cygnus and Somerville) in the Soutpansberg coal fields.

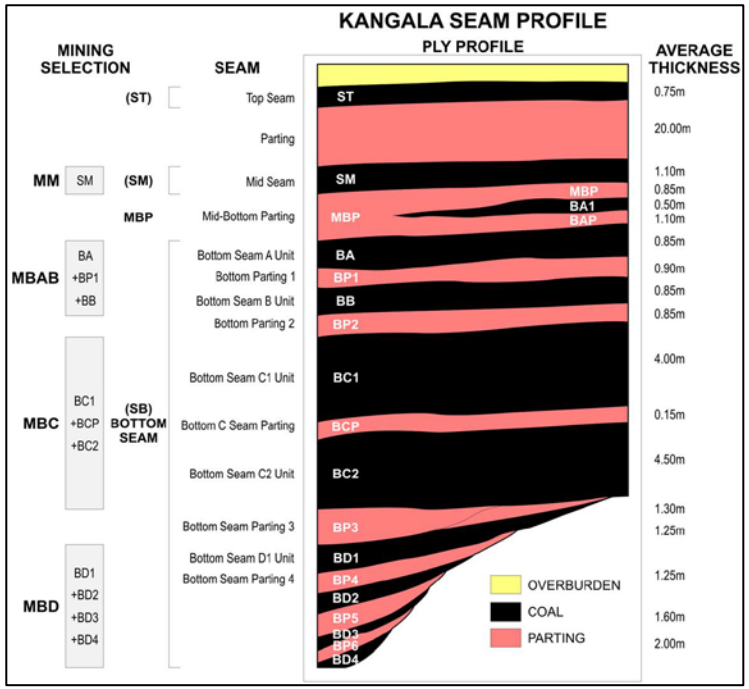


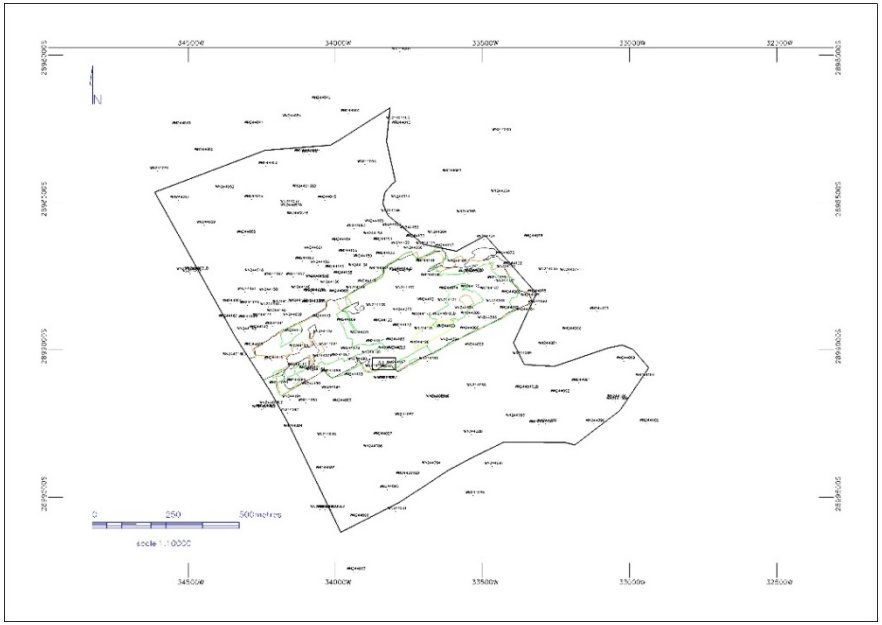
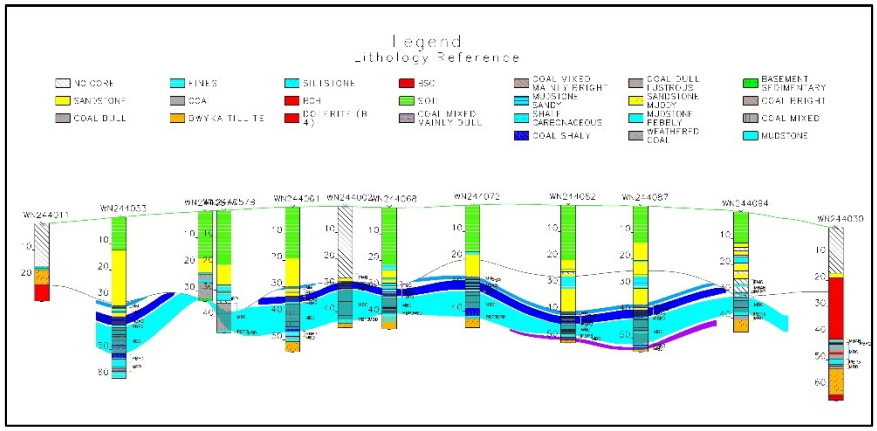
Annexure 1: JORC Code (2012) Table 1 for Kangala (Wolvenfontein, Middelbult and Modderfontein) Resources and Reserves

Criteria	JORC Code explanation	CP Comments
Section 1: Sampling Techniques and Data		
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling is used to obtain 1 m samples from which 3 kg is 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.*	- Kangala cores are placed in metal core trays with some transported to a central core storage facility and some logged and sampled on-site. - Detailed sampling of coal seams is undertaken only once the coal seam is logged accurately and in detail. Sample increments are based on variations in coal characteristics in conjunction with density data obtained from wireline logs. - Whole core is sampled as per the South African industry standard and described as required in SANS 10320:2004. - All coal seams and intra seam stone partings intersected are sampled separately. - All coal samples are treated with due care during handling in order to minimise any change to the originally sampled material. The samples are bagged and properly marked and then sent to the laboratories for analyses. - At Wolvenfontein (Kangala Mine), in addition to core sampling chips samples are also taken from blast holes. The analyses of these samples are used for grade control purposes.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so by what method, etc.).*	- All exploration holes are core holes using a conventional TNW size barrel (60.5 mm core diameter). - Large diameter core holes using a T6-146 size barrel (123mm core diameter) were completed for bulk sample purposes. - Drilling was vertical and not oriented. - A full list exploration drill holes completed to date at Kangala is attached hereto as Annexure 2.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. Whether sample sizes are appropriate to the grain size of the material being sampled.*	- An assessment of core recovery is made by the geologist in the field using the recovered thickness versus thickness reported in the geophysical log. If core recovery for a seam falls below 95 % the seam is re-drilled. - Coal is sampled as is from the core and its representivity is dependent upon the core diameter size, i.e. the larger the diameter the more likely the coal is to break close to natural sizing. The core diameter used (60.5mm) is deemed appropriate.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	- Historic exploration boreholes at Wolvenfontein, Middelbult and Modderfontein were logged by independent geologists, while on-going in-fill boreholes at Kangala Mine are logged by internal geology staff at the mine. - Total lengths of boreholes are logged following industry accepted lithological descriptions, procedures and methods. - Logging of the coal and/or carbonaceous shale is recorded down to 1cm. - All logging carried out is qualitative in nature. - All exploration boreholes and intersecting coal are geophysical logged. A standard suite of geophysical sondes are completed, including both long and short-spaced density calibrate internally to units of relative density (g/cc), gamma and calliper. All geophysical tools are calibrated on a regular basis and prior to arrival on site. - Geotechnical logging is done at the discretion of the Rock Mechanics personnel.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	- Sampling of the coal zones is done on a lithological basis. - The coal core is sampled whole, bagged on site to ensure the sampling is representative of the style and type of deposit and the sample size is sufficient for the analytical techniques.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	- Core samples are sent for analyses to a number of laboratories in South Africa including Bureau Veritas Inspectorate Laboratories (historically) in Middelburg and SGS Witbank Laboratory (current).

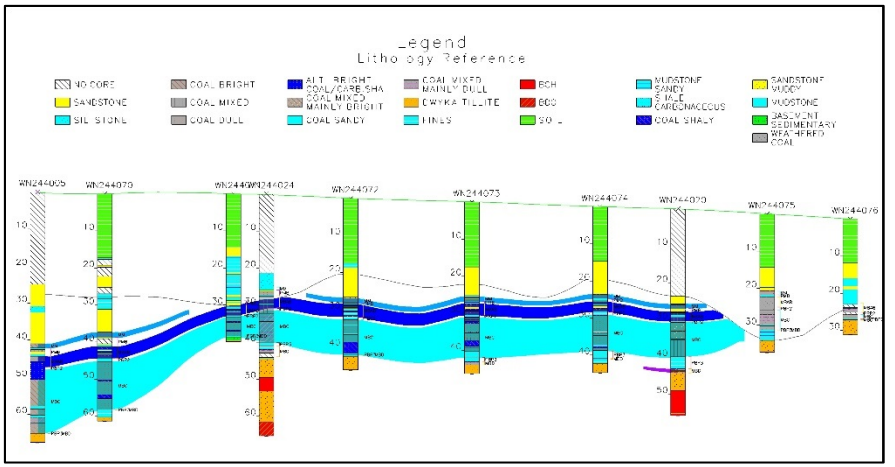
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	- Bureau Veritas Inspectorate is SANAS accredited with certificate number T0313 and SGS Witbank laboratory, with SANAS accreditation number T0497. Both laboratories are accredited in accordance with the recognised International Standard ISO/IEC 17025:2005. - For each core sample the following tests/analyses are performed: ▪ The raw Relative Density ("RD") is determined. ▪ The sample is air dried to eliminate all surface moisture and the air dried mass recorded. ▪ The air-dried sample is crushed to a top size of 25mm before analyses, a size deemed appropriate for the type and nature of the coal at Kangala, and screened and divided into –0.5mm and +0.5-25mm fractions ▪ Proximate analysis (raw) is done on the two size fractions including inherent moisture content (C030-403W - Based on SABS 925), ash content (C030-401W - based on ISO 1171:97), volatile matter content (C030-404W - based on ISO 562:98) and fixed carbon (by difference). ▪ Raw gross calorific value (MJ/Kg) (C030-405W - based on ISO 1928:95) and total sulphur content (C030-402W - based on ASTM:D4239-04a (Method B)) are determined for each size fraction. ▪ Calculation of reconstituted raw coal values for total sample. ▪ Washability tests (Float & Sink) are conducted on all specified samples. Ten wash densities plus sink are used (F1.35, 1.40, 1.45, 1.50, 1.55, 1.60, 1.65, 1.70, 1.80, 1.90 and S1.9). The samples are screened and then submerged in a chemical solution at specific densities starting with the lowest (F1.35). The float is removed, dried and weighed and the sink moved onto the next barrel containing a higher density solution. This process is repeated until the maximum requested density (F1.90) is reached. After the washing process a representative sample of the different float fractions are submitted for a variety of laboratory tests on an air dried basis, including gross calorific value, inherent moisture (IM), volatile matter (VM), total sulphur (TS) and ash (AS) contents, which are calculated as percentages. ▪ Calculation of cumulative wash values for each cut-point density and of reconstituted raw coal values for each washability test sample. ▪ Ultimate analyses, ash analysis, ash flow temperature, abrasiveness index and hard grove index test work/analyses are done on selective samples only. ▪ Where the laboratory detects irregular analytical results a duplicate sample is re- analysed. Where this procedure does not resolve the irregularity a duplicate sample is sent to an external laboratory for verification.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	- All coal intersections are verified against the wireline logs. - Bureau Veritas Inspectorate and SGS make both use of custom designed LIMS with traceability to all raw data. All data calculations are done automatically and are first line checked by the laboratory supervisors for duplicate results repeatability and all out of tolerance results are repeated. Completed projects are handed over to the Customer Liaison Officer. Data is extracted to Microsoft Excel where it is pulled into graphs (macro operated) with pre-set limits using calorific value/ash correlation with upper and lower tolerance values. All results are also manually evaluated by experience and all suspect results together with all results that deviate by 2 points below or above the pre-set check value are repeated. All lab results are received both by electronic and hard copy (signed) formats. - All data is electronically imported and stored in an electronic geological data base (Geobank). - Coal quality data is checked and verified in the Geological data base. Washability data are normalised to report additional wash fractions if needed within the current range of wash densities.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	- All boreholes are initially positioned by the field geologist using a hand-held GPS with accuracies of ±10m. At completion of each drilling program final collar positions of boreholes are surveyed using a high-accuracy differential GPS (Leica 1200 Dual Frequency GPS with Base Station), operated by professional, qualified surveyors at X-Y accuracies of less than 10mm and Z accuracies of <1 metre. - Grid used: South African LO29 grid system, Hartbeeshoek 94 (WGS84) datum. - A detailed surface survey was also conducted by professional, qualified surveyors using a differential GPS system and used to validate/verify hole collar elevations, detailed mine and surface infrastructure planning (1m contour intervals). Relevant surface features (like roads) were surveyed for accuracy.
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.* • *Whether sample compositing has been applied.*	- Exploration drilling has been conducted on a grid, spaced at between 50m and 500m. The data spacing and distribution are sufficient to allow the JORC 2012 limits for classification of Measured, Indicated and Inferred resources and appropriate for the structural provenance of the area. - No sample compositing are applied.
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.*	- No major structures are present that has an influence on the coal qualities. - Coal seams are near horizontal, and an even drilling grid is applied across the area.
Sample security	• *The measures taken to ensure sample security.*	- Sample security is ensured under a chain of custody between Universal Coal personnel and the laboratories.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	- Regular site inspections, verification of exploration procedures and activities are undertaken by the Universal Coal Chief Geologist. - The laboratories undertake internal audits and check, in line with international standards, to ensure their analysis

		results are consistent and reporting is correct. - Gemecs, on behalf of Universal Coal, conduct an independent validation and audit of the Geobank database.
Section 2: Reporting of Exploration Results		
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.*	- Universal Coal Development I (Pty) Ltd holds title to a Mining Right (number MP30/5/1/2/2/429MR) for coal over the Wolvenfontein property and Prospecting Rights over the Middelbult (number MP30/5/1/1/2/641PR) and Modderfontein (MP30/5/1/1/2/639PR) areas. Universal Coal Development I (Pty) Ltd is a joint venture between Universal Coal plc (70.5% ownership) and black economic empowerment entity, Mountain Rush Trading 6 (Pty) Ltd (29.5% ownership). The Wolvenfontein Mining Right covers an area of 951 hectares, the Middelbult Prospecting Right 942 hectares and the Modderfontein Prospecting right 127 hectares.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	- Previous exploration was carried out by Southern Sphere (Pty) Ltd and Ingwe Coal Corporation Limited. - None of the historic exploration data has been used by Universal Coal in the resource estimations.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The main Karoo Basin: - Filled between the Late Carboniferous and Middle Jurassic periods; - Lithostratigraphically subdivided into the Dwyka, Ecca and Beaufort groups, succeeded by the Molteno, Elliot and Clarens Formations and the Drakensburg Formation (volcanics); - The coal bearing Ecca Group has been divided into three sub-units: the Pietermaritzburg; Vryheid and Volksrust Formations.  The Witbank Coalfield: - The coal-bearing Vryheid Formation attains a thickness of 70m to 200m in the Witbank Coalfield; - The Vryheid Formation consists of five coarsening-upward sequences with coal seams associated predominantly with the coarser-grained fluvial facies. - The Kangala projects are located on the western margin of the Witbank Coalfield within the Springs-Vischkuil block Local Geology: - In the Springs-Vischkuil block the coal seams are inconsistently developed. - Three seams, namely the Top, Mid and Bottom seams are recognized. The Top and Mid seams can possibly be correlated with the No.5 and No.4 and No.3 seams of the Witbank Coalfield and the thicker Bottom seam appears to

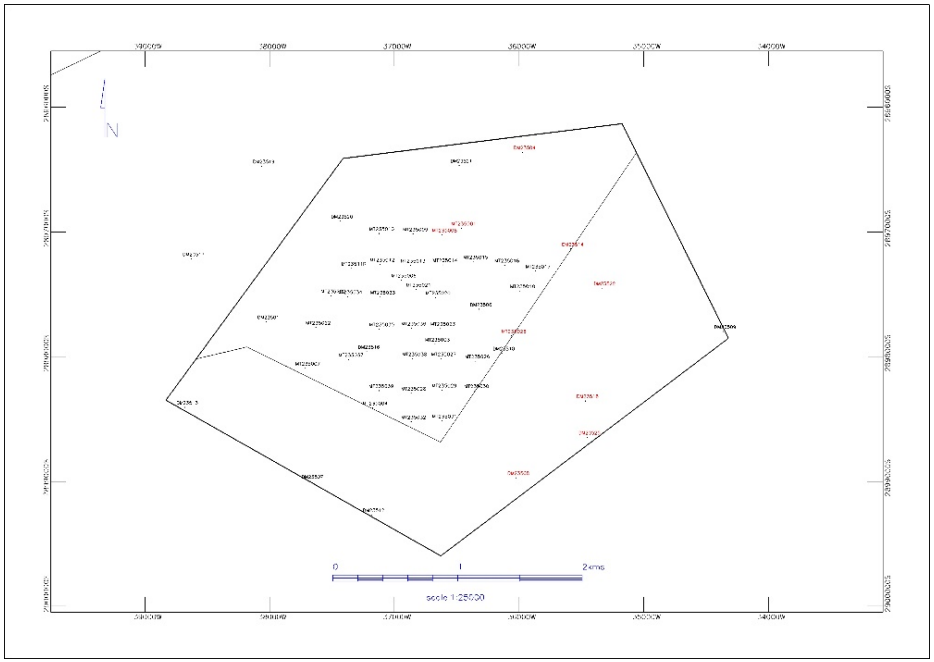
		represent a combination of the No.2 and No.1 seams. - The underlying basement consists of dolomite and chert of the Malmani Group and typically displays karst features resulting in highly undulating and irregular development of the coal measures. - The typical stratigraphic sequence is illustrated below:  - The coal seams are characteristically sub-horizontal and split by shale and sandstone bands.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* - *easting and northing of the drill hole collar* - *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* - *dip and azimuth of the hole* - *down hole length and interception depth* - *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	- A full list of details of drill holes used in the Resource Estimate can be found in Annexure 2. - All drill holes have been used and modelled as vertical.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	- All seams where multiple coal quality samples are taken are given a composite value (generated within the Minex software) weighting each quality by thickness and relative density, with the exception of relative density which is weighted on thickness.

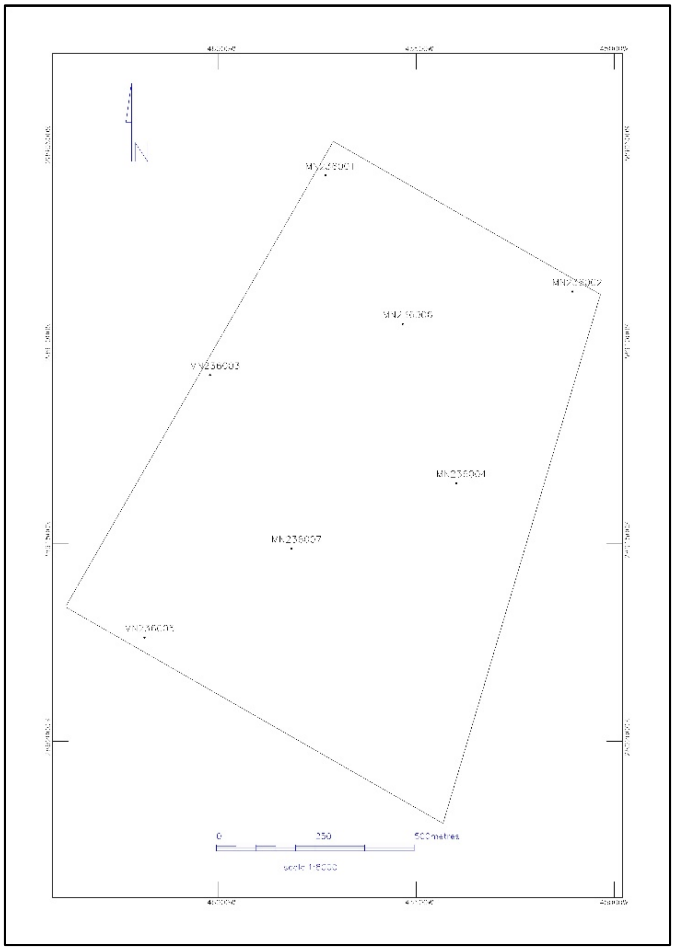
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	- The coal seams are horizontal to sub-horizontal and the apparent thickness (width) of the intersected coal seams does not always approximate the true thickness. The difference is however small, and do not have a material impact on the resource estimation. Undulating contacts are honoured in the geological model.
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.*	- A plan of the Wolvenfontein project area with drill hole collar positions and appropriate sectional views are presented below:  NW-SE section 

SW-NE section

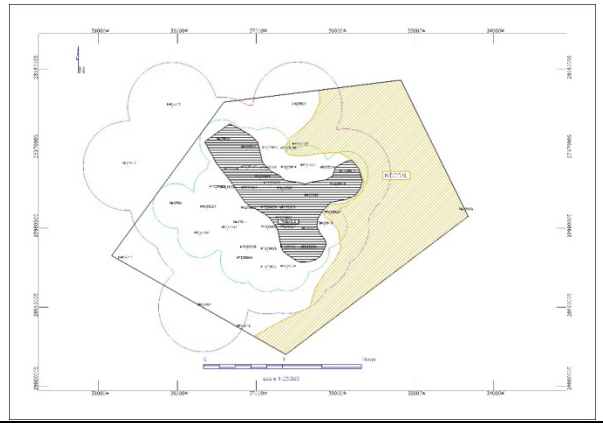


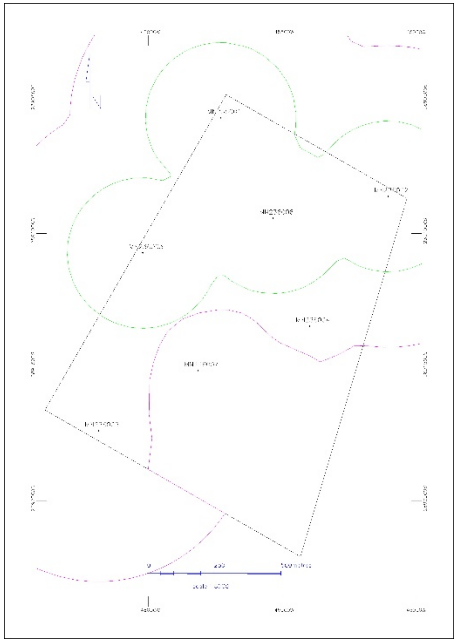
- A plan of the Middelbult project area with drill hole collar positions is presented below:



		- A plan of the Modderfontein project area with drill hole collar positions is presented below: 
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 exploration results within the Kangala area have been reported on and no intersections were excluded.
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 number of additional geology-related studies have been completed during the Feasibility study at the Wolvenfontein project, and during the mining at Kangala Mine. These include: ▪ A Geotechnical (pit slope stability) investigation. ▪ Bulk samples - coal wash simulation and metallurgical test work. ▪ A Geohydrological study.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main*	- Infill drilling at 50m x 50m spacing at Kangala Mine is ongoing - to improve confidence levels and assist in grade control.

	geological interpretations and future drilling areas, provided this information is not commercially sensitive.	
Section 3: Estimation and Reporting of Mineral Resources		
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.*	- All the exploration data and analytical results are imported into a Geobank database and subjected to independent validation routines. ▪ Lithological descriptions are verified against the down hole geophysical logs, and coal seam correlations are validated. ▪ Coal sample positions are verified against coal seam occurrences, and raw coal analyses compared to lithological descriptions. ▪ A number of analytical tests and routines are used to validate all the raw and washability data as received from the laboratory. ▪ Anomalies are identified, queried and corrected where possible, otherwise flagged and removed from the final modelling dataset prior to geological modelling and resource calculation.
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 undertook a number of site visits to the Wolvenfontein project and is familiar with the area and geology. - The Competent Person reviewed geological logging and field procedures and is satisfied with the data collection procedures and protocols.
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.*	- Confidence in the geological interpretation is moderate to high: Borehole coverage and density confirmed the nature, continuity of the seams and coal quality. - Boreholes are geologically detailed logged, acceptably sampled and data used is independently validated. - The Mineral Resource estimation is primarily guided by geology. - Continuity in geology and quality is primarily affected by basement topography, in-seam stone bands and dolerite intrusions. - It is recommended that future exploration involve infill drilling at 50m intervals to allow more accurate coal quality predictions for mine planning.
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 main target Seams (Mid & Bottom seams) at Wolvenfontein extend approximately 3km along strike and 1.2km perpendicular to strike with an approximate average combined thickness of 16m. - The main target Seams (Mid & Bottom seams) at Middelbult extend approximately 2km along strike and 0.75km perpendicular to strike with an approximate average combined thickness of 12.5m. - The main target Seams (Mid & Bottom seams) at Modderfontein extend approximately 1.4km along strike and 0.85km perpendicular to strike with an approximate average combined thickness of 20m. - The depth of cover to the seams averages 25m, ranging from 15m to 45m.
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 is chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and* • *Whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation is 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.*	- Geological modelling and Resource estimation are performed using Geovia Minex™ software. - Sections are used across the resource area to ensure all the correlations are consistent, and are verified against the lithological logging as well as downhole geophysical logs. - Structural models are created for each seam as well as relevant sub-units and selections where applicable. - The surface topography is created using the borehole collars, and verified with topography maps and surface contours. - The stratigraphic sequence is verified in Geobank as well as in Minex (including gaps and overlaps) before structural modelling commenced. - Each coal seam, ply and partings are modelled on a grid of 20x20m, based on the average borehole spacing in the project area. - Coal extrapolation is limited to 500m from the last borehole with data and terminated against known areas of non-coal deposition. - The final structural model is created, using the topographic surface, weathering limit and base surface as cutting surfaces to remove coal where it intersects these surfaces.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	- Tonnages are estimated as in situ using the in situ density estimation method using air dried moisture and air dried relative density laboratory values.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	- No cut-off values are used when modelling the coal qualities. Minimum coal product qualities are however considered in defining and reporting the mineable coal resource areas.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is*	- A minimum seam thickness of 0.5 metres is applied to the resource estimate. - Other economic factors and constraints are considered to define a minable coal area (strip ratio, coal qualities). - More detailed factors are applied by the mining team to determine and report coal reserves.

	the case, this should be reported with an explanation of the basis of the mining assumptions made.	
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.*	- Universal Coal has determined, following washability studies done by AMEC and the CSIR Centre for Mining Innovation, that the Bottom seam is suitable to produce thermal coal with a calorific value of 18-20.5 Mj/kg for domestic power generation (Eskom) and the Mid seam export thermal coal with an ash content of less than 15%. The Mine currently has off-take agreements with Eskom and Exxaro for supply of both domestic and export 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 greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	- It is the Competent Person's opinion that there are no limiting environmental factors at this stage of the project development other than regulations relating to mining adjacent to wetlands, which are managed through applying buffer zones as applied for and granted (Mining Right, NEMA and Water Use Licence). - The regulatory framework in South Africa makes provision for waste and process residue disposal and the project area has suitable areas available to host such facilities and the necessary Regulatory approvals for waste disposal have been obtained.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	- The density used in the tonnage calculation is relative density determined in the laboratory according to ISO 5072:1997. The apparent relative density is determined by weighing a sample suspended in water, allowing the sample to drain to remove surface liquid and then reweighing the sample in air. - All coal samples submitted to the laboratory is subjected to RD determination.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie 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.*	- Resource classification was done prior to the release of the JORC 2012 code, and is therefore still based on the 2003 Coal guidelines. - It is the view of the competent person, that the current classification is acceptable for the type of deposit, drilling density, and coal quality data. Classification will be reviewed should more infill drilling been done at Middelbult and Modderfontein. - Borehole spacing of <350m is used to classify a measured resource at Wolvenfontein (Kangala Mine). Borehole spacing of 500m is used to classify a measured resource and up to 1000m to classify an indicated resource at Middelbult and Modderfontein. - Only boreholes where the relevant seams are analysed are considered as point observations to be used for resource classification. - The borehole spacing within the mining area of Kangala is generally less than 150m apart, and is therefore all classified as a measured resource. - The figure below illustrates the resource classification for the BC ply at Middelbult (Measured – green, Indicated – pink): 

		- The figure below illustrates the resource classification for the BC ply at Modderfontein (Measured – green, Indicated – pink): 
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	- Stefanutti and Stocks conducted an independent audit of the Resource estimate for Wolvenfontein as part of the Bankable Feasibility Study and identified no material issues with the methodology applied or the final estimation.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.* • *Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	- The Competent Person applied the principles of the JORC 2012 code in estimating the Resources at Kangala. - To date no geostatistical studies have been undertaken to ascertain a feel for the confidence in drill hole spacing for the purposes of resource estimation. - Factors that could affect the accuracy of the resource estimate include unknown basement highs and structures between completed drill holes, dolerite dykes and sills, seam wash outs (weathering) or in-seam stone band thickening. - Ongoing infill drilling at 50m intervals will assist in providing further confidence in the structure of the deposit.
Section 4: Estimation and Reporting of Ore Reserves		
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 Ore Reserve Estimate is based on the Mineral Resource estimate completed by Mr. Nico Denner of Gemecs, who is a Competent Person as defined by the 2012 JORC Code. - The Mineral Resource estimate is based on a geologically model prepared in Minex (Refer to Section 3 above). - The Resources in the Wolvenfontein Main Resource Area are converted to an Ore Reserve using XPAC Scheduling software, targeting annual production rate of 2.8 million tons per annum (Mtpa) run-of-mine over a remaining 6 year life of mine.
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 Persons responsible for the preparation of the Ore Reserve estimate on several occasions visited the NCC project and surrounding areas.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to*	- A Bankable Feasibility Study has been completed for the Wolvenfontein project (Kangala Mine).

	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.*	
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	- No coal quality cut-offs are applied for reporting of the coal resource tonnes with the exception is the BD ply, where a minimum volatile matter cut-off was applied at 18%.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg 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.*	**General** - The classification of Coal Reserves is based on the "Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves (The JORC Code) 2012 edition". - The Resource model (geological model) used for the estimation of Coal Reserves is the same model used for the estimation of Coal Resources. - No Inferred Coal Resources are utilised in the mining studies. - A life of mine production schedule is generated and updated on an ongoing basis. The schedule confirm that ROM coal can be presented to the processing plant in sufficient quantity in each year of the mine life to satisfy the assumptions regards costs used in the Ore Reserve estimate. - The mining method assumed for the Kangala Mine is conventional truck-shovel with some assistance from bulk dozer push. The following mine design parameters are utilised at Kangala Mine: ▪ Type of operation: Load and Haul Surface Strip Mining ▪ Minimum mineable strip length: sufficient to allow for the planned monthly production of 200,000 tonnes ▪ Minimum width of mining strip: 40m ▪ Bench height of softs: soft overburden and the topsoil are removed for a variable distance on each side of the hard overburden high wall depending on the depth of the hard overburden. In the northern geotechnical domain the soft bench height is 7m while in the southern geotechnical domain the soft bench height is 10m. The slope scenarios are stable at stack angle less than 67° and heights less than 50m. Overall long term slope stability is sustainable at overall slope angles less than 37° and total slope heights less than 70m. ▪ Bench height of Hards: single bench of 10m up to a maximum of 35m ▪ Minimum coal seam thickness after losses: 0.5m ▪ Maximum average mining depth: 50m ▪ Buffer from wetland: 100 year flood line ▪ Geological loss applied: 2.5% ▪ Total mining loss on reserve: 10% ▪ Contamination applied: Based on fixed 200mm waste loaded with the coal - 100mm waste loaded with the coal from the roof and 100mm waste loaded with the coal from the floor - Final pit slope design parameters are recommended by specialist geotechnical consultants, Umnotho Rock Engineering and Geotechnical Consultants, based on geotechnical logging of existing drill core of selected holes, soil profiling of trial pits and field and laboratory testing. - Loading and haulage are achieved by a conventional truck and backhoe excavator fleet with 4 off 120 ton and 3 off 85 ton excavators, 15 off 40 t ADT, 20 off 60 t rigid dump trucks and 1 off D9 dozer. - The Ore Reserve is estimated within an open pit design that includes ramps and safety berms on the pit walls. - Infrastructure required to support the proposed open pit mining operation includes box cut, access, maintenance and haul roads, water management, including pipelines and pumps, storm water drains, a pollution control dam, a processing plant, security fencing, lighting, weighbridges and a fuel depot, electrical infrastructure, offices and maintenance workshops, waste dumps and ROM coal stockpiles.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	- Coal is treated in the existing Kangala Mine processing facility that includes conventional crushing, screening and washing circuits based on dense medium separation techniques, at a monthly rate of 200,000 tons of ROM. The plant includes proven processing technology, has a proven record and the planned production rate is consistently achieved since production commenced in 2014. - Bulk sample scale test work was undertaken by AMEC during the bankable feasibility study. - The respective Mid and Bottom seam ROM coals are processed to yield the following target products (air dried): o Mid seam: Export-Grade (27.50 MJ/kg) o Bottom seam: Eskom product (20.5 MJ/kg) - There are no deleterious elements present, such as would necessitate special attention during treatment.
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 Kangala Mine (Wolvenfontein) has approved National Environmental Management Act (NEMA) Authorisations, approved Mining Rights, EMPRs, Social and Labour Plans (SLP), Water Use and Waste Licences. - The Middelbult and Modderfontein projects have approved EMPs. - The recommendations and commitments of the various licences are taken into consideration in the Ore Reserve estimate and there are no other factors likely to have a material impact on the estimate.

		- Coal processing tailings and waste water are retained in a tailing storage facility (TSF) and pollution control dam (PCD), their design and position was incorporated into the approved EIA, NEMA, EMPR, Waste and Water Use Licences.
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.*	- The mining, processing, water, power and transport infrastructure already exists at Kangala Mine (Wolvenfontein). - Labour is sourced from the town of Delmas, 5km from the Kangala Mine and no accommodation are required on the Mine site.
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 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.*	- The mining costs are not disclosed in this document as they are commercially sensitive. - Capital costs for the infrastructure (including mining (Incl box-cut, processing plant, discard co-disposal facility, earthworks, buildings, roads and bridges, fencing, water, storm water, electricity, maintenance vehicles, staff & ancillaries, information software and hardware, acquisition of land, legal costs and rehabilitation bonds) are actuals spent on the construction of the Kangala Mine and are in real terms. - Mining, processing, transport, waste disposal and administrative costs used are actual costs incurred and reported for at Kangala Mine. - Coal product specifications include limits for these, and coal is produced and sold within specifications. - Government royalties and taxes are based on actual costs incurred to date. - Export penalties have been included in the estimate of Coal Reserves. - The long term USD/ZAR exchange rate assumed is commercially sensitive and is not inconsistent with actual long term historical average exchange.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	- The coal prices are not disclosed in this document as they are commercially sensitive. - For export thermal coal the pricing is based on the existing medium-term coal sales agreement between Universal Coal and Exxaro. - Eskom coal sales pricing and transportation charges are based on the existing medium-term coal sales agreement between Universal Coal and Eskom.
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.*	- Product tonnage forecasts for Kangala Mine are primarily driven by geological conditions, Ore Reserve controls and the terms and conditions of the coal sales agreements between Universal Coal, Eskom and Exxaro, price data from Bloomberg LP, and CTI / ETA analysis 2014. - The coal from Kangala Mine is supplied to the domestic (95% of sales tonnes) and export markets (5% of sales tonnes). - Independent market analyses concluded that domestic (Eskom) and worldwide demand for thermal coals will continue to increase over the long term. The price forecasts from market analysts take into account the forecast relationship between supply and demand on regional and worldwide bases.
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.*	- Net present values are not reported in this document, however the financial performance of Kangala Mine to date confirms the economic viability of the operation. - The assumptions and inputs to the economic analysis to produce the net present value (NPV) in the study include: ▪ The Mine will produce 22.52 million run of mine tons over the life of mine. The average annual ROM production is 2.8mtpa. ▪ The average stripping ratio over the life of mine is 1.80:1. ▪ The ore is processed in a crush & screen unit (123ktpm) and a single stage DMS washing plant (150ktpm). ▪ The average product yield (Export plus Eskom) is 72% and the total product volumes are 16.19mt. ▪ Coal is sold on a delivered basis. ▪ Refer to "Costs" above for details on assumptions of costs, royalties and taxes used in the economic analysis. ▪ A discount rate of 10% is applied. - The confidence of the economic inputs complies with the requirements of a Bankable Feasibility study.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	- An approved Social and Labour Plan (SLP) is in place and has been implemented. The SLP entails commitments relating to human resource development (training), local employment and economic development. - The costs relating to the SLP commitments have been taken into consideration in the economic analysis of the Kangala Mine.

Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:*
	  • *Any identified material naturally occurring risks.*
	  • *The status of material legal agreements and marketing arrangements.*
	  • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*
		- The material naturally-occurring risks impacting the Kangala Mine are:
		▪ Fall of ground
		▪ Unknown geological anomalies
		▪ Flooding, including mud rushes
		▪ Severe weather
		▪ Fire
		- The following regulatory approvals are in place:
		▪ Mining Right and EMPR.
		▪ National Environmental Management Act (NEMA) Authorisation.
		▪ Waste Disposal Licence.
		▪ Water Use Licence.
		- Coal sales agreements for all production are in place for the life of mine, supplier agreements for mining, processing, fuel, transport (road, rail, port handling), and electricity are in place.

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).*	- The Coal Reserves are classified as Proved Coal Reserves based on the JORC (2012) Code. The basis for classification of Coal Reserves is the Coal Resource category polygons (Measured for Proved and Indicated for Probable) for each seam within the proposed Reserve area, in conjunction with the calculated profits and other modifying factors.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	- The Coal Reserve estimate has been prepared by an external independent mining consultant Michael Vertue. Mr Vertue is suitably qualified and experienced to act as a Competent Person as per the requirements of JORC 2012.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.* • *Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	- The design, schedule and financial model on which the Ore Reserve is based has been completed to a Bankable Feasibility standard, with a corresponding level of confidence. - Modifying factors, the quantum of which is determined by experienced and independent geological, mining, processing, environmental and marketing experts is applied to the Kangala Mine on a global scale.

Annexure 1a: Drill Hole Data Summary for the Kangala Project

Kangala Mine (Wolvenfontein)

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
WN244001	Core	WGS84	South African	34088.60	2898337.20	1587.70	66.73	0	-90
WN244001LD	Core	WGS84	South African	34107.37	2898334.34	1587.64	50.00	0	-90
WN244002	Core	WGS84	South African	34061.60	2898761.80	1591.70	45.83	0	-90
WN244002LD	Core	WGS84	South African	34478.78	2898734.29	1591.67	50.00	0	-90
WN244003	Core	WGS84	South African	34494.10	2898742.30	1591.60	39.20	0	-90
WN244003LD	Core	WGS84	South African	33550.52	2898743.00	1589.38	50.00	0	-90
WN244004	Core	WGS84	South African	33660.00	2898610.60	1588.60	30.00	0	-90
WN244004LD	Core	WGS84	South African	33820.64	2899003.08	1592.10	50.00	0	-90
WN244005	Core	WGS84	South African	34243.60	2899200.70	1593.80	67.62	0	-90
WN244005LD	Core	WGS84	South African	34224.73	2899189.97	1593.63	50.00	0	-90
WN244006	Core	WGS84	South African	33651.50	2899169.00	1590.50	59.11	0	-90
WN244006LD	Core	WGS84	South African	34016.35	2899542.15	1593.49	50.00	0	-90
WN244007	Core	WGS84	South African	33781.63	2897988.48	1584.58	47.22	0	-90
WN244007LD	Core	WGS84	South African	33309.77	2899253.88	1585.39	50.00	0	-90
WN244008	Core	WGS84	South African	34024.49	2897927.27	1583.60	35.24	0	-90
WN244009	Core	WGS84	South African	34346.18	2897962.08	1579.33	29.26	0	-90
WN244010	Core	WGS84	South African	34529.79	2898241.58	1583.50	29.32	0	-90
WN244011	Core	WGS84	South African	34283.49	2898239.56	1585.06	29.22	0	-90
WN244012	Core	WGS84	South African	34053.96	2898154.95	1585.41	23.24	0	-90
WN244012LD	Core	WGS84	South African	34112.39	2898454.84	1589.13	62.53	0	-90
WN244013	Core	WGS84	South African	33782.58	2898239.83	1585.82	67.94	0	-90
WN244014	Core	WGS84	South African	33784.37	2898490.81	1588.06	53.22	0	-90
WN244015	Core	WGS84	South African	34034.68	2898491.65	1589.66	83.22	0	-90
WN244016	Core	WGS84	South African	34283.86	2898489.65	1589.03	47.32	0	-90
WN244016LD	Core	WGS84	South African	34349.69	2899025.43	1591.63	48.47	0	-90
WN244017	Core	WGS84	South African	34534.59	2898492.03	1587.90	54.57	0	-90
WN244018	Core	WGS84	South African	34282.10	2898740.34	1592.14	53.30	0	-90
WN244018LD	Core	WGS84	South African	33638.58	2898888.21	1590.68	44.85	0	-90
WN244019	Core	WGS84	South African	33783.40	2898740.33	1589.99	59.24	0	-90
WN244019LD	Core	WGS84	South African	33357.99	2899136.44	1588.01	66.15	0	-90
WN244020	Core	WGS84	South African	33534.59	2898740.16	1589.24	55.80	0	-90
WN244021	Core	WGS84	South African	33284.29	2898987.33	1587.29	47.30	0	-90
WN244021LD	Core	WGS84	South African	33762.09	2899428.57	1590.88	45.72	0	-90
WN244022	Core	WGS84	South African	33534.50	2898991.85	1592.18	65.24	0	-90
WN244023	Core	WGS84	South African	33800.42	2899003.53	1592.12	55.55	0	-90
WN244024	Core	WGS84	South African	34029.96	2898991.15	1593.24	65.30	0	-90
WN244025	Core	WGS84	South African	34283.43	2898991.42	1592.14	47.24	0	-90
WN244026	Core	WGS84	South African	34035.63	2899296.59	1596.18	71.30	0	-90
WN244027	Core	WGS84	South African	33845.16	2899294.56	1594.57	53.27	0	-90
WN244028	Core	WGS84	South African	33538.40	2899287.40	1588.87	59.24	0	-90
WN244029	Core	WGS84	South African	33286.61	2899250.31	1585.03	47.24	0	-90
WN244030	Core	WGS84	South African	33531.84	2899495.03	1583.62	65.27	0	-90
WN244031	Core	WGS84	South African	33795.38	2899548.29	1588.97	41.30	0	-90
WN244032	Core	WGS84	South African	34034.35	2899542.75	1593.71	53.30	0	-90
WN244033	Core	WGS84	South African	33935.52	2899753.35	1583.78	41.30	0	-90
WN244035	Core	WGS84	South African	33283.44	2898736.20	1586.38	35.30	0	-90
WN244036	Core	WGS84	South African	33441.33	2898263.40	1582.19	53.24	0	-90
WN244037	Core	WGS84	South African	33279.62	2897735.12	1580.83	29.27	0	-90
WN244039	Core	WGS84	South African	33148.69	2900239.91	1585.73	71.24	0	-90
WN244050	Core	WGS84	South African	34452.66	2898331.02	1585.45	30.97	0	-90
WN244051	Core	WGS84	South African	34603.98	2898393.91	1585.69	51.32	0	-90
WN244052	Core	WGS84	South African	34381.53	2898457.53	1588.00	63.97	0	-90
WN244053	Core	WGS84	South African	34235.32	2898376.54	1587.52	60.85	0	-90
WN244054	Core	WGS84	South African	34154.07	2898216.21	1585.61	26.07	0	-90
WN244055	Core	WGS84	South African	33955.02	2898198.58	1585.98	27.96	0	-90
WN244056	Core	WGS84	South African	33899.61	2898371.16	1588.01	67.70	0	-90
WN244057A	Core	WGS84	South African	34156.64	2898519.08	1589.74	33.89	0	-90
WN244057B	Core	WGS84	South African	34135.18	2898546.97	1589.95	46.08	0	-90
WN244058	Core	WGS84	South African	34309.19	2898610.42	1590.40	33.78	0	-90
WN244059	Core	WGS84	South African	34445.57	2898576.92	1589.53	34.34	0	-90
WN244060	Core	WGS84	South African	34356.62	2898843.27	1592.33	38.53	0	-90
WN244061	Core	WGS84	South African	34080.66	2898664.32	1591.22	54.49	0	-90
WN244062	Core	WGS84	South African	33936.21	2898588.86	1590.28	66.99	0	-90
WN244063	Core	WGS84	South African	33609.77	2898402.54	1584.10	46.00	0	-90
WN244064	Core	WGS84	South African	33444.97	2898472.08	1585.47	79.13	0	-90
WN244065	Core	WGS84	South African	33561.07	2898541.43	1586.74	57.96	0	-90
WN244066	Core	WGS84	South African	33742.17	2898664.32	1589.85	51.88	0	-90
WN244067	Core	WGS84	South African	33858.59	2898733.31	1590.23	51.78	0	-90
WN244068	Core	WGS84	South African	33994.42	2898810.93	1591.16	45.84	0	-90
WN244069	Core	WGS84	South African	34151.80	2898890.70	1592.89	39.96	0	-90

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
WN244070	Core	WGS84	South African	34199.23	2899121.39	1593.26	61.30	0	-90
WN244071	Core	WGS84	South African	34050.47	2899030.84	1593.28	39.92	0	-90
WN244072	Core	WGS84	South African	33923.27	2898951.06	1592.06	46.29	0	-90
WN244073	Core	WGS84	South African	33778.82	2898873.45	1591.04	46.32	0	-90
WN244074	Core	WGS84	South African	33621.44	2898800.15	1589.76	44.76	0	-90
WN244075	Core	WGS84	South African	33429.56	2898681.57	1587.79	37.31	0	-90
WN244076	Core	WGS84	South African	33332.92	2898623.75	1586.45	31.15	0	-90
WN244077	Core	WGS84	South African	33210.35	2898738.85	1585.28	31.34	0	-90
WN244078	Core	WGS84	South African	33321.76	2898810.93	1587.09	37.29	0	-90
WN244079	Core	WGS84	South African	33414.46	2898866.98	1588.31	42.35	0	-90
WN244080	Core	WGS84	South African	33550.29	2898935.97	1590.17	67.29	0	-90
WN244081	Core	WGS84	South African	33688.27	2899039.46	1591.18	48.53	0	-90
WN244082	Core	WGS84	South African	33828.41	2899104.14	1592.05	51.95	0	-90
WN244083	Core	WGS84	South African	33983.64	2899181.75	1593.36	69.56	0	-90
WN244084	Core	WGS84	South African	34149.65	2899267.99	1594.75	66.62	0	-90
WN244085	Core	WGS84	South African	34039.69	2899410.29	1594.31	40.30	0	-90
WN244086	Core	WGS84	South African	33878.00	2899336.98	1592.76	46.49	0	-90
WN244087	Core	WGS84	South African	33772.35	2899229.18	1591.74	55.00	0	-90
WN244088	Core	WGS84	South African	33526.57	2899130.01	1589.60	67.37	0	-90
WN244089	Core	WGS84	South African	33371.34	2899022.21	1588.11	37.40	0	-90
WN244090	Core	WGS84	South African	33202.45	2898938.12	1585.78	51.88	0	-90
WN244091	Core	WGS84	South African	33171.87	2899112.26	1584.13	66.03	0	-90
WN244092	Core	WGS84	South African	33242.34	2899150.51	1585.21	62.86	0	-90
WN244093	Core	WGS84	South African	33394.23	2899232.71	1587.10	49.19	0	-90
WN244094	Core	WGS84	South African	33680.01	2899394.02	1589.44	45.35	0	-90
WN244095	Core	WGS84	South African	33823.06	2899474.16	1591.25	46.33	0	-90
WN244096	Core	WGS84	South African	33924.13	2899572.44	1591.05	33.64	0	-90
WN244097	Core	WGS84	South African	33467.13	2899395.09	1584.26	69.79	0	-90
WN244098	Core	WGS84	South African	33122.95	2899250.22	1579.23	36.29	0	-90
WN244099	Core	WGS84	South African	33019.43	2899037.69	1581.02	48.21	0	-90
WN244100	Core	WGS84	South African	33049.26	2899167.88	1579.09	45.65	0	-90
WN244101	Core	WGS84	South African	32953.46	2899095.56	1577.40	85.07	0	-90
WN244102	Core	WGS84	South African	32939.86	2899249.87	1575.61	31.23	0	-90
WN244103	Core	WGS84	South African	33110.11	2898870.00	1584.19	33.76	0	-90
WN244104	Core	WGS84	South African	33495.04	2898624.84	1587.83	35.84	0	-90
WN244105	Core	WGS84	South African	33592.33	2898709.00	1589.10	60.66	0	-90
WN244106	Core	WGS84	South African	33683.26	2898756.00	1589.73	42.98	0	-90
WN244107	Core	WGS84	South African	33769.90	2898799.00	1590.39	45.24	0	-90
WN244108	Core	WGS84	South African	33868.79	2898858.00	1590.84	44.39	0	-90
WN244109	Core	WGS84	South African	33969.49	2898908.00	1591.88	40.92	0	-90
WN244110	Core	WGS84	South African	34049.84	2898948.00	1592.72	40.26	0	-90
WN244111	Core	WGS84	South African	34129.81	2898996.00	1593.12	45.70	0	-90
WN244112	Core	WGS84	South African	34148.51	2898944.49	1592.92	40.97	0	-90
WN244113	Core	WGS84	South African	34054.69	2898895.56	1592.48	41.09	0	-90
WN244114	Core	WGS84	South African	33937.30	2898798.47	1590.46	50.10	0	-90
WN244115	Core	WGS84	South African	33899.32	2898776.99	1590.28	50.10	0	-90
WN244116	Core	WGS84	South African	33700.60	2898708.01	1589.18	48.27	0	-90
WN244117	Core	WGS84	South African	33636.24	2898655.77	1588.96	46.09	0	-90
WN244118	Core	WGS84	South African	34216.00	2899037.00	1588.57	35.17	0	-90
WN244119	Core	WGS84	South African	34135.89	2899060.20	1593.38	65.75	0	-90
WN244120	Core	WGS84	South African	33844.70	2898910.33	1591.45	42.78	0	-90
WN244121	Core	WGS84	South African	33695.59	2898839.36	1590.47	42.07	0	-90
WN244122	Core	WGS84	South African	33403.80	2898717.04	1587.71	38.36	0	-90
WN244123	Core	WGS84	South African	33699.36	2898648.96	1589.26	64.63	0	-90
WN244124	Core	WGS84	South African	33425.10	2898727.77	1588.03	35.48	0	-90
WN244130	Core	WGS84	South African	33734.97	2898623.87	1589.75	54.91	0	-90
WN244132	Core	WGS84	South African	33786.44	2898647.66	1590.22	52.18	0	-90
WN244133	Core	WGS84	South African	33836.56	2898681.72	1590.35	56.14	0	-90
WN244134	Core	WGS84	South African	33929.07	2898723.11	1590.73	58.05	0	-90
WN244135	Core	WGS84	South African	33980.63	2898748.60	1590.87	61.06	0	-90
WN244136	Core	WGS84	South African	34025.00	2898780.63	1590.93	41.53	0	-90
WN244137A	Core	WGS84	South African	34074.73	2898809.07	1591.78	32.37	0	-90
WN244137B	Core	WGS84	South African	34079.82	2898806.35	1591.87	44.45	0	-90
WN244138B	Core	WGS84	South African	34077.81	2898844.29	1592.09	36.48	0	-90
WN244138C	Core	WGS84	South African	34085.36	2898846.52	1592.24	42.31	0	-90
WN244139	Core	WGS84	South African	34132.65	2898842.64	1592.47	39.02	0	-90
WN244140	Core	WGS84	South African	34206.12	2898877.04	1592.70	40.36	0	-90
WN244141	Core	WGS84	South African	34213.14	2898919.92	1592.51	40.92	0	-90
WN244142	Core	WGS84	South African	34266.47	2898932.62	1592.00	47.33	0	-90
WN244143	Core	WGS84	South African	34307.41	2898938.33	1591.90	51.38	0	-90
WN244144	Core	WGS84	South African	34303.45	2898897.37	1592.10	45.81	0	-90
WN244145	Core	WGS84	South African	34254.42	2898891.85	1592.36	40.92	0	-90
WN244146	Core	WGS84	South African	34228.29	2898855.31	1592.74	41.77	0	-90
WN244147	Core	WGS84	South African	34186.19	2898846.71	1592.71	41.56	0	-90

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
WN244148	Core	WGS84	South African	34124.11	2898797.60	1592.24	41.53	0	-90
WN244149	Core	WGS84	South African	34009.03	2898727.96	1590.72	56.44	0	-90
WN244150	Core	WGS84	South African	33913.44	2898691.82	1589.97	54.95	0	-90
WN244151	Core	WGS84	South African	33844.69	2898634.80	1590.47	52.36	0	-90
WN244152	Core	WGS84	South African	33755.34	2898595.40	1589.41	45.66	0	-90
WN244153	Core	WGS84	South African	33814.74	2898585.33	1589.95	57.41	0	-90
WN244154	Core	WGS84	South African	33878.10	2898615.26	1590.38	62.64	0	-90
WN244155	Core	WGS84	South African	33963.84	2898673.71	1590.92	53.30	0	-90
WN244156	Core	WGS84	South African	34058.22	2898712.61	1591.34	56.01	0	-90
WN244157	Core	WGS84	South African	34142.64	2898753.19	1591.97	53.40	0	-90
WN244158	Core	WGS84	South African	34233.56	2898805.89	1592.53	50.14	0	-90
WN244159	Core	WGS84	South African	34298.20	2898849.53	1592.32	44.51	0	-90
WN244160	Core	WGS84	South African	34370.82	2898895.84	1591.83	48.91	0	-90
WN244161	Core	WGS84	South African	34307.00	2898803.47	1592.55	44.23	0	-90
WN244162	Core	WGS84	South African	34216.39	2898752.93	1591.85	42.44	0	-90
WN244163	Core	WGS84	South African	34111.11	2898698.82	1591.66	51.58	0	-90
WN244164	Core	WGS84	South African	33986.36	2898635.70	1590.86	52.90	0	-90
WN244165	Core	WGS84	South African	33874.13	2898573.32	1590.29	71.04	0	-90
WN244166	Core	WGS84	South African	33818.16	2898538.08	1589.48	51.37	0	-90
WN244167	Core	WGS84	South African	33989.63	2899027.71	1592.82	56.33	0	-90
WN244168	Core	WGS84	South African	34072.64	2899076.97	1593.50	49.06	0	-90
WN244169	Core	WGS84	South African	34139.27	2899112.95	1593.71	42.95	0	-90
WN244170	Core	WGS84	South African	33955.98	2899004.68	1592.58	46.16	0	-90
WN244171	Core	WGS84	South African	33870.76	2898979.67	1592.12	49.96	0	-90
WN244172	Core	WGS84	South African	33780.22	2898926.04	1591.54	48.27	0	-90
WN244173	Core	WGS84	South African	33714.25	2898888.36	1590.98	47.74	0	-90
WN244174	Core	WGS84	South African	33625.74	2898841.19	1589.96	42.96	0	-90
WN244175	Core	WGS84	South African	33547.40	2898794.95	1589.27	43.02	0	-90
WN244176	Core	WGS84	South African	33458.22	2898764.76	1588.67	49.05	0	-90
WN244179	Core	WGS84	South African	33343.48	2898824.52	1587.35	36.96	0	-90
WN244180	Core	WGS84	South African	33319.59	2898846.03	1587.30	37.71	0	-90
WN244181	Core	WGS84	South African	33360.75	2898873.30	1587.87	41.26	0	-90
WN244182	Core	WGS84	South African	33427.75	2898776.14	1588.39	54.30	0	-90
WN244183	Core	WGS84	South African	33482.13	2898801.07	1588.91	57.31	0	-90
WN244184	Core	WGS84	South African	33568.75	2898867.48	1589.91	45.91	0	-90
WN244185	Core	WGS84	South African	33705.32	2898937.18	1591.41	53.93	0	-90
WN244186	Core	WGS84	South African	33802.78	2898974.88	1591.60	60.92	0	-90
WN244187	Core	WGS84	South African	33883.37	2899018.57	1592.14	55.10	0	-90
WN244188	Core	WGS84	South African	33930.80	2899041.22	1592.59	57.04	0	-90
WN244189	Core	WGS84	South African	34020.65	2899081.60	1592.93	63.24	0	-90
WN244190	Core	WGS84	South African	34089.12	2899124.63	1593.74	62.72	0	-90
WN244191	Core	WGS84	South African	34154.46	2899168.32	1593.92	75.87	0	-90
WN244192	Core	WGS84	South African	34162.95	2899214.57	1594.21	75.82	0	-90
WN244193	Core	WGS84	South African	34100.25	2899180.49	1593.99	75.97	0	-90
WN244194	Core	WGS84	South African	34021.24	2899137.40	1593.27	72.93	0	-90
WN244195	Core	WGS84	South African	33944.51	2899093.81	1592.67	78.55	0	-90
WN244196	Core	WGS84	South African	33872.05	2899064.79	1592.31	84.07	0	-90
WN244197	Core	WGS84	South African	33799.23	2899052.20	1591.81	57.27	0	-90
WN244198	Core	WGS84	South African	33719.87	2898984.50	1591.48	68.49	0	-90
WN244199	Core	WGS84	South African	33630.43	2898929.81	1590.65	67.96	0	-90
WN244200	Core	WGS84	South African	33547.13	2898885.35	1589.89	46.44	0	-90
WN244201	Core	WGS84	South African	33461.87	2898843.71	1589.08	50.86	0	-90
WN244202	Core	WGS84	South African	33409.01	2898813.71	1588.24	41.20	0	-90
WN244203	Core	WGS84	South African	33489.83	2898901.04	1589.52	49.06	0	-90
WN244204	Core	WGS84	South African	33617.15	2898975.20	1590.90	71.18	0	-90
WN244210	Core	WGS84	South African	34096.14	2899071.24	1593.08	52.80	0	-90
WN244211	Core	WGS84	South African	33418.74	2898954.78	1587.32	44.92	0	-90
WN244213	Core	WGS84	South African	33423.36	2899004.26	1587.24	44.21	0	-90
WN244215	Core	WGS84	South African	33472.00	2899051.98	1589.35	40.59	0	-90
WN244216	Core	WGS84	South African	33523.87	2899050.26	1590.01	43.79	0	-90
WN244217	Core	WGS84	South African	33572.21	2898999.51	1585.34	59.87	0	-90
WN244218	Core	WGS84	South African	33574.66	2899048.77	1590.37	50.74	0	-90
WN244219	Core	WGS84	South African	33525.73	2899099.38	1589.72	60.29	0	-90
WN244220	Core	WGS84	South African	33575.43	2899098.00	1590.28	60.64	0	-90
WN244221	Core	WGS84	South African	33620.99	2899045.75	1586.99	50.80	0	-90
WN244222	Core	WGS84	South African	33624.83	2899095.03	1590.74	72.30	0	-90
WN244223	Core	WGS84	South African	33626.38	2899143.00	1590.58	64.10	0	-90
WN244225	Core	WGS84	South African	33678.10	2899142.24	1591.06	63.00	0	-90
WN244226	Core	WGS84	South African	33727.63	2899139.00	1591.41	65.30	0	-90
WN244229	Core	WGS84	South African	33778.82	2899137.27	1592.10	81.70	0	-90
WN244230	Core	WGS84	South African	33817.48	2899141.83	1588.71	65.55	0	-90
WN244231	Core	WGS84	South African	33730.33	2899191.05	1591.35	64.00	0	-90
WN244232	Core	WGS84	South African	33779.77	2899187.98	1591.67	58.20	0	-90
WN244233	Core	WGS84	South African	33830.18	2899187.86	1591.41	66.05	0	-90

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
WN244234	Core	WGS84	South African	33878.79	2899183.00	1591.63	68.61	0	-90
WN244235	Core	WGS84	South African	33931.25	2899180.19	1592.84	70.66	0	-90
WN244236	Core	WGS84	South African	33831.51	2899236.93	1592.34	62.36	0	-90
WN244237	Core	WGS84	South African	33880.77	2899233.26	1592.79	62.90	0	-90
WN244238	Core	WGS84	South African	33933.33	2899228.76	1593.14	68.90	0	-90
WN244239	Core	WGS84	South African	33982.25	2899229.38	1593.64	65.86	0	-90
WN244240	Core	WGS84	South African	34031.52	2899224.41	1593.97	70.52	0	-90
WN244241	Core	WGS84	South African	33888.20	2899284.89	1592.98	53.35	0	-90
WN244242	Core	WGS84	South African	33936.17	2899280.34	1593.44	58.44	0	-90
WN244243	Core	WGS84	South African	33986.20	2899279.70	1593.76	65.24	0	-90
WN244244	Core	WGS84	South African	34074.32	2899245.77	1594.22	62.87	0	-90
WN244245	Core	WGS84	South African	33948.35	2899324.57	1593.74	56.60	0	-90
WN244246	Core	WGS84	South African	33994.23	2899353.14	1594.08	47.69	0	-90
WN244247	Core	WGS84	South African	34054.09	2899339.27	1594.45	50.55	0	-90
WN244248	Core	WGS84	South African	34041.78	2899377.40	1595.31	42.22	0	-90
WN244249	Core	WGS84	South African	34087.18	2899401.44	1594.61	41.87	0	-90
WN244250	Core	WGS84	South African	34125.87	2899320.62	1595.75	52.20	0	-90
WN244251	Core	WGS84	South African	33846.16	2898484.28	1588.94	43.96	0	-90
WN244252	Core	WGS84	South African	33849.08	2898532.43	1589.56	55.52	0	-90
WN244253	Core	WGS84	South African	33900.91	2898532.16	1589.91	74.85	0	-90
WN244254	Core	WGS84	South African	33897.59	2898479.44	1589.27	72.98	0	-90
WN244256	Core	WGS84	South African	33951.05	2898529.26	1589.97	84.48	0	-90
WN244257	Core	WGS84	South African	34000.82	2898578.62	1591.20	79.68	0	-90
WN244258	Core	WGS84	South African	33999.98	2898529.17	1590.06	83.49	0	-90
WN244259	Core	WGS84	South African	34032.94	2898521.04	1590.20	62.50	0	-90
WN244260	Core	WGS84	South African	34050.89	2898575.66	1590.77	83.32	0	-90
WN244262	Core	WGS84	South African	34116.53	2898588.93	1591.40	51.10	0	-90
WN244263	Core	WGS84	South African	34107.36	2898626.52	1591.14	47.56	0	-90
WN244264	Core	WGS84	South African	34153.05	2898619.17	1591.04	32.78	0	-90
WN244266	Core	WGS84	South African	34152.58	2898671.63	1591.52	27.62	0	-90
WN244267	Core	WGS84	South African	34158.21	2898720.72	1591.98	34.79	0	-90
WN244265	Core	WGS84	South African	34204.17	2898618.24	1590.90	51.65	0	-90
WN244268	Core	WGS84	South African	34209.41	2898718.74	1591.78	38.82	0	-90
WN244269	Core	WGS84	South African	34206.83	2898664.25	1590.91	28.45	0	-90
WN244270	Core	WGS84	South African	34256.26	2898667.02	1591.34	41.60	0	-90
WN244271	Core	WGS84	South African	34305.66	2898657.48	1591.19	34.05	0	-90
WN244272	Core	WGS84	South African	34308.24	2898714.50	1592.01	38.47	0	-90
WN244273	Core	WGS84	South African	34358.42	2898713.74	1591.84	39.26	0	-90
WN244274	Core	WGS84	South African	34408.72	2898708.48	1591.73	39.12	0	-90
WN244275	Core	WGS84	South African	34443.42	2898765.71	1592.22	37.82	0	-90
WN244276	Core	WGS84	South African	34360.18	2898761.23	1592.18	36.94	0	-90
WN244277	Core	WGS84	South African	34363.63	2898811.75	1592.50	39.88	0	-90
WN244278	Core	WGS84	South African	34413.94	2898809.00	1592.36	43.92	0	-90

Middelbult Project

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
DM23501	Core	WGS84	South African	38027.41	2897721.01	1584.00	46.02	0	-90
DM23502	Core	WGS84	South African	35377.42	2894629.02	1585.00	18.30	0	-90
DM23503	Core	WGS84	South African	38483.41	2895249.01	1606.00	21.82	0	-90
DM23504	Core	WGS84	South African	35972.42	2896362.01	1572.00	16.90	0	-90
DM23505	Core	WGS84	South African	40056.4	2896678.01	1624.00	48.15	0	-90
DM23506	Core	WGS84	South African	36322.41	2897620.01	1588.00	50.62	0	-90
DM23507	Core	WGS84	South African	37674.41	2898999.00	1610.00	59.20	0	-90
DM23508	Core	WGS84	South African	36022.42	2898971.00	1583.00	18.30	0	-90
DM23509	Core	WGS84	South African	34364.42	2897798.01	1578.00	20.75	0	-90
DM23510	Core	WGS84	South African	36139.41	2897973.01	1588.00	32.30	0	-90
DM23511	Core	WGS84	South African	36940.41	2897387.01	1587.00	42.63	0	-90
DM23512	Core	WGS84	South African	37183.41	2899268.00	1601.00	46.80	0	-90
DM23513	Core	WGS84	South African	38678.41	2898406.01	1594.00	51.36	0	-90
DM23514	Core	WGS84	South African	35586.42	2897137.01	1578.00	14.00	0	-90
DM23515	Core	WGS84	South African	36647.41	2898582.00	1596.00	60.40	0	-90
DM23516	Core	WGS84	South African	37221.41	2897960.01	1598.00	49.69	0	-90
DM23517	Core	WGS84	South African	38627.41	2897216.01	1604.00	54.10	0	-90
DM23518	Core	WGS84	South African	35467.42	2898355.01	1579.00	14.63	0	-90
DM23519	Core	WGS84	South African	38064.41	2896474.01	1588.00	43.40	0	-90
DM23520	Core	WGS84	South African	37436.41	2896914.01	1580.00	42.70	0	-90
DM23521	Core	WGS84	South African	36480.41	2896468.01	1574.00	25.45	0	-90
DM23522	Core	WGS84	South African	35331.42	2897452.01	1575.00	17.65	0	-90
DM23525	Core	WGS84	South African	35452.42	2898647.00	1582.00	14.55	0	-90
MT235001	Core	WGS84	South African	36463.47	2896970.76	1581.15	35.10	0	-90
MT235002	Core	WGS84	South African	37509.27	2897512.11	1587.16	41.16	0	-90
MT235003	Core	WGS84	South African	36674.30	2897900.16	1594.08	44.92	0	-90

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
MT235004	Core	WGS84	South African	37173.37	2898410.17	1601.98	50.58	0	-90
MT235005	Core	WGS84	South African	36354.32	2898261.85	1588.51	45.70	0	-90
MT235006	Core	WGS84	South African	36943.71	2897387.13	1586.84	40.65	0	-90
MT235007	Core	WGS84	South African	37713.78	2898092.75	1597.86	59.68	0	-90
MT235008	Core	WGS84	South African	36616.61	2897023.78	1583.30	50.98	0	-90
MT235009	Core	WGS84	South African	36850.68	2897016.71	1583.41	59.80	0	-90
MT235010	Core	WGS84	South African	37121.07	2897012.98	1582.76	50.35	0	-90
MT235011	Core	WGS84	South African	37345.32	2897293.46	1583.05	41.98	0	-90
MT23511R	Core	WGS84	South African	37345.32	2897293.46	1583.05	39.44	0	-90
MT235012	Core	WGS84	South African	37116.28	2897260.98	1585.73	35.45	0	-90
MT235013	Core	WGS84	South African	36870.36	2897268.93	1585.17	39.23	0	-90
MT235014	Core	WGS84	South African	36613.22	2897264.46	1585.65	42.28	0	-90
MT235015	Core	WGS84	South African	36368.99	2897239.46	1583.88	39.18	0	-90
MT235016	Core	WGS84	South African	36116.43	2897267.58	1583.10	30.97	0	-90
MT235017	Core	WGS84	South African	35867.56	2897314.20	1581.50	64.04	0	-90
MT235018	Core	WGS84	South African	35991.31	2897473.46	1584.23	57.94	0	-90
MT235020	Core	WGS84	South African	36669.47	2897526.25	1589.31	54.05	0	-90
MT235021	Core	WGS84	South African	36825.99	2897462.08	1588.40	57.81	0	-90
MT235022	Core	WGS84	South African	37629.66	2897766.18	1591.39	46.27	0	-90
MT235023	Core	WGS84	South African	36630.31	2897775.00	1592.51	47.28	0	-90
MT235025	Core	WGS84	South African	36061.29	2897833.9	1585.83	19.80	0	-90
MT235026	Core	WGS84	South African	36353.83	2898036.16	1589.21	67.02	0	-90
MT235027	Core	WGS84	South African	36623.16	2898016.8	1593.68	52.72	0	-90
MT235028	Core	WGS84	South African	36865.04	2898293.6	1596.18	48.40	0	-90
MT235029	Core	WGS84	South African	36619.19	2898269.03	1594.57	56.70	0	-90
MT235030	Core	WGS84	South African	36360.68	2898273.27	1588.70	49.55	0	-90
MT235031	Core	WGS84	South African	36617.01	2898514.58	1594.81	50.45	0	-90
MT235032	Core	WGS84	South African	36865.27	2898521.93	1596.01	50.65	0	-90
MT235033	Core	WGS84	South African	37112.48	2897522.35	1589.41	50.59	0	-90
MT235034	Core	WGS84	South African	37376.51	2897518.76	1588.45	47.25	0	-90
MT235035	Core	WGS84	South African	37120.08	2897778.71	1594.41	66.67	0	-90
MT235036	Core	WGS84	South African	36864.77	2897772.42	1594.15	50.30	0	-90
MT235037	Core	WGS84	South African	37367.73	2898022.77	1597.80	69.75	0	-90
MT235038	Core	WGS84	South African	36857.68	2898017.38	1595.92	50.67	0	-90
MT235039	Core	WGS84	South African	37124.17	2898272.60	1599.79	53.70	0	-90

Modderfontein Project

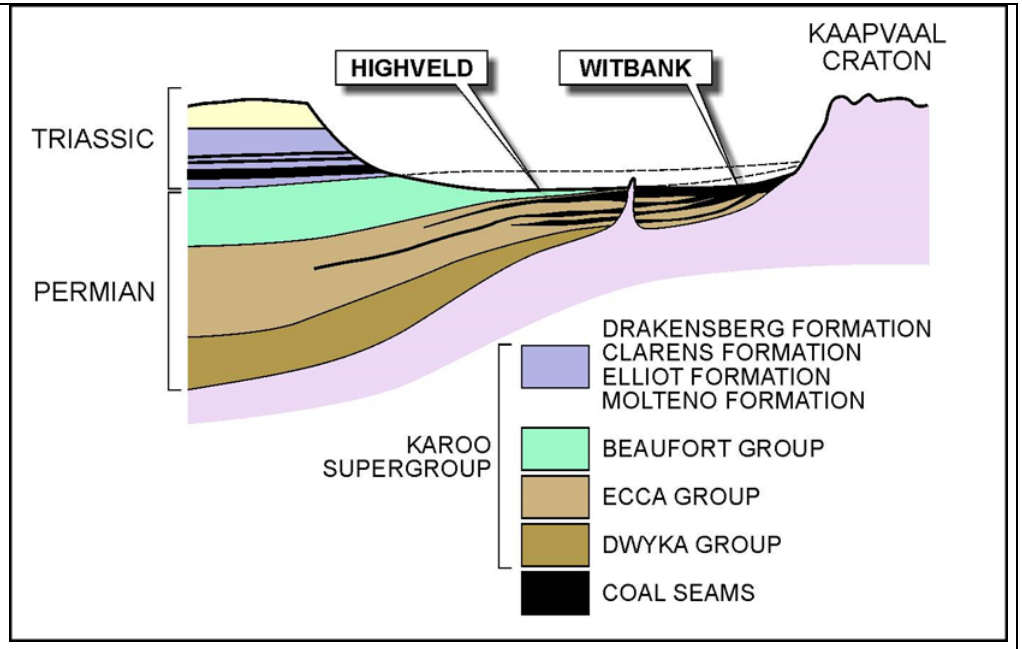
Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
MN236001	Core	WGS84	South African	45729.228	2890568.29	1610.440	92.35	0	-90
MN236002	Core	WGS84	South African	45105.681	2890861.91	1601.819	31.54	0	-90
MN236003	Core	WGS84	South African	46021.111	2891073.10	1610.359	92.67	0	-90
MN236004	Core	WGS84	South African	45398.626	2891346.89	1600.580	30.40	0	-90
MN236005	Core	WGS84	South African	46186.431	2891737.43	1606.050	47.72	0	-90
MN236006	Core	WGS84	South African	45534.219	2890943.70	1606.559	64.65	0	-90
MN236007	Core	WGS84	South African	45814.741	2891512.35	1604.419	27.70	0	-90

Annexure 2: JORC Code (2012) Table 1 for NCC Resources and Reserves

Criteria	JORC Code explanation	CP Comments
Section 1: Sampling Techniques and Data		
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	- Roodekop cores are transported in metal core trays to a core storage facility. Extreme care was taken during transport, to retain the integrity of the core in the boxes. Available data indicates that the New Clydesdale Colliery cores were logged and sampled on-site. - Detailed sampling of coal seams is undertaken only once the coal seam is logged accurately and in detail. Sample increments are based on variations in coal characteristics in conjunction with density data obtained from wireline logs. - Whole core is sampled as per the South African industry standard and described as required in SANS 10320:2004. - All coal seams and intra seam stone partings intersected are sampled separately. - All coal samples are treated with due care during handling in order to minimise any change to the originally sampled material. The samples are bagged and properly marked and sent to the laboratories for analyses. - New Clydesdale Colliery's drilling data is historic in nature, and indications are that the samples have been analysed by various laboratories over the years, the latest being the N-Tec laboratory in Witbank. - Roodekop samples are submitted to the Inspectorate Laboratory (a Bureau Veritas Group company) in Middelburg, Mpumalanga, South Africa for testing. - At New Clydesdale Colliery, in addition to borehole sampling: ▪ Channel samples are taken from the existing underground operations to test the accuracy of the geological model. ▪ Grab samples are also taken from the run of mine product using a sample scoop that is three times larger than the biggest particles on the stock pile. The analyses of these samples are used to check the accuracy of the geological model.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so by what method, etc.).*	- All holes are cored fully using a conventional TNW size barrel (60.5 mm core diameter). - A full list drill holes completed to date at NCC is attached hereto as Annexure 2a.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. Whether sample sizes are appropriate to the grain size of the material being sampled.*	- An assessment of core recovery is made by the geologist in the field using the recovered thickness versus thickness reported in the geophysical log. If core recovery for a seam fell below 95 % the hole is re-drilled. - Whilst there is no record of sample recoveries available at New Clydesdale Colliery, it is reasonable to assume that where the recovery for a seam fell below the acceptable levels, the hole was re-drilled. - Coal is sampled as is from the core and its representivity is dependent upon the core diameter size, i.e. the larger the diameter the more likely the coal is to break close to natural sizing. The core diameter used (60.5mm) is deemed appropriate.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	- Roodekop' s boreholes are logged by independent geologist, while those of New Clydesdale Colliery appear to have been logged by internal geology staff of the various mining companies that operated the mine historically. - Total lengths of boreholes are logged following industry accepted lithological descriptions, procedures and methods. - Logging of the coal and/or carbonaceous shale is recorded down to 1cm. - All logging is qualitative in nature. - At Roodekop, all boreholes intersecting coal are geophysical logged. A standard suite of geophysical sondes is run, including both long and short-spaced density calibrate internally to units of relative density (g/cc), gamma and calliper. All geophysical tools are calibrated prior to arrival on site. Geophysical logging was done only on a selected number of boreholes at New Clydesdale Colliery and only at the discretion of the Rock Mechanics personnel.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	- The coal core is sampled whole, bagged on site and transported to the laboratory for testing. - Roodekop's samples are sent to Inspectorate Laboratory in Middelburg, which is SANAS accredited and comply with South African Bureau of Standards and ISO standards for sample preparation, sub sampling and analyses. - New Clydesdale Colliery's samples were sent to various laboratories over the years, the latest being N-Tec laboratory (formerly BABU) which is also accredited and comply with South African Bureau of Standards and ISO standards for sample preparation and sub sampling and analyses. - All coal samples are crushed to a top size of 25mm before analyses, a size deemed appropriate for the type and nature of the coal at Roodekop and New Clydesdale Colliery.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters*	- Inspectorate Laboratory and N-Tec Laboratory are SANAS accredited and comply with South African Bureau of Standards and ISO standards for sample preparation, sub sampling and analyses. It is reasonable to assume that the other laboratories used by NCC in the past were also accredited or had similar compliances.

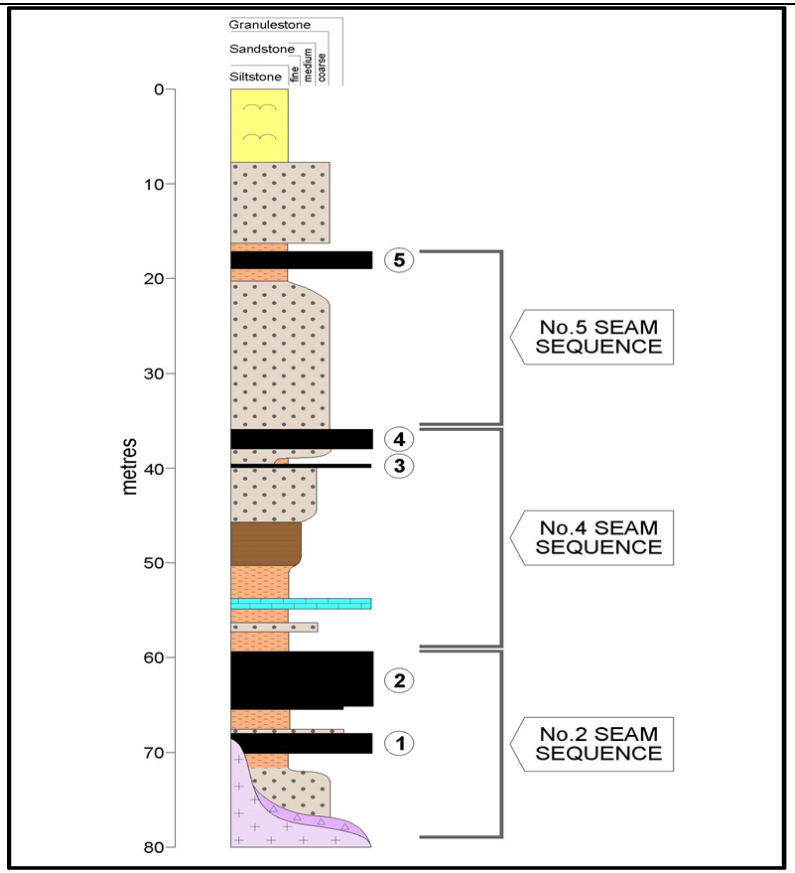
	used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	- For each Roodekop sample the following tests/analyses are performed: ▪ The raw Relative Density ("RD") is determined. ▪ The sample is air dried to eliminate all surface moisture and the air dried mass is recorded. ▪ The air-dried sample is crushed and screened and divided into –0.5mm and +0.5-25mm fractions ▪ Proximate analysis (raw) is done on the two size fractions including inherent moisture content (C030-403W - Based on SABS 925), ash content (C030-401W - based on ISO 1171:97), volatile matter content (C030-404W - based on ISO 562:98) and fixed carbon (by difference). ▪ Raw gross calorific value (MJ/Kg) (C030-405W - based on ISO 1928:95) and total sulphur content (C030-402W - based on ASTM:D4239-04a (Method B)) are determined for each size fraction. ▪ Calculation of reconstituted raw coal values for total sample. ▪ Washability tests (Float & Sink) are conducted on all specified samples. Ten wash densities plus sink are used (F1.35, 1.40, 1.45, 1.50, 1.55, 1.60, 1.65, 1.70, 1.80, 1.90 and S1.9). The samples are screened and then submerged in a chemical solution at specific densities starting with the lowest (F1.35). The float is removed, dried and weighed and the sink moved onto the next barrel containing a higher density solution. This process is repeated until the maximum requested density (F1.90) is reached. After the washing process a representative sample of the different float fractions are submitted for a variety of laboratory tests on an air dried basis, including gross calorific value, inherent moisture (IM), volatile matter (VM), total sulphur (TS) and ash (AS) contents, which are calculated as percentages. ▪ Calculation of cumulative wash values for each cut-point density and of reconstituted raw coal values for each washability test sample. ▪ Ultimate analyses, ash analysis, ash flow temperature, abrasiveness index and hard grove index test work/analyses are done on representative samples. ▪ Where the laboratory detected irregular analytical results a duplicate sample is re-analysed. Where this procedure did not resolve the irregularity a duplicate sample is sent to an external laboratory for verification. - New Clydesdale Colliery - no record of the analytical and laboratory procedures historically used are available, however, after examination of the available data the analyses are considered to have been completed by accredited laboratories that would have complied with South African Bureau of Standards for sample preparation and sub sampling and analyses.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	- Roodekop - Inspectorate Laboratory makes use of a custom designed LIMS with traceability to all raw data. All data calculations are done automatically and are first line checked by the laboratory supervisors for duplicate results repeatability and all out of tolerance results are repeated. Completed projects are handed over to the Customer Liaison Officer. Data is extracted to Microsoft Excel where it is pulled into graphs (macro operated) with pre-set limits using calorific value/ash correlation with upper and lower tolerance values. All results are also manually evaluated by experience personnel and all suspect results together with all results that deviate by 2 points below or above the pre-set check value are repeated. - New Clydesdale Colliery - no record of any verification of the historic data is available and could not be confirmed, however, it is reasonable to assume that documentation of primary data, data entry procedures, data verification and data storage (physical and electronic) protocols did adhere to acceptable industry norms.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	- Roodekop: ▪ All boreholes are initially positioned by the field geologist using a hand-held GPS with accuracies of ±10m. ▪ At completion of each drilling program final collar positions of boreholes are surveyed using a high-accuracy differential GPS (Leica 1200 Dual Frequency GPS with Base Station), operated by professional, qualified surveyors at X-Y accuracies of less than 10mm and Z accuracies of <1 metre. Grid used: South African LO29 grid system, Hartbeeshoek 94 (WGS84) datum. - New Clydesdale Colliery: ▪ Planning of the boreholes was done in conjunction with the mine planner, outlined on Minex software, taking into consideration local changes in coal seam elevations and other geological structures. ▪ The final coordinates of the surface collars of the boreholes were measured by the on-site survey department. ▪ All survey conducted on the LO29 system, Cape datum. ▪ Universal Coal converted the coordinates to the Hartbeeshoek 94 (WGS84) datum prior to integration with the Roodekop drill data.
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.* • *Whether sample compositing has been applied.*	- Exploration drilling is completed on a staggered grid, with boreholes spaced between 65m and 750m apart. The borehole distribution is sufficient to meet the JORC 2012 limits for classification of Measured and Indicated resources and appropriate for the structural provenance of the area. - No sample compositing are applied.
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.*	- The Coal Measures at this locality strike approximately 90°, are flat-lying and underlay the entire project area. The drilling grid has a north-south, east-west orientation and is distributed regularly over the project area achieving unbiased sampling of coal measures and structure. - The coal seams are nearly horizontal and the apparent thickness (width) of the intersected coal seams closely approximates the true thickness.

Sample security	• *The measures taken to ensure sample security.*	- Roodekop - sample security is ensured under a chain of custody between Universal Coal personnel and Inspectorate Laboratory, Middelburg, South Africa. - New Clydesdale Colliery - no record of measures taken to ensure sample security during the historic drilling is available, however, it is reasonable to assume that appropriate protocols and procedures existed and were adhered to.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	- Roodekop: ▪ Regular site inspections, verification of exploration procedures and activities are undertaken by the Universal Coal Chief Geologist. ▪ Inspectorate Laboratory, Middelburg undertake internal audits and check, in line with international standards, to ensure their analysis results are consistent and reporting is correct. - New Clydesdale Colliery: ▪ No record of audits or reviews of sampling techniques during historic drilling campaigns is available, however, it is reasonable to assume that such audits were conducted ▪ Gemecs, on behalf of Universal Coal, captured the historic data in Geobank and conduct an independent validation and audit thereof.
Section 2: Reporting of Exploration Results		
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.*	- Universal Coal Development IV (Pty) Ltd holds title to a Mining Right for coal over the Roodekop project. Universal Coal Development IV (Pty) Ltd is a joint venture between Universal Coal plc (49% ownership) and black economic empowerment entity, Ndalamo Resources (Pty) Ltd (51% ownership). The mining right, number MP30/5/1/1/2/492MR, covers an area of 835.3715 hectares. - Universal Coal Development VIII (Pty) Ltd acquired New Clydesdale Colliery (mining right MP30/5/1/2/2/148MR) from Exxaro. Forty nine percent (49%) of NCC is own by Universal Coal Development VIII (Pty) Ltd and 51% by Universal Coal's black economic partner, Ndalamo Resources. The mining right totals approximately 4,125 hectares in size.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	- The following companies have been involved in historic exploration at New Clydesdale Colliery and Roodekop - Ingwe Coal Corporation Limited, Anglo American Corporation of South Africa Limited, Iscor Limited, Anglo Transvaal Collieries Limited, Goldfields, Eyesizwe Coal and Exarro. - Data is available from 297 boreholes that formed part of these initial exploration programmes. - The holes intersected the following coal seams: No. 1A, No. 1, No. 2A, No. 2T, No. 2S, No. 4U and No. 4L. - The historical assay data included raw assay values and those washed at density fractions (t/m^3) F1.35, F1.4, F1.45, F1.5, F1.55, F1.6, F1.65, F1.7, F1.75 and F1.80. - The seam thicknesses and qualities obtained from these holes are in line with that obtained from Universal Coal's current drilling.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The main Karoo Basin: - Filled between the Late Carboniferous and Middle Jurassic periods; - Lithostratigraphically subdivided into the Dwyka, Ecca and Beaufort groups, succeeded by the Molteno, Elliot and Clarens Formations and the Drakensburg Formation (volcanics); - The coal bearing Ecca Group has been divided into three sub-units: the Pietermaritzburg; Vryheid and Volksrust Formations.



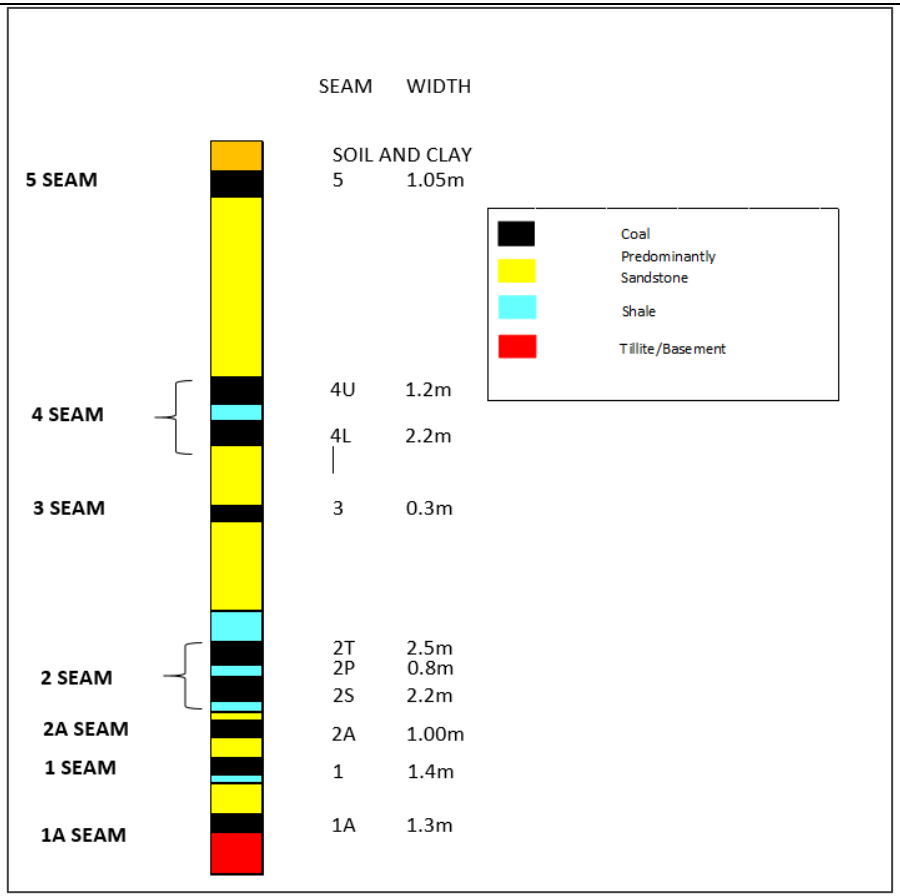
The Witbank Coalfield:

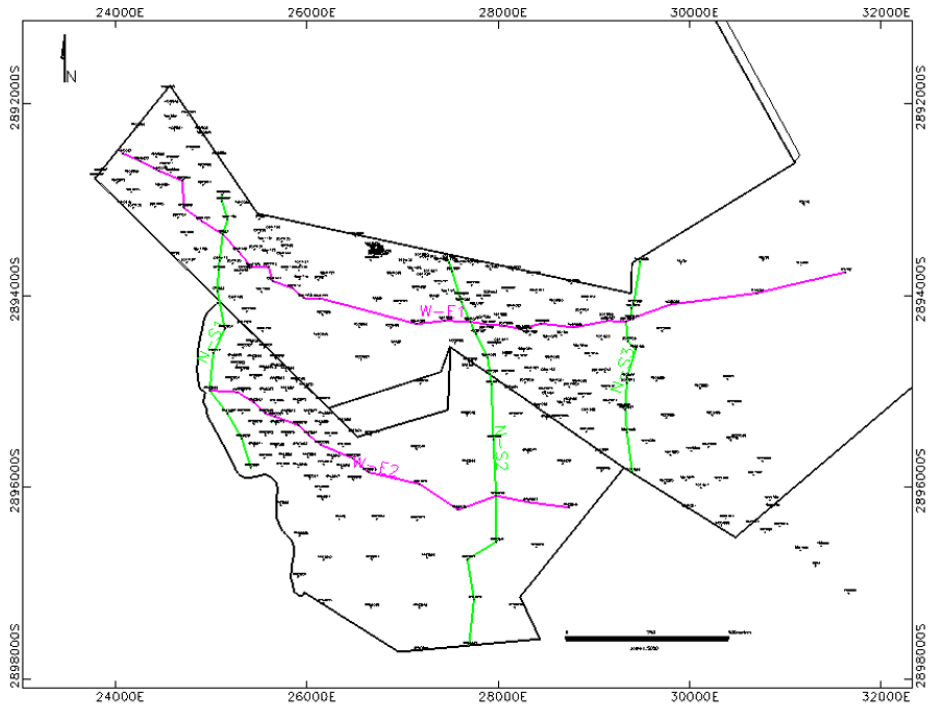
- The coal-bearing Vryheid Formation attains a thickness of 70m to 200m in the Witbank Coalfield;
- The Vryheid Formation consists of five coarsening-upward sequences with coal seams associated predominantly with the coarser-grained fluvial facies at the top of each sequence;
- The No. 2, 4, 5 and 1 seams are of economic interest.

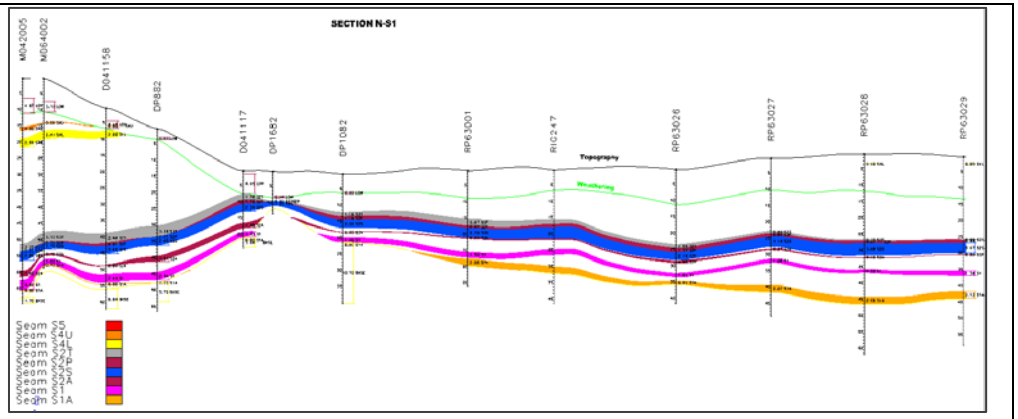
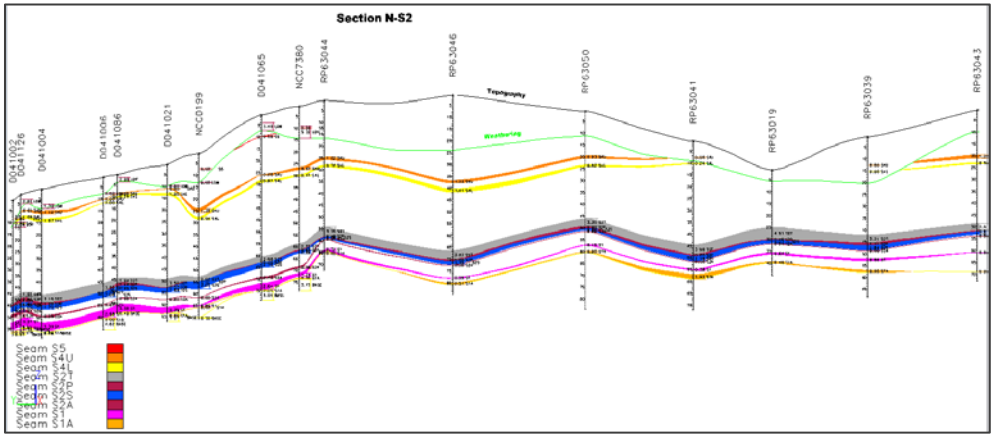


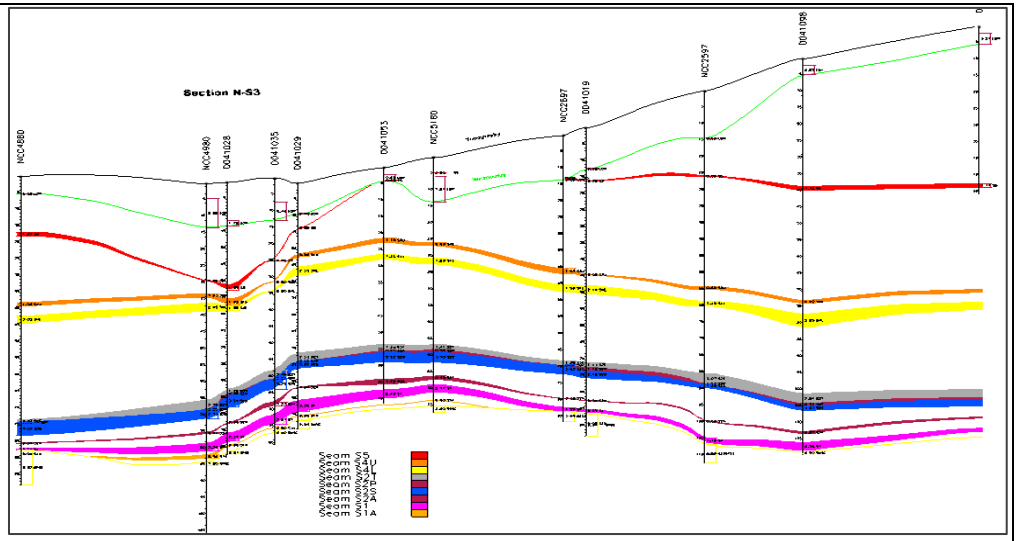
Local Geology:

- The coal succession occurs within the Permian-age Vryheid formation of the Ecca group
- Local basement highs cause the thinning and pinching out of both the No. 2 and No. 1 seams, with the depth to the seams depending largely on the local surface topography.
- Lithological sequence consists predominantly of the No. 1A, No. 1 and No. 2 seams with the No. 4 (4UA, 4U, 4LA and 4L) and No. 5 seam limited to the elevated part of the project area.
- The typical stratigraphic sequence is illustrated below:

		 - The coal seams are characteristically near horizontal and often split by shale and sandstone bands.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* - *easting and northing of the drill hole collar* - *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* - *dip and azimuth of the hole* - *down hole length and interception depth* - *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	- A full list of drill holes used in the Resource Estimate can be found in Annexure 2. - All drill holes have been modelled as vertical.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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*	- All seams where multiple coal quality samples were taken are given a composite value (generated within the Minex software) weighting each quality by thickness and relative density, with the exception of relative density which is weighted on thickness.

	stated.	
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 (eg 'down hole length, true width not known').*	- The coal seams are nearly horizontal and the apparent thickness (width) of the intersected coal seams closely approximates the true thickness.
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.*	- A plan of the area with drill hole collar positions and appropriate sectional views are presented below: 

		 SECTION N-S1 MD42005 MD64002 D041158 DP882 D0411117 DP1682 DP1082 RP63001 RIG247 RP63026 RP63027 RP63028 RP63029 Topography Weathering Seam S5 Seam S4U Seam S4L Seam S3U Seam S3L Seam S2A Seam S1 Seam S1A  Section N-S2 D041002 D041126 D041004 D041086 D041086 D041021 NCC0199 D041065 NCC7380 RP63044 RP63046 RP63050 RP63041 RP63019 RP63039 RP63043 Topography Weathering Seam S5 Seam S4U Seam S4L Seam S3U Seam S3L Seam S2A Seam S1 Seam S1A


Section N-S3
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NCC4980
D041028
D041035
D041029
D041055
NCC5180
NCC5597
D041019
NCC2597
D041098
Seam S5
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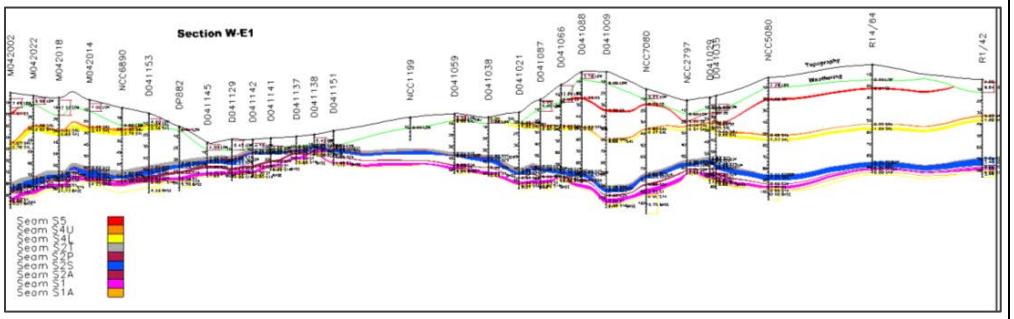
Seam S2A
Seam S1
Seam S1A


Section W-E1
MD42002
MD42022
MD42018
MD42014
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D9882
D041145
D041129
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D041141
D041137
D041138
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NCC1199
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D041066
D041088
D041009
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D041033
D041035
NCC5080
Topography
Weathering
R14/64
R1/42
Seam S5
Seam S4U
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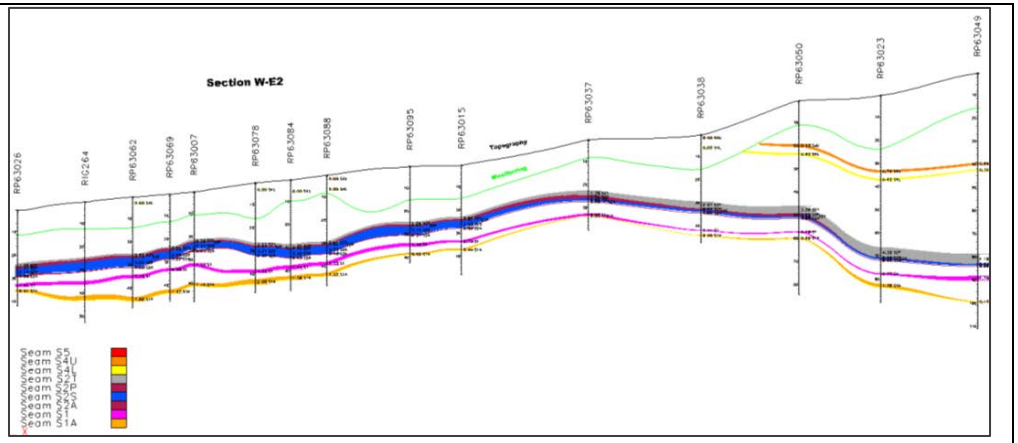
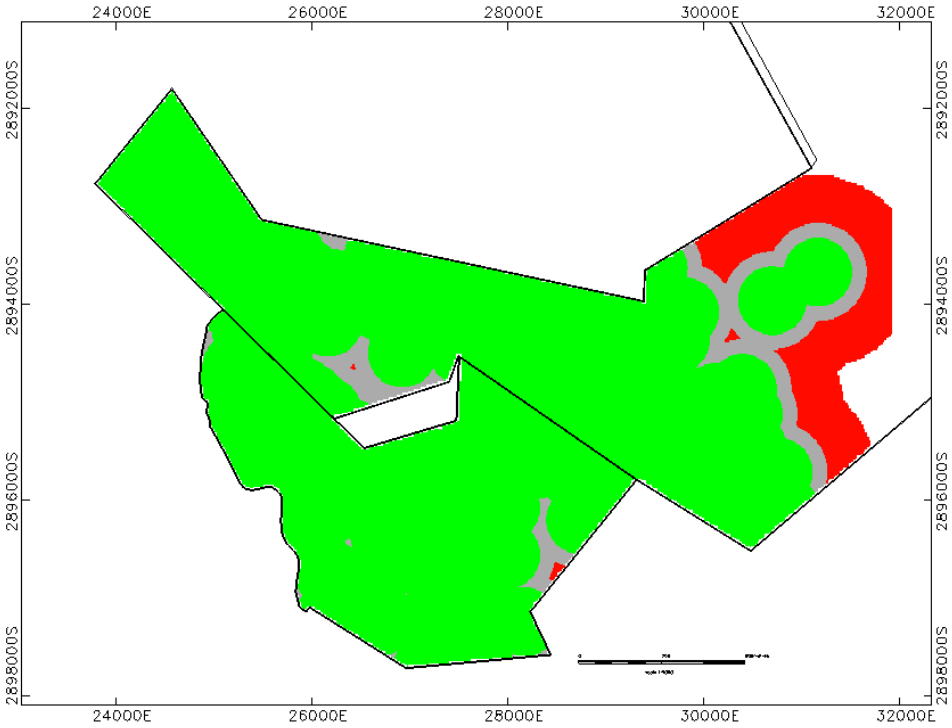
Seam S2U
Seam S2L
Seam S2A
Seam S1
Seam S1A

		
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 exploration results within the NCC area have been reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	- A number of additional geology-related studies were completed during the Feasibility study at NCC, and during the mining at New Clydesdale Colliery. These include: ▪ A Geotechnical Investigation. ▪ Metallurgical test work. ▪ A Geohydrological study.
Further work	• *The nature and scale of planned further work (eg 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.*	- Infill drilling on an ongoing basis and at 75m to 250m spacing is planned to improve confidence levels at NCC.
Section 3: Estimation and Reporting of Mineral Resources		
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.*	- All the exploration data and analytical results are imported into a Geobank database and subjected to validation routines. ▪ Lithological descriptions are verified against the down hole geophysical logs, and coal seam correlations validated. ▪ Coal sample positions are verified against coal seam occurrences, and raw coal analyses compared to lithological descriptions. ▪ A number of analytical tests and routines are used to validate all the raw and washability data as received from the laboratory. ▪ Anomalies are identified, queried and corrected where possible, otherwise flagged and removed from the final modelling dataset prior to geological modelling and resource calculation.
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 undertook a site visit and is familiar with the area and geology. - The Competent Person reviewed geological logging and field procedures and is satisfied with the data collection procedures and protocols.
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.*	- Confidence in the geological interpretation is moderate to high: Borehole distribution and density confirmed the nature and continuity of the seams and coal quality. - Boreholes are geologically detailed logged, acceptably sampled and data used is independently validated. - The Mineral Resource estimation is primarily guided by geology. - Continuity in geology and quality is primarily affected by basement topography and variation in inseam stone bands thickness. - It is recommended that future exploration involve infill drilling at 250m intervals to allow more accurate geological interpretation and improve resource confidence levels.
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*	- The main target Seams (S4, S2, S1 & S1A) extend approximately 9km along strike and 3.5km perpendicular to strike with an approximate average combined thickness of 13m.

	Resource.	- The depth of cover to the S4 seam ranges from <10m in the west, 80m in the central area and <10m in the east. - The depth of cover to the S2 seam ranges from <10m in the southwest to 110m in the central area. - The depth of cover to the S1A seam ranges from 25m in the west to 106m in the east.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation.* • *Method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and* • *Whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *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.*	- Geological modelling and Resource estimation are performed using Geovia Minex™ software. - A minimum seam thickness of 0.5 metres is applied to the open cast resource estimate, and 1 meter to the underground resource estimate. - Sections are used across the resource area to ensure all the correlations are consistent, and are verified against the lithological logging as well as downhole geophysical logs. - Structural models are created for each seam as well as relevant sub-units and selections where applicable. - The surface topography is created using the borehole collars, and verified with topography maps and surface contours. - The stratigraphic sequence is verified in Geobank and Minex (including gaps and overlaps) before structural modelling commences. - Each coal seam, ply and parting is modelled on a 20x20m grid, based on the average borehole spacing in the project area. - Coal extrapolation is limited to 500m from the last borehole with data. - The final structural model is created, using the topographic surface, weathering limit and basement surface as cutting surfaces to remove coal where it intersects these surfaces.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	- Tonnages are estimated as in situ using the in situ density estimation method using air dried moisture and air dried relative density laboratory values.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	- No cut-offs are applied on qualities as the data falls well within the acceptable limits.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	- A minimum seam thickness cut-off of 0.5m is applied to all seams in the open cast area, and 1 meter to all the seams in the underground area.
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.*	- Universal Coal has determined, following washability studies done by the CSIR Centre for Mining Innovation that the seams are suitable to produce a range of products including export thermal coal with an ash of 15%, low phos. metallurgical coal with a phos. content of less than 0.01% and domestic thermal coal with a calorific value of 20.5-22.5 Mj/kg for domestic power generation (Eskom).
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	- It is the Competent Person's opinion that there are no limiting environmental factors at this stage of the project development other than regulations relating to mining adjacent to wetlands, which should be managed through applying buffer zones and a wetland offsets. Universal Coal (Roodekop) and Exxaro (New Clydesdale Colliery) applied for buffer zones and offsets in the Regulatory applications (Mining Right, NEMA and Water Use Licence) and the same were granted. - The regulatory framework in South Africa makes provision for waste and process residue disposal and the project area has suitable areas available to host such facilities. The required Regulatory approvals for waste disposal have been obtained.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	- The density used in the tonnage calculation is relative density determined in the laboratory according to ISO 5072:1997. The apparent relative density is determined by weighing a sample suspended in water, allowing the sample to drain to remove surface liquid and then reweighing the sample in air. - All coal samples submitted to the laboratory was subjected to RD determination.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology*	- Resource classification is done according to the JORC 2012 code guidelines and appropriately reflects the Competent Person's view of the deposit. - Borehole spacing up to 350m is used to classify a measured resource, up to 500m to classify an indicated resource and up to 2000m used to classify as an inferred resource.

	and metal values, quality, quantity and distribution of the data). • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	- Only boreholes where the relevant seams were analysed are considered as point observations to be used for resource classification. - The figure below illustrates the resource classification of S5, S4, S2, S1 and S1A seams at NCC (Measured – green, Indicated – grey, Inferred - red). 
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	- Minset Mining Consultants (Pty) Ltd conducted an independent audit of the Resource estimate as part of the Bankable Feasibility Study and identified no material issues with the methodology applied or the final estimation.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.* • *Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	- The Competent Person applied the principles of the JORC 2012 code in estimating the Resources at NCC. - To date no geostatistical studies have been undertaken to ascertain the confidence in drill hole distribution for the purposes of resource estimation. - Factors that could affect the accuracy of the resource estimate include unknown basement highs and structures between completed drill holes, rolls in the seam, seam wash outs or in-seam stone band thickening. - Planned infill drilling at 250m intervals should assist in providing further confidence in the geological model and resource estimate.
Section 4: Estimation and Reporting of Ore Reserves		
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*	- The Ore Reserve Estimate is based on the Mineral Resource estimate completed by Pogiso Rantao of Universal Coal, who is a Competent Person as defined by the 2012 JORC Code. - The Mineral Resource estimate is based on a geologically model prepared in Minex (Refer to Section 3 above).

	inclusive of the Ore Reserves.	- The Resources in the Roodekop-Diepspruit Opencast Area (RDOA) and Diepspruit Underground Area (DUA) are converted to an Ore Reserve using XPAC Scheduling software, targeting an initial production rate of 2-2.28 million tons per annum (Mtpa) over an initial 10 year life of mine.
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 Persons responsible for the preparation of the Ore Reserve estimate on several occasions visited the NCC project and surrounding areas.
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.*	- A Bankable Feasibility Study has been completed for the NCC project.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	- No quality cut-offs were applied to the opencast resources. - A maximum raw in-situ ash cut-off of 45% (air dried basis) was applied to the underground resources.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg 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.*	**General** - The classification of Coal Reserves into Proved and Probable categories has been based on the "Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves (The JORC Code) 2012 edition". - The Resource model (geological model) used for the estimation of Coal Reserves is the same model used for the estimation of Coal Resources. - No Inferred Coal Resources were utilised in the mining studies. - A life of mine production schedule was generated and shows that ROM coal can be presented to the processing plant in sufficient quantity in each year of the mine life to satisfy the assumptions regarding costs used in the Ore Reserve estimate. **Opencast** - The mining method assumed for the Roodekop-Diepspruit Opencast Area is conventional truck-shovel with some assistance from bulk dozer push. The following mine design parameters were deemed appropriate for the opencast area: ▪ Type of operation: Load and Haul Surface Strip Mining ▪ Minimum mineable strip length: sufficient to allow for the planned monthly production of between 160,000 tonnes and 170,000 tonnes ▪ Minimum width of mining strip: 40m ▪ Bench height of Softs: soft overburden and the topsoil will be removed for a distance of 30 m on each side of the hard overburden high wall and the batter angle for the soft material will be 45° ▪ Bench height of Hards: single bench of 35m up to a maximum of 41m ▪ Minimum coal seam thickness after losses: 0.5m ▪ Maximum average mining depth: 45m ▪ Buffer from wetland and/or 100 year flood line: 50m ▪ Geological loss applied: 5% ▪ Total mining loss on reserve: 5% ▪ Contamination applied: Based on fixed 100mm waste loaded with the coal - Final pit slope design parameters were recommended by specialist geotechnical consultants, Big C Rock Engineering, based on geotechnical logging of existing drill core of selected holes, soil profiling of trial pits and field and laboratory testing. - Loading and haulage are achieved by a conventional truck and backhoe excavator fleet with four 100 ton excavators, sixteen 40 t ADT and two D10 dozers. - The Ore Reserve is estimated within an open pit design that includes ramps and safety berms on the pit walls. - Infrastructure required to support the proposed open pit mining operation includes box cut, access, maintenance and haul roads, water management, including pipelines and pumps, storm water drains, a pollution control dam, a processing plant, security fencing, lighting, weighbridges and a fuel depot, electrical infrastructure, offices and maintenance workshops, waste dumps and ROM coal stockpiles. **Underground** - The mining method preferred for the Diepspruit Underground Area is board and pillar mining with CMs and shuttle cars. The following mine design parameters were deemed appropriate for the opencast area: ▪ Type of operation: board and pillar mining. ▪ Monthly production rate: 40,000 tons. ▪ The safety factors applied for the board and pillar underground workings are 2.00 for main developments, 1.6 for secondary developments and 2.2 for undermining structures. ▪ The mining board width is 7.2 m and the pillar sizes are calculated to ensure the required safety factors are met. ▪ Number of roadways per panel: average 7-9. ▪ Minimum coal seam thickness applied is 1.5m, and minimum mining height is 2m and mmaximum mining height

		of 4m. ▪ Minimum underground mining depth: 30m. ▪ Minimum barrier pillar from surface infrastructure: 50m. ▪ Geological loss applied: none. ▪ Total mining loss on reserve: 5%. ▪ Contamination applied: Based on fixed 110mm waste cut with the coal. - Infrastructure required to support the proposed underground mine is already established (by Exxaro) and in good working order (currently on care and maintenance).
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	- Coal will be treated in the existing NCC coal processing facility that includes conventional crushing, screening and washing circuits based on dense medium separation techniques, at a monthly rate of 170,000 to 190,000 tons of ROM. The plant includes proven processing technology, has a proven record and the planned production rate is consistent to that achieved historically at NCC. - No bulk sample or pilot scale test work was undertaken. - Detailed washability simulation work has been performed by the CSIR Centre for Mining Innovation based on wash and analytical feed files from 51 exploration bore holes from Roodekop. To determine the expected practical yield obtainable from the respective coal seams when washed to specific product specifications, a simulation program capable of simulating dense-medium cyclones and spirals was used. The simulation program is an Excel-based model developed by the CSIR and commercially available as part of the "Coal Preparation Utilities" (CPU) package supplied by DMP Consulting CC. - For the simulation, the wash data were used as if it were the raw coal from a mining operation. In this regard, it was required to make a number of assumptions namely: ▪ Sizing: The coal is assumed to have the following size grading which is typical of a plant feed crushed to a nominal top-size of 50 mm: o -50 + 1 mm = 88%. o -1 mm + 0.15 mm = 7%. o -0.15 mm = 5%. o The minus 0.15 mm material, which makes up 5% of the plant feed and is termed ultra-fines or slimes, is removed from the feed during processing and disposed of. o The material between 1 mm and 0.15 mm, termed fine coal, was processed using spirals and the product from the spirals was added to the Eskom product. o The coal sized between 50 mm and 1 mm was processed using dense medium cyclones, to yield a primary export product. The sinks from the primary washing stage were then re-processed at a higher relative density to yield an Eskom product. The product obtained from the spirals was added to the Eskom coal. o The effect of liberation affected by crushing the borehole cores to minus 25 mm prior to analysis was not taken into consideration. ▪ Prior to processing, the washability data were diluted by adding 'contamination', ie. shale and/or stone normally associated with the mining operation due to the inclusion of extraneous roof, floor or inter-seam partings with the raw coal. ▪ The respective Roodekop raw coals were 'washed' to yield the following target products (air dried): o Export-Grade (27.50 MJ/kg) o Low phos coal (<18% ash) o Eskom product (20.50-22.50 MJ/kg) - There are no deleterious elements present, such as would necessitate special attention during treatment.
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 New Clydesdale Colliery and Roodekop projects have approved National Environmental Management Act (NEMA) Authorisations, approved Mining Rights, EMPRs, Social and Labour Plans (SLP), Water Use Licences and Waste Licences. - The recommendations and commitments of the various licences have been taken into consideration in the Ore Reserve estimate and there are no other factors likely to have a material impact on the estimate. - Coal processing tailings and waste water would be retained in an existing tailing storage facility (TSF) and pollution control dam (PCD), their design and position having been incorporated into the approved EIA, NEMA, EMPR, Waste Licence and Water Use Licences.
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.*	- The underground mining, processing, water, power and transport infrastructure already exists at New Clydesdale Colliery, the infrastructure required to operate the opencast at Roodekop is outstanding and would be required to be constructed during commissioning of the operation. - The Roodekop project area has sufficient land available for the required infrastructure. - Sufficient labour is available from the town of Kriel, 10km from the project area and no accommodation would be required on the proposed operation.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.*	- The actual assumed mining costs are not disclosed in this document as they are commercially sensitive. - Capital costs for the infrastructure at Roodekop (including mining (Incl box-cut, processing plant, discard co-disposal

	• *Allowances made for the content of deleterious elements.* • *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.*	facility, earthworks, buildings, roads and bridges, fencing, water, storm water, electricity, maintenance vehicles, staff & ancillaries, information software and hardware, acquisition of land, legal costs and rehabilitation bonds) have been estimated as part of the Feasibility study. Capital cost inputs have been applied based on the results of the individual expert contributions and are in real terms. - Mine operating costs have been estimated with a combination of first principle calculations, and life of mine (long term) cost estimates. Opencast mining costs vary with strip ratio and waste rock classification (free-dig or hard waste) - hard waste and coal have a higher extraction cost due to blasting and grade control charges (for coal). Ore processing operating costs are distributed over the range of processing throughput rates for the purposes of estimating a total unit cost of processing. General and Administration unit costs for the site were estimated. Cost of major consumables (fuel, electrical power, steel, chemicals) are based on assumptions are based on a combination of supplier contracts and market intelligence. - No allowances for deleterious elements are necessary or have been made. - Coal product specifications include limits for these, and coal is produced and sold within specifications. - Estimates for transportation charges and government royalties and taxes have been obtained from Government legislation or from existing medium-term coal sales agreements between Universal Coal and relevant parties. - No export penalties have been included in the estimate of Coal Reserves. - The long term USD/ZAR exchange rate assumed is commercially sensitive and is not inconsistent with actual long term historical average exchange.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	- The actual assumed coal prices are not disclosed in this document as they are commercially sensitive. - For export thermal coal the pricing has been based on guidance obtained from the market analysts relating to a Richards Bay export thermal coal price (RB1) using the Wood Mackenzie Global Economic Model, price data from Bloomberg LP, and CTI / ETA analysis 2014. - Eskom coal sales pricing and transportation charges are based on existing medium-term coal sales agreements between Universal Coal and Eskom. - Low phos. metallurgical coal sales pricing and transportation charges are based on preliminary negotiations with domestic users.
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.*	- Product tonnage forecasts for NCC are primarily driven by Ore Reserve controls and analyses of export and domestic market trends by Mindset Mining Consultants (Pty) Ltd using Wood Mackenzie Global Economic Model, price data from Bloomberg LP, and CTI / ETA analysis 2014. - The market analyses concluded that coal from NCC is suitable to supply a number of domestic and export markets. - The market analyses concluded that domestic (Eskom) and worldwide demand for thermal coals will continue to increase over the long term. The price forecasts from market analysts take into account the forecast relationship between supply and demand on regional and worldwide bases.
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.*	- Net present values are not reported in this document, however the NPV and IRR confirms the economic viability of the NCC project. - The assumptions and inputs to the economic analysis to produce the net present value (NPV) in the study include: ▪ The Mine will produce 24.64 million run of mine tons over the first 10 years of operation from the 2, 1 and 1A seams. The average annual ROM production is 2.4mtpa. ▪ The average stripping ratio for the Roodekop-Diepspruit opencast reserve area is 2.99:1. ▪ The ore is processed in a crush & screen unit (160,000 to 170,000 tpm) and a single stage DMS washing plant processing 170,000 to 190,000 tpm. ▪ The total product yield (Export plus Eskom) is 64.5% and the total product volumes are 15.88 mt. ▪ Coal is sold delivered. ▪ Refer to "Costs" above for details on assumptions of costs, royalties and taxes used in the economic analysis. ▪ A discount rate of 10% was applied. - The confidence of the economic inputs complies with the requirements of a Bankable Feasibility study.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	- Approved Social and Labour Plans (SLP) are in place and entails commitments relating to human resource development, local economic development and housing and living conditions of employees. - The costs relating to the SLP commitments have been taken into consideration in the economic analysis of the NCC project.

Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:*
	  • *Any identified material naturally occurring risks.*
	  • *The status of material legal agreements and marketing arrangements.*
	  • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*
		- The material naturally-occurring risks expected to impact the proposed NCC operation are:
		▪ Floods – The Project is positioning adjacent to the Steenkoolspruit River and exposed to floods resulting from particularly high-rainfall events. A 50m buffer zone from the 100 year flood line has been incorporated in the opencast mine design. Berms will also be placed along the buffer zone to protect the mine from flood levels above a "1 in 100 year" event.
		- The following regulatory approvals are in place:
		▪ Mining Right and EMPR.
		▪ National Environmental Management Act (NEMA) Authorisation.
		▪ Waste Disposal Licence.
		▪ Water Use Licence.

		- No coal marketing arrangements or supplier agreements for mining, processing, fuel, railing, port handling, and electricity are in place – selection of supplier and negotiation of contracts are well advanced.
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).*	- The Coal Reserves are classified as Proved and Probable Coal Reserves based on the JORC (2012) Code. The basis for classification of Coal Reserves is the Coal Resource category polygons (Measured for Proved and Indicated for Probable) for each seam within the proposed Reserve areas, in conjunction with the calculated profits and other modifying factors.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	- The Coal Reserve estimate has been prepared by an external independent mining consultancy (Mindset Mining Consultants). The Competent Persons are employees of Mindset Mining Consultants and suitably qualified and experienced to act in that capacity. - No external audits have been conducted on the Coal Reserve estimate.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.* • *Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	- The design, schedule and financial model on which the Ore Reserve is based has been completed to a Bankable Feasibility standard, with a corresponding level of confidence. - Modifying factors, the quantum of which was determined by experienced and independent geological, mining, processing, environmental and marketing experts was applied to the NCC project on a global scale.

Annexure 2a: Drill Hole Data Summary for the NCC Project

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
D041001	Core	WGS84	South African	24740.03	-2893366	1547.74	56.23	0	-90
D041002	Core	WGS84	South African	27472.26	-2893625	1536.01	56.9	0	-90
D041003	Core	WGS84	South African	27606.84	-2893671	1541.54	65.9	0	-90
D041004	Core	WGS84	South African	27518.54	-2893745	1540.92	62.8	0	-90
D041005	Core	WGS84	South African	27157.91	-2893939	1539.82	48	0	-90
D041006	Core	WGS84	South African	27602.84	-2894005	1546.03	64.43	0	-90
D041007	Core	WGS84	South African	28093.61	-2893947	1570.16	89.85	0	-90
D041008	Core	WGS84	South African	28356.87	-2893786	1571.59	94.4	0	-90
D041009	Core	WGS84	South African	28446.4	-2894290	1586.09	117.23	0	-90
D041010	Core	WGS84	South African	28264.5	-2894370	1587.49	105	0	-90
D041011	Core	WGS84	South African	28017.46	-2894488	1574	86.94	0	-90
D041012	Core	WGS84	South African	28217.27	-2894653	1587.52	102	0	-90
D041013	Core	WGS84	South African	29035.48	-2894804	1581.9	101.86	0	-90
D041014	Core	WGS84	South African	28927.66	-2894038	1559.92	98.75	0	-90
D041015	Core	WGS84	South African	28485.09	-2894995	1588.59	111.08	0	-90
D041016	Core	WGS84	South African	28844.24	-2894548	1578.65	102.3	0	-90
D041017	Core	WGS84	South African	29157.38	-2895120	1593	108.4	0	-90
D041019	Core	WGS84	South African	29341.93	-2894909	1580.78	92.92	0	-90
D041020	Core	WGS84	South African	29079.93	-2894456	1568.24	71.78	0	-90
D041021	Core	WGS84	South African	27706.92	-2894271	1551.34	66.18	0	-90
D041022	Core	WGS84	South African	28151.15	-2894132	1578.03	93.45	0	-90
D041023	Core	WGS84	South African	28647.8	-2895280	1588.56	117.43	0	-90
D041024	Core	WGS84	South African	28121.76	-2894982	1578.69	81.2	0	-90
D041025	Core	WGS84	South African	28527.22	-2894456	1585.14	113.6	0	-90
D041026	Core	WGS84	South African	28836.42	-2894920	1591.66	122.58	0	-90
D041027	Core	WGS84	South African	28393.12	-2893968	1577.93	101.6	0	-90
D041028	Core	WGS84	South African	29389.86	-2894128	1564.32	81.96	0	-90
D041029	Core	WGS84	South African	29333.18	-2894268	1564.05	74.1	0	-90
D041030	Core	WGS84	South African	28551.26	-2894668	1588.26	120.65	0	-90
D041031	Core	WGS84	South African	27277.24	-2893772	1533.53	50.52	0	-90
D041032	Core	WGS84	South African	28149.53	-2893733	1562.5	85.2	0	-90
D041034	Core	WGS84	South African	28088.54	-2894814	1581.04	89.57	0	-90
D041035	Core	WGS84	South African	29381.38	-2894242	1565.52	80.21	0	-90
D041036	Core	WGS84	South African	28424.89	-2895164	1584.66	95.85	0	-90
D041037	Core	WGS84	South African	29131.03	-2894972	1586.24	98.63	0	-90
D041038	Core	WGS84	South African	27439.72	-2894261	1547.01	50.85	0	-90
D041040	Core	WGS84	South African	27186.8	-2893597	1529.71	48.87	0	-90
D041041	Core	WGS84	South African	27264.15	-2893618	1531.29	52.02	0	-90
D041042	Core	WGS84	South African	27386.1	-2893645	1534.68	53.56	0	-90
D041043	Core	WGS84	South African	30640.32	-2896387	1601.63	100.71	0	-90
D041044	Core	WGS84	South African	31155.8	-2896658	1593.15	92.74	0	-90
D041045	Core	WGS84	South African	30938.85	-2896410	1595.22	93.59	0	-90
D041046	Core	WGS84	South African	30853.44	-2896213	1599.52	80.58	0	-90
D041047	Core	WGS84	South African	30116.48	-2896006	1603.81	107.43	0	-90
D041048	Core	WGS84	South African	30195.16	-2895578	1602.1	100.43	0	-90
D041049	Core	WGS84	South African	29961.27	-2895926	1601.46	112.9	0	-90
D041050	Core	WGS84	South African	29799.04	-2895661	1598.58	107.34	0	-90
D041051	Core	WGS84	South African	29975.81	-2896222	1600.5	110.56	0	-90
D041053	Core	WGS84	South African	29353.7	-2894474	1568.74	71.11	0	-90
D041054	Core	WGS84	South African	29067.99	-2895639	1602.1	117.94	0	-90
D041055	Core	WGS84	South African	28928.57	-2895219	1593.48	114.62	0	-90
D041056	Core	WGS84	South African	28955.84	-2894629	1577.28	103.7	0	-90
D041057	Core	WGS84	South African	28862.8	-2894177	1565.43	92.66	0	-90
D041058	Core	WGS84	South African	28281.22	-2894907	1584.45	91.63	0	-90
D041059	Core	WGS84	South African	27147.62	-2894294	1549.97	51.81	0	-90
D041060	Core	WGS84	South African	26896.95	-2893791	1535.7	54	0	-90
D041061	Core	WGS84	South African	26778.97	-2893588	1530.08	54.9	0	-90
D041063	Core	WGS84	South African	24417.45	-2893071	1558.38	86.54	0	-90
D041064	Core	WGS84	South African	26507.52	-2893378	1524.54	48.2	0	-90
D041065	Core	WGS84	South African	27888.74	-2894649	1572.12	78	0	-90
D041066	Core	WGS84	South African	28064.93	-2894314	1574.93	84	0	-90
D041067	Core	WGS84	South African	27904.57	-2893991	1561.2	84	0	-90
D041068	Core	WGS84	South African	26695.58	-2893584	1529.41	53.52	0	-90
D041069	Core	WGS84	South African	26668.26	-2893628	1530.89	56.75	0	-90
D041070	Core	WGS84	South African	26704.97	-2893570	1528.91	54.73	0	-90
D041071B	Core	WGS84	South African	26713.95	-2893560	1528.8	53.66	0	-90
D041072	Core	WGS84	South African	26722.13	-2893545	1529	50.4	0	-90
D041073	Core	WGS84	South African	26793.26	-2893567	1529.64	55.97	0	-90
D041074	Core	WGS84	South African	26731.68	-2893550	1528.91	54.18	0	-90
D041075	Core	WGS84	South African	26719.85	-2893521	1527.32	53.47	0	-90

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
D041076	Core	WGS84	South African	26701.79	-2893510	1527.13	51.09	0	-90
D041077	Core	WGS84	South African	26681.71	-2893498	1527.23	53.41	0	-90
D041078	Core	WGS84	South African	26661.95	-2893485	1527.09	51.79	0	-90
D041081	Core	WGS84	South African	28330.7	-2894407	1589	102.92	0	-90
D041082	Core	WGS84	South African	28009.67	-2894226	1570.1	83.15	0	-90
D041085	Core	WGS84	South African	27829.56	-2894027	1557.45	73.85	0	-90
D041086	Core	WGS84	South African	27615.72	-2894067	1546.96	58.79	0	-90
D041087	Core	WGS84	South African	27887.14	-2894300	1562.28	77.36	0	-90
D041088	Core	WGS84	South African	28240.78	-2894351	1586.09	95.6	0	-90
D041089	Core	WGS84	South African	28266.01	-2894583	1589.15	104.73	0	-90
D041090	Core	WGS84	South African	27944.45	-2894519	1570.27	77.77	0	-90
D041091	Core	WGS84	South African	28595.87	-2894911	1590.83	107.54	0	-90
D041093	Core	WGS84	South African	29113.58	-2894224	1560.67	74.68	0	-90
D041098	Core	WGS84	South African	29343	-2895427	1601.65	119.28	0	-90
D041099	Core	WGS84	South African	29398.98	-2895845	1611.33	50.52	0	-90
D041102	Core	WGS84	South African	30666.2	-2895872	1602.08	26.17	0	-90
D041103	Core	WGS84	South African	30376.79	-2896328	1603.17	100.61	0	-90
D041104	Core	WGS84	South African	25841.51	-2894060	1531.99	27.04	0	-90
D041105	Core	WGS84	South African	25942.21	-2894206	1534.22	17.88	0	-90
D041106	Core	WGS84	South African	25225.56	-2893663	1525.42	29.65	0	-90
D041107	Core	WGS84	South African	25167.9	-2893843	1525.65	34.27	0	-90
D041108	Core	WGS84	South African	25245.27	-2894043	1526.88	22.62	0	-90
D041110	Core	WGS84	South African	25927.16	-2893830	1528.52	29.59	0	-90
D041116	Core	WGS84	South African	26062.89	-2894286	1536.31	33.68	0	-90
D041117	Core	WGS84	South African	25087.01	-2893635	1526.1	23.54	0	-90
D041119	Core	WGS84	South African	25347.72	-2893935	1526.6	23.43	0	-90
D041120	Core	WGS84	South African	25330.92	-2894301	1532.45	31.76	0	-90
D041121	Core	WGS84	South African	25932.73	-2893679	1526.7	29.54	0	-90
D041122	Core	WGS84	South African	27014.66	-2893658	1532.19	64.75	0	-90
D041123	Core	WGS84	South African	27108.72	-2893739	1533.31	59.52	0	-90
D041124	Core	WGS84	South African	27207.58	-2893805	1534.35	62.45	0	-90
D041125	Core	WGS84	South African	27463.87	-2893979	1540.93	59.49	0	-90
D041126	Core	WGS84	South African	27487.94	-2893655	1538.7	57.82	0	-90
D041127	Core	WGS84	South African	25393.37	-2894068	1529.87	32.12	0	-90
D041128	Core	WGS84	South African	25408.69	-2893881	1528.1	32.8	0	-90
D041129	Core	WGS84	South African	25424.87	-2893703	1527.96	35.59	0	-90
D041130	Core	WGS84	South African	25633.74	-2893315	1525.09	32.54	0	-90
D041131	Core	WGS84	South African	26200.18	-2893791	1528.43	29.6	0	-90
D041132	Core	WGS84	South African	25549.3	-2893431	1527.16	35.25	0	-90
D041133	Core	WGS84	South African	25739.02	-2893435	1527.17	38.5	0	-90
D041134	Core	WGS84	South African	25453.78	-2893515	1527.72	33.36	0	-90
D041135	Core	WGS84	South African	25918.85	-2893730	1526.83	32.8	0	-90
D041136	Core	WGS84	South African	25790.6	-2893730	1528.19	32.6	0	-90
D041137	Core	WGS84	South African	25852.51	-2893922	1530.34	23.9	0	-90
D041138	Core	WGS84	South African	25968.11	-2894025	1532.07	18.03	0	-90
D041139	Core	WGS84	South African	25690.11	-2894024	1531.02	14.4	0	-90
D041140	Core	WGS84	South African	25524.4	-2893957	1529.86	13.6	0	-90
D041141	Core	WGS84	South African	25644.3	-2893848	1528.9	27.9	0	-90
D041142	Core	WGS84	South African	25602.44	-2893697	1527.72	32.6	0	-90
D041143	Core	WGS84	South African	25585.89	-2893555	1527.56	34.62	0	-90
D041144	Core	WGS84	South African	25746.42	-2893586	1527.68	32.45	0	-90
D041145	Core	WGS84	South African	25288.08	-2893540	1525.13	29.6	0	-90
D041146	Core	WGS84	South African	25303.79	-2893765	1526.08	34.93	0	-90
D041147	Core	WGS84	South African	25586.75	-2894187	1532.7	21.22	0	-90
D041148	Core	WGS84	South African	25837.73	-2894116	1532.54	30	0	-90
D041149	Core	WGS84	South African	25375.76	-2894163	1530.43	21.7	0	-90
D041150	Core	WGS84	South African	25538.61	-2894371	1534.4	23.58	0	-90
D041151	Core	WGS84	South African	26135.04	-2894026	1535.26	29.98	0	-90
D041152	Core	WGS84	South African	25782.66	-2894320	1533.39	17.75	0	-90
D041153	Core	WGS84	South African	24901.4	-2893219	1550.31	68.96	0	-90
D041154	Core	WGS84	South African	24656.59	-2893184	1554.12	74.93	0	-90
D041155	Core	WGS84	South African	24187.04	-2893082	1563.4	87.3	0	-90
D041156	Core	WGS84	South African	24875.46	-2893543	1535.86	48.45	0	-90
D041157	Core	WGS84	South African	24746.67	-2893654	1539.14	35.87	0	-90
D041158	Core	WGS84	South African	25173.99	-2893204	1545.29	61.63	0	-90
D041163	Core	WGS84	South African	28334.83	-2894780	1589.29	108.13	0	-90
D041164	Core	WGS84	South African	28506.32	-2894799	1590.8	123.15	0	-90
D041165	Core	WGS84	South African	28740.22	-2894951	1593.1	116.18	0	-90
D041166	Core	WGS84	South African	28671.69	-2895140	1592.21	112.3	0	-90
D041167	Core	WGS84	South African	28887.28	-2895053	1593.11	119.88	0	-90
D041168	Core	WGS84	South African	27861.4	-2894360	1561.16	75.08	0	-90
DP1082	Core	WGS84	South African	25067.05	-2893954	1525.06	39.65	0	-90
DP1182	Core	WGS84	South African	25783.7	-2893504	1527.52	35.3	0	-90

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
DP1282	Core	WGS84	South African	25499.49	-2893345	1529.89	35.7	0	-90
DP1382	Core	WGS84	South African	25339.36	-2893733	1526.37	27.21	0	-90
DP1682	Core	WGS84	South African	25077.66	-2893729	1525.87	13	0	-90
DP182	Core	WGS84	South African	26921.13	-2894512	1554.1	34.53	0	-90
DP282	Core	WGS84	South African	26727.02	-2894056	1543.55	63.7	0	-90
DP382	Core	WGS84	South African	26120.8	-2893835	1527.48	29.5	0	-90
DP482	Core	WGS84	South African	27321.47	-2894032	1539.42	55.1	0	-90
DP782	Core	WGS84	South African	24611.02	-2893583	1540.67	48.45	0	-90
DP882	Core	WGS84	South African	25123	-2893360	1538.95	55.9	0	-90
DP982	Core	WGS84	South African	25504.79	-2893198	1536.49	60.85	0	-90
DS1364	Core	WGS84	South African	28661.46	-2894412	1580.35	105.36	0	-90
DS1464	Core	WGS84	South African	28510.73	-2895046	1589.39	108.46	0	-90
DS763	Core	WGS84	South African	29115.22	-2894800	1580	94.58	0	-90
DS863	Core	WGS84	South African	28081.22	-2894625	1580	87.44	0	-90
M042001	Core	WGS84	South African	24567.58	-2892153	1557.95	74.6	0	-90
M042002	Core	WGS84	South African	24080.33	-2892515	1568.03	99.6	0	-90
M042003	Core	WGS84	South African	24426.93	-2892551	1560.02	77.1	0	-90
M042004	Core	WGS84	South African	24477.43	-2892869	1562.91	80.7	0	-90
M042005	Core	WGS84	South African	25115.83	-2892944	1554.43	69.08	0	-90
M042006	Core	WGS84	South African	25311.63	-2893053	1548.02	61.21	0	-90
M042007	Core	WGS84	South African	23836.14	-2892713	1569.99	98.39	0	-90
M042008	Core	WGS84	South African	24581.13	-2892713	1569.99	86.5	0	-90
M042009	Core	WGS84	South African	24910.93	-2892324	1559.47	77.57	0	-90
M042010	Core	WGS84	South African	24079.31	-2893053	1565.87	76.63	0	-90
M042011	Core	WGS84	South African	24517.81	-2892645	1562	84.12	0	-90
M042013	Core	WGS84	South African	24168.88	-2892920	1566.6	97.48	0	-90
M042014	Core	WGS84	South African	24702.22	-2892798	1561.89	74.8	0	-90
M042016	Core	WGS84	South African	24573.15	-2892003	1561.65	84.13	0	-90
M042017	Core	WGS84	South African	24918.58	-2892843	1558.62	81.72	0	-90
M042018	Core	WGS84	South African	24456.99	-2892699	1563.81	81.4	0	-90
M042019	Core	WGS84	South African	24015.63	-2892820	1569.18	95.4	0	-90
M042020	Core	WGS84	South African	24802.2	-2892475	1562.19	81.5	0	-90
M042021	Core	WGS84	South African	24755.6	-2892111	1561.24	75.53	0	-90
M042022	Core	WGS84	South African	24261.92	-2892594	1565.63	81.73	0	-90
M042023	Core	WGS84	South African	24883.26	-2892278	1560.3	78.12	0	-90
MD04201	Core	WGS84	South African	24589.1	-2892577	1562.18	79	0	-90
MD04202	Core	WGS84	South African	23794.9	-2892761	1571.17	103.5	0	-90
MD04203	Core	WGS84	South African	24535.29	-2891846	1560.92	101	0	-90
MD04204	Core	WGS84	South African	25073.89	-2892542	1556.7	83	0	-90
MD04205	Core	WGS84	South African	24222.45	-2892241	1564.12	100.75	0	-90
MD482A	Core	WGS84	South African	25073.89	-2892542	1556.78	83	0	-90
MD63001	Core	WGS84	South African	24617.88	-2892279	1558.86	66.49	0	-90
MD64002	Core	WGS84	South African	25113.61	-2893012	1554.37	58.19	0	-90
NCC0199	Core	WGS84	South African	27766.94	-2894397	1555.96	69.6	0	-90
NCC0299	Core	WGS84	South African	27692.22	-2894690	1568.8	70.64	0	-90
NCC0399	Core	WGS84	South African	26130.51	-2894435	1538.41	25	0	-90
NCC0499	Core	WGS84	South African	26878.3	-2894337	1551.6	44.12	0	-90
NCC0599	Core	WGS84	South African	26968.32	-2894082	1544.64	48.98	0	-90
NCC0799	Core	WGS84	South African	27187.37	-2894917	1559.92	21.41	0	-90
NCC0899	Core	WGS84	South African	26568.78	-2894667	1549.77	14.99	0	-90
NCC0999	Core	WGS84	South African	26547.99	-2894327	1547.29	33.49	0	-90
NCC1097	Core	WGS84	South African	27732.95	-2893674	1546.03	66.25	0	-90
NCC1099	Core	WGS84	South African	26163.12	-2894200	1537.54	42.46	0	-90
NCC1197	Core	WGS84	South African	27723.29	-2893890	1551.57	70	0	-90
NCC1199	Core	WGS84	South African	26778.1	-2894197	1546.8	19.56	0	-90
NCC1297	Core	WGS84	South African	27761.42	-2894113	1552.04	66.85	0	-90
NCC2597	Core	WGS84	South African	29326.66	-2895193	1591.89	112.07	0	-90
NCC2697	Core	WGS84	South African	29343.32	-2894856	1578.51	86.2	0	-90
NCC2797	Core	WGS84	South African	29133.83	-2894263	1561.69	64.16	0	-90
NCC3197	Core	WGS84	South African	27385.61	-2893877	1537.63	58.44	0	-90
NCC3380	Core	WGS84	South African	29742.54	-2895958	1608.88	112	0	-90
NCC3480	Core	WGS84	South African	30233.94	-2895250	1607.17	101.1	0	-90
NCC3580	Core	WGS84	South African	30107.76	-2894966	1605.78	89.1	0	-90
NCC3680	Core	WGS84	South African	30019.67	-2895621	1598.04	100	0	-90
NCC3780	Core	WGS84	South African	30759.9	-2895726	1598.13	98.1	0	-90
NCC3980	Core	WGS84	South African	29756.49	-2895274	1596.84	103.2	0	-90
NCC4080	Core	WGS84	South African	29553.94	-2895541	1608.27	126.1	0	-90
NCC4180	Core	WGS84	South African	30841.4	-2896134	1600.15	83.1	0	-90
NCC4280	Core	WGS84	South African	30330.23	-2896401	1599.16	104.1	0	-90
NCC4380	Core	WGS84	South African	30316.89	-2895930	1608.25	110.1	0	-90
NCC4480	Core	WGS84	South African	29296.22	-2895167	1591	98.55	0	-90
NCC4680	Core	WGS84	South African	28918.22	-2895417	1595.5	115.8	0	-90
NCC4880	Core	WGS84	South African	29483.82	-2893647	1566.05	93	0	-90

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
NCC4980	Core	WGS84	South African	29415.48	-2894086	1563.98	112.5	0	-90
NCC5080	Core	WGS84	South African	29805.52	-2894091	1581.17	105.86	0	-90
NCC5180	Core	WGS84	South African	29436.25	-2894559	1571.9	76.96	0	-90
NCC5380	Core	WGS84	South African	28763.22	-2893872	1560.5	128.71	0	-90
NCC5480	Core	WGS84	South African	27548.22	-2894497	1559	59	0	-90
NCC5780	Core	WGS84	South African	29711.6	-2894370	1577.45	82.6	0	-90
NCC6480	Core	WGS84	South African	30454.01	-2895134	1603.8	80.46	0	-90
NCC6490	Core	WGS84	South African	24918.18	-2892659	1560.11	85.07	0	-90
NCC6580	Core	WGS84	South African	30502.96	-2895488	1606.73	99.44	0	-90
NCC6590	Core	WGS84	South African	24156.94	-2892733	1567.41	80.38	0	-90
NCC6680	Core	WGS84	South African	29652.43	-2894888	1584.94	78.38	0	-90
NCC6690	Core	WGS84	South African	28591.23	-2894077	1574.99	96.75	0	-90
NCC6890	Core	WGS84	South African	24715.91	-2893083	1554.97	65.29	0	-90
NCC6980	Core	WGS84	South African	28738.22	-2895107	1591	124.01	0	-90
NCC7080	Core	WGS84	South African	28788.22	-2894331	1571.2	107.63	0	-90
NCC7180	Core	WGS84	South African	27918.22	-2893727	1554.5	84.93	0	-90
NCC7280	Core	WGS84	South African	27833.22	-2894252	1560.5	85.78	0	-90
NCC7380	Core	WGS84	South African	27913.22	-2894815	1575.8	77.9	0	-90
NCC779	Core	WGS84	South African	30430.12	-2895511	1606.73	97.47	0	-90
NCC879	Core	WGS84	South African	30393.19	-2894871	1596.9	79	0	-90
R1/42	Core	WGS84	South African	31626.62	-2893754	1579.45	84.43	0	-90
R13/64	Core	WGS84	South African	31162.58	-2893683	1581.54	90.22	0	-90
R14/64	Core	WGS84	South African	30698.21	-2893974	1592.31	93.57	0	-90
R2/42	Core	WGS84	South African	31193.17	-2893049	1574.12	81.76	0	-90
R3/42	Core	WGS84	South African	29909.47	-2893670	1584.71	129.54	0	-90
R8/63	Core	WGS84	South African	30768.28	-2893631	1580.77	82.54	0	-90
RDP15	Core	WGS84	South African	26341	-2896336	1530	37.43	0	-90
RIG247	Core	WGS84	South African	25023	-2894597	1526.3	40.9	0	-90
RIG264	Core	WGS84	South African	25277	-2895007	1530.1	52.01	0	-90
RP63001	Core	WGS84	South African	25144.24	-2894350	1526.2	35.56	0	-90
RP63002	Core	WGS84	South African	25267.64	-2894724	1532.91	38.56	0	-90
RP63003	Core	WGS84	South African	25425.68	-2894502	1535.68	31.65	0	-90
RP63004	Core	WGS84	South African	25456.63	-2894861	1531.87	38.48	0	-90
RP63005	Core	WGS84	South African	25926.13	-2896509	1530.02	47.22	0	-90
RP63006	Core	WGS84	South African	25739.28	-2895781	1537.01	50.55	0	-90
RP63007	Core	WGS84	South African	25665.59	-2895260	1534.47	47.32	0	-90
RP63008	Core	WGS84	South African	25676.67	-2894753	1534.66	35.27	0	-90
RP63009	Core	WGS84	South African	26177.56	-2895255	1542.19	35.22	0	-90
RP63010	Core	WGS84	South African	26174.73	-2895760	1542.26	47.22	0	-90
RP63011	Core	WGS84	South African	26162.93	-2896127	1539.57	53.27	0	-90
RP63012	Core	WGS84	South African	26175.21	-2896760	1537.72	47.27	0	-90
RP63013	Core	WGS84	South African	26176.38	-2897206	1532.52	53.27	0	-90
RP63014	Core	WGS84	South African	26676.22	-2896754	1544.61	53.28	0	-90
RP63015	Core	WGS84	South African	26642.22	-2895843	1546.01	47.22	0	-90
RP63016	Core	WGS84	South African	27147.69	-2895603	1558.73	32.72	0	-90
RP63017	Core	WGS84	South African	27150.52	-2896341	1541.41	29.27	0	-90
RP63018	Core	WGS84	South African	27173.73	-2897259	1560.54	59.25	0	-90
RP63019	Core	WGS84	South African	27676.56	-2896753	1548.94	44.42	0	-90
RP63020	Core	WGS84	South African	27675.62	-2895754	1570.11	59.27	0	-90
RP63021	Core	WGS84	South African	27677.82	-2894754	1572.99	65.22	0	-90
RP63022	Core	WGS84	South African	28173.56	-2895258	1578.92	89.27	0	-90
RP63023	Core	WGS84	South African	28323.8	-2896156	1576.12	89.27	0	-90
RP63024	Core	WGS84	South African	28173.41	-2897254	1564.41	71.48	0	-90
RP63025	Core	WGS84	South African	28674.11	-2895754	1593.19	112.64	0	-90
RP63026	Core	WGS84	South African	24984.62	-2894989	1526.5	41.1	0	-90
RP63027	Core	WGS84	South African	25172.21	-2895231	1529.9	48.4	0	-90
RP63028	Core	WGS84	South African	25320.42	-2895490	1531.18	61.57	0	-90
RP63029	Core	WGS84	South African	25416	-2895796	1530.34	57.83	0	-90
RP63030	Core	WGS84	South African	25726.53	-2896189	1527.74	42.02	0	-90
RP63031	Core	WGS84	South African	25908.93	-2896937	1530.1	50.36	0	-90
RP63032	Core	WGS84	South African	25981.47	-2894959	1539	26.82	0	-90
RP63033	Core	WGS84	South African	26667.99	-2895452	1551.27	20.65	0	-90
RP63034	Core	WGS84	South African	26729.82	-2896330	1539.02	29.97	0	-90
RP63035	Core	WGS84	South African	26668.71	-2897261	1542.45	61.17	0	-90
RP63036	Core	WGS84	South African	27254.2	-2896735	1548.49	38.68	0	-90
RP63037	Core	WGS84	South African	27176.57	-2895965	1556.95	38.79	0	-90
RP63038	Core	WGS84	South African	27580.17	-2896235	1559.12	46.53	0	-90
RP63039	Core	WGS84	South African	27746.39	-2897173	1562.88	67.5	0	-90
RP63040	Core	WGS84	South African	27673.33	-2895252	1572.6	62.55	0	-90
RP63041	Core	WGS84	South African	27979.18	-2896571	1561.17	71.14	0	-90
RP63042	Core	WGS84	South African	27184.73	-2897707	1564.36	59.85	0	-90
RP63043	Core	WGS84	South African	27692.9	-2897658	1574.23	72.13	0	-90
RP63044	Core	WGS84	South African	27928.03	-2894927	1578.34	71.72	0	-90

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
RP63045	Core	WGS84	South African	28506.16	-2895289	1587.61	122.64	0	-90
RP63046	Core	WGS84	South African	27948.36	-2895499	1580.54	83.99	0	-90
RP63047	Core	WGS84	South African	28312.17	-2895641	1587.64	101.6	0	-90
RP63048	Core	WGS84	South African	29081.17	-2895831	1606.34	123.7	0	-90
RP63049	Core	WGS84	South African	28739.06	-2896210	1585.72	110.15	0	-90
RP63050	Core	WGS84	South African	27978.25	-2896090	1573.78	83.5	0	-90
RP63051	Core	WGS84	South African	28399.94	-2896627	1566.62	86.7	0	-90
RP63052	Core	WGS84	South African	25334.9	-2894543	1533.48	38.75	0	-90
RP63053	Core	WGS84	South African	25231.71	-2894651	1532.14	38.75	0	-90
RP63054	Core	WGS84	South African	25212.26	-2894885	1530.46	48.57	0	-90
RP63055	Core	WGS84	South African	25313.76	-2894783	1532.37	42.56	0	-90
RP63056	Core	WGS84	South African	25440.63	-2894660	1534.12	35.88	0	-90
RP63057	Core	WGS84	South African	25556.51	-2894542	1535.44	31.05	0	-90
RP63058	Core	WGS84	South African	25674.93	-2894656	1534.51	33.49	0	-90
RP63059	Core	WGS84	South African	25561.59	-2894776	1533.81	33.53	0	-90
RP63060	Core	WGS84	South African	25330.88	-2894998	1531.19	48.55	0	-90
RP63061	Core	WGS84	South African	25327.08	-2895224	1531.29	50.48	0	-90
RP63062	Core	WGS84	South African	25451.42	-2895116	1532.26	47.77	0	-90
RP63063	Core	WGS84	South African	25563.07	-2895005	1533.34	41.15	0	-90
RP63064	Core	WGS84	South African	25679.8	-2894890	1534.6	35.75	0	-90
RP63065	Core	WGS84	South African	25783.84	-2894785	1535.53	27.6	0	-90
RP63066	Core	WGS84	South African	25894.22	-2894898	1536.94	27.55	0	-90
RP63067	Core	WGS84	South African	25786.37	-2894992	1535.61	39.98	0	-90
RP63068	Core	WGS84	South African	25670.92	-2895120	1534.52	52.06	0	-90
RP63069	Core	WGS84	South African	25565.61	-2895228	1533.49	45.95	0	-90
RP63070	Core	WGS84	South African	25445.71	-2895341	1532.4	51.48	0	-90
RP63071	Core	WGS84	South African	25450.33	-2895574	1532.65	52.42	0	-90
RP63072	Core	WGS84	South African	25565.92	-2895456	1534.76	49.32	0	-90
RP63073	Core	WGS84	South African	25678	-2895345	1535.53	46.39	0	-90
RP63074	Core	WGS84	South African	25794.16	-2895232	1536.12	46.33	0	-90
RP63075	Core	WGS84	South African	25908.63	-2895114	1537.17	41.18	0	-90
RP63076	Core	WGS84	South African	26152.05	-2895099	1541.1	31.02	0	-90
RP63077	Core	WGS84	South African	26024.33	-2895231	1539.14	42.24	0	-90
RP63078	Core	WGS84	South African	25913.5	-2895353	1538.35	47.17	0	-90
RP63079	Core	WGS84	South African	25786.62	-2895455	1537.46	48.45	0	-90
RP63080	Core	WGS84	South African	25677.51	-2895584	1536.29	49.38	0	-90
RP63081	Core	WGS84	South African	25556.55	-2895692	1533.51	47.67	0	-90
RP63082	Core	WGS84	South African	25763.36	-2895686	1537.42	50.72	0	-90
RP63083	Core	WGS84	South African	25919	-2895575	1538.84	48.97	0	-90
RP63084	Core	WGS84	South African	26023.88	-2895458	1539.7	47.75	0	-90
RP63085	Core	WGS84	South African	26140.61	-2895345	1541.49	43.34	0	-90
RP63086	Core	WGS84	South African	26379.99	-2895323	1545.68	28.1	0	-90
RP63087	Core	WGS84	South African	26240.42	-2895463	1543.28	42.36	0	-90
RP63088	Core	WGS84	South African	26145.26	-2895557	1541.66	47.73	0	-90
RP63089	Core	WGS84	South African	26012.46	-2895685	1540.21	47.83	0	-90
RP63090	Core	WGS84	South African	25914.35	-2895792	1539.22	50.86	0	-90
RP63091	Core	WGS84	South African	26031.5	-2895913	1540.37	49.02	0	-90
RP63092	Core	WGS84	South African	26266.64	-2895699	1543.57	46.39	0	-90
RP63093	Core	WGS84	South African	26377.03	-2895576	1545.29	46.01	0	-90
RP63094	Core	WGS84	South African	26490.37	-2895438	1547.06	30.13	0	-90
RP63095	Core	WGS84	South African	26475.99	-2895694	1545.47	41.66	0	-90
RP63096	Core	WGS84	South African	26367.72	-2895800	1543.53	48.97	0	-90
RP63097	Core	WGS84	South African	26257.13	-2895917	1541.24	46.36	0	-90
RP63098	Core	WGS84	South African	26140.4	-2896022	1540.22	46.01	0	-90
RP63099	Core	WGS84	South African	26483.81	-2895922	1543.21	44.77	0	-90
RP63101	Core	WGS84	South African	25396.34	-2895661	1530.72	47.15	0	-90
RP63102	Core	WGS84	South African	25391.57	-2895431	1532.02	49.98	0	-90
RP63103	Core	WGS84	South African	25392.43	-2895195	1531.73	46.74	0	-90
RP63104	Core	WGS84	South African	25391.97	-2894966	1530.86	42.30	0	-90
RP63105	Core	WGS84	South African	25392.83	-2894734	1533.92	31.42	0	-90
RP63106	Core	WGS84	South African	25390.37	-2894563	1535.55	32.47	0	-90
RP63107	Core	WGS84	South African	25393.66	-2894370	1534.15	31.49	0	-90
RP63108	Core	WGS84	South African	25380.81	-2894441	1534.49	31.43	0	-90
RP63109	Core	WGS84	South African	25470.58	-2895682	1532.19	48.94	0	-90
RP63110	Core	WGS84	South African	25473.86	-2895485	1533.09	46.42	0	-90
RP63111	Core	WGS84	South African	25472.79	-2895273	1532.64	45.10	0	-90
RP63112	Core	WGS84	South African	25479.81	-2894980	1531.68	40.44	0	-90
RP63113	Core	WGS84	South African	25475.42	-2894734	1534.38	30.00	0	-90
RP63114	Core	WGS84	South African	25476.16	-2894553	1536.15	28.49	0	-90
RP63115	Core	WGS84	South African	25463.41	-2894442	1535.52	29.20	0	-90
RP63116	Core	WGS84	South African	25312.97	-2894399	1532.13	31.25	0	-90
RP63118	Core	WGS84	South African	25356.98	-2895091	1531.20	45.65	0	-90
RP63118B	Core	WGS84	South African	25326.27	-2894627	1534.35	31.49	0	-90

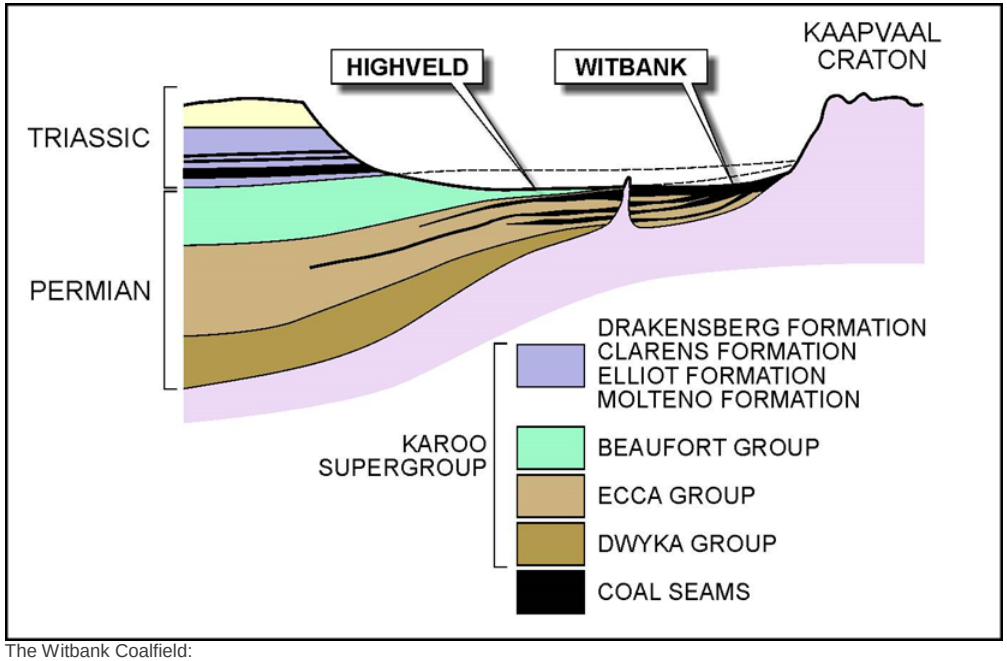
Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
RP63119	Core	WGS84	South African	25273.93	-2895339	1531.00	46.55	0	-90
RP63120	Core	WGS84	South African	25152.82	-2894735	1530.49	45.33	0	-90
RP63121	Core	WGS84	South African	25090.41	-2894198	1526.34	29.55	0	-90
RP63122	Core	WGS84	South African	25354.95	-2894868	1530.85	37.43	0	-90
RP63165	Core	WGS84	South African	25249.09	-2894441	1528.27	28.80	0	-90
RP63181	Core	WGS84	South African	25322.11	-2895595	1529.14	44.09	0	-90
RP63182	Core	WGS84	South African	25326.10	-2895344	1531.48	50.00	0	-90
RP63183	Core	WGS84	South African	25325.15	-2895145	1530.54	43.99	0	-90
RP63184	Core	WGS84	South African	25247.61	-2894942	1530.32	43.95	0	-90
RP63185	Core	WGS84	South African	25252.35	-2894832	1531.64	43.95	0	-90
RP63188	Core	WGS84	South African	25248.82	-2894247	1527.20	26.54	0	-90
RP63189	Core	WGS84	South African	25250.09	-2894341	1527.19	29.13	0	-90
RP63190	Core	WGS84	South African	25078.96	-2894256	1525.96	31.83	0	-90
RP63195	Core	WGS84	South African	25053.10	-2894523	1526.14	32.50	0	-90
RP63196	Core	WGS84	South African	25025.61	-2894820	1527.44	38.75	0	-90
RP63198	Core	WGS84	South African	25375.80	-2895264	1531.91	46.35	0	-90
RP63199	Core	WGS84	South African	25245.24	-2895255	1530.64	43.40	0	-90
RP63200	Core	WGS84	South African	25422.52	-2895043	1531.42	43.47	0	-90
WD14	Core	WGS84	South African	31314.21	-2896821	1600	98.15	0	-90
WD3580	Core	WGS84	South African	31662.78	-2897105	1607.84	108.45	0	-90
WD3680	Core	WGS84	South African	31375.25	-2896613	1601.67	103.69	0	-90
WD3780	Core	WGS84	South African	30787.03	-2896468	1598.16	102.39	0	-90

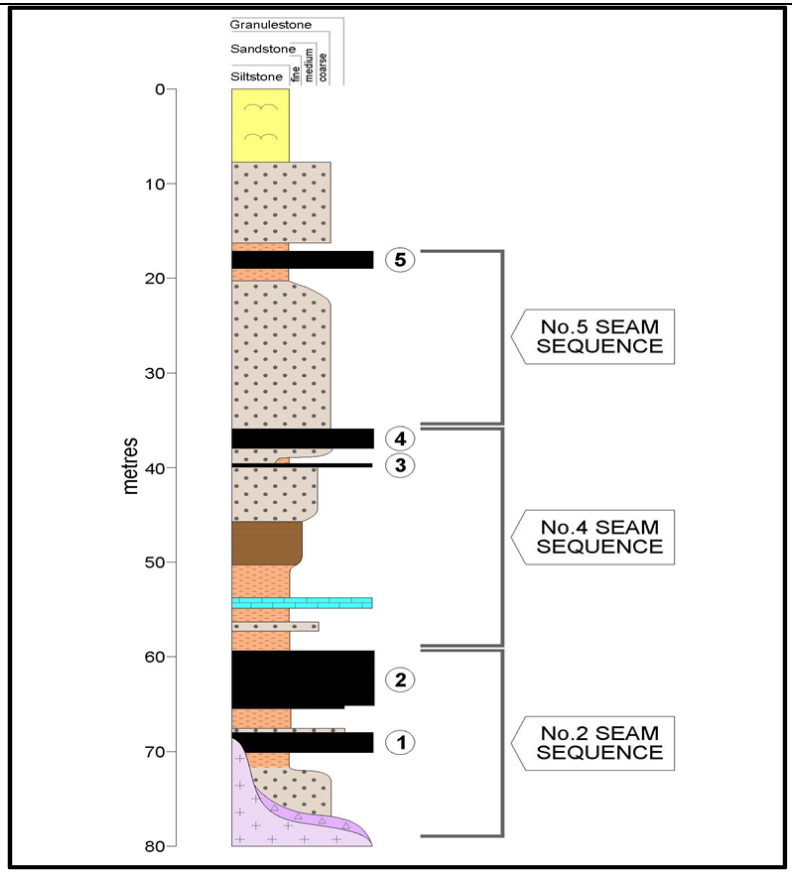
Annexure 3: JORC Code (2012) Table 1 for the Brakfontein Resources

Criteria	JORC Code explanation	CP Comments
Section 1: Sampling Techniques and Data		
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Core is transported in metal trays to a core storage facility. Extreme care is taken during transport, to retain the integrity of the core in the boxes. Detailed sampling of coal seams is undertaken only once the coal seam is logged accurately and in detail. Sample increments are based on variations in coal characteristics in conjunction with density data obtained from wireline logs. Whole core is sampled as per the South African industry standard and described as required in SANS 10320:2004. Where any core loss occurred, this is recorded on the sampling sheet. Only coal seams with satisfactory core recovery are sampled. All coal seams and intra seam non-coal partings are sampled separately depending on the thickness of the parting. As a guide, partings with a thickness of more than 30cm are sampled separately and if less than 30cm thick, included with the coal sample All coal samples are treated with due care during handling in order to minimise any change to the originally sampled material. The samples are bagged in 250 micron thick polyurethane bags. A paper sample tag is placed inside the bag with the coal and a further tag affixed to the uppermost fold-over of the bag. Care is taken to accurately record the sample names and the tags included with each sample on a sample sheet and transported to the laboratory (a Bureau Veritas Group company) in Middelburg, Mpumalanga, South Africa for testing.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so by what method, etc.).*	All holes are cored fully using a conventional TNW size barrel (60.5 mm core diameter). All holes are drilled vertical.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. Whether sample sizes are appropriate to the grain size of the material being sampled.*	An assessment of core recovery is made by the geologist in the field using the recovered thickness versus thickness reported in the geophysical log. If core recovery for a seam falls below 95 % the hole is re-drilled. Coal is sampled as is from the core and its representivity is dependent upon the core diameter size, i.e. the larger the diameter the more likely the coal is to break close to natural sizings. The core diameter used (60.5mm) is deemed appropriate. The coal deposit at Brakfontein is of the multiple seam type, consisting of discreet coal seams. No relationship between sample recovery and coal qualities exists. Coal fines (-0.5mm) are sampled and reported separately.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	All core (total length) is geologically logged, marked and photographed before sampling by an independent, qualified and experienced coal geologists. Logged followings industry-accepted coal lithological descriptions, procedures and methods and is qualitative in nature. Every aspect of the drill core is recorded in a standard data template. All holes intersecting coal are geophysical logged with a minimum of density, gamma and calliper. All geophysical tools are calibrated prior to arrival on site.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and*	The coal core is sampled whole, bagged on site and transported to the laboratory for testing. No non-core drilling is performed.

	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.*	Both Inspectorate laboratory in Middelburg and SGS Trichardt Laboratory are SANAS accredited and comply with South African Bureau of Standards and ISO standards for sample preparation and sub sampling and analyses. All coal samples are crushed to a top size of 25mm before analyses, a size deemed appropriate for the type and nature of the coal at Brakfontein. No field duplicate samples or half core samples are collected. Remaining sampling material is kept at the lab for a minimum of three months should any repeat analyses be required. Not applicable.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	Inspectorate laboratory in Middelburg and SGS Witbank Laboratory are SANAS accredited and comply with South African Bureau of Standards and ISO standards for sample preparation, sub sampling and analyses. For each Brakfontein sample the following tests/analyses are performed: - The raw Relative Density ("RD") is determined. - The sample is air dried to eliminate all surface moisture and the air dried mass is recorded. - The air-dried sample is crushed and screened and divided into –0.5mm and +0.5-25mm fractions - Proximate analysis (raw) is done on the two size fractions including inherent moisture content (C030-403W - Based on SABS 925), ash content (C030-401W - based on ISO 1171:97), volatile matter content (C030-404W - based on ISO 562:98) and fixed carbon (by difference). - Raw gross calorific value (MJ/Kg) (C030-405W - based on ISO 1928:95) and total sulphur content (C030-402W - based on ASTM:D4239-04a (Method B)) are determined for each size fraction. - Calculation of reconstituted raw coal values for total sample. - Washability tests (Float & Sink) are conducted on all specified samples. Six wash densities plus sink are used (F1.40, 1.50, 1.60, 1.70, 1.80, 1.90 and S1.90). The samples are screened and then submerged in a chemical solution at specific densities starting with the lowest (F1.40). The float is removed, dried and weighed and the sink moved onto the next barrel containing a higher density solution. This process is repeated until the maximum requested density (F1.90) is reached. After the washing process a representative sample of the different float fractions are submitted for a variety of laboratory tests on an air dried basis, including gross calorific value, inherent moisture (IM), volatile matter (VM), total sulphur (TS) and ash (AS) contents, which are calculated as percentages. - Calculation of cumulative wash values for each cut-point density and of reconstituted raw coal values for each washability test sample. - Ultimate analyses, ash analysis, ash flow temperature, abrasiveness index and hard grove index test work/analyses are done on selected samples. All geophysical tools are calibrated prior to arrival on site. A standard suite of geophysical sondes is run, including both long and short-spaced density calibrate internally to units of relative density (g/cc). No standard or blank samples are submitted for coal. Coal laboratories used all participate in round robin and inter-laboratory checks. Where the laboratory detects irregular analytical results a duplicate sample is re-analysed. Where this procedure does not resolve the irregularity a duplicate sample is sent to an external laboratory for verification. Coal quality analyses are checked for consistency in terms of cross correlation between parameters such as Density/Ash & CV and Ash results.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	All coal intersections are verified against the wireline logs. Twinning is only done to establish correlation and verification of old boreholes where applicable.

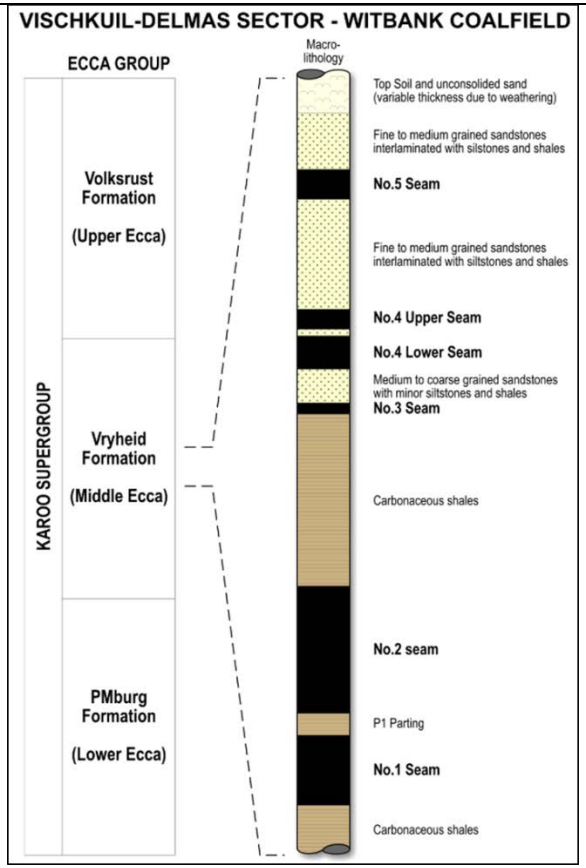
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	The laboratory makes use of a custom designed LIMS with traceability to all raw data. All data calculations are done automatically and are first line checked by the laboratory supervisors for duplicate results repeatability and all out of tolerance results are repeated. Completed projects are handed over to the Customer Liaison Officer. Data is extracted to Microsoft Excel where it is pulled into graphs (macro operated) with pre-set limits using calorific value/ash correlation with upper and lower tolerance values. All results are also manually evaluated by experience personnel and all suspect results together with all results that deviate by 2 points below or above the pre-set check value are repeated. All lab results are received both by electronic and hard copy (signed) formats. All data is electronically imported and stored in an electronic geological data base (Geobank). Coal quality data is checked and verified in the Geological data base. Washability data can be normalised to report additional wash fractions if needed within the current rage of wash densities.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	All boreholes are initially positioned by the field geologist using a hand-held GPS with accuracies of ±10m. At completion of each drilling program final collar positions of boreholes are surveyed using a high-accuracy differential GPS (Leica 1200 Dual Frequency GPS with Base Station), operated by professional, qualified surveyors at X-Y accuracies of less than 10mm and Z accuracies of <1 metre. Mine plans of historical underground working in the area where obtained, and these are deemed accurate to less than 50m on plan. Grid used: South African LO29 grid system, Hartebeesthoek 94 (WGS84) datum. A detailed surface survey was also completed by professional, qualified surveyors using a differential GPS system. The survey is used to validate/verify hole collar elevations and develop detailed mine and surface infrastructure plans (1m contour intervals). Relevant surface features (like roads) are surveyed for accuracy.
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.* • *Whether sample compositing has been applied.*	Extensive drilling has been done on the property to allow for the modelling and reporting of coal resources. The data spacing and distribution are sufficient to meet the JORC 2012 limits for classification of a Measured, Indicated and Inferred resource and appropriate for the structural provenance of the area. Where more than one sample is taken within the coal seam, composite coal qualities are calculated for the total coal seam selection.
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.*	The Coal Measures at this locality strike approximately 90°, are flat-lying and underlay the entire project area. Boreholes are more densely distributed over imminent planned mining areas and to a more widely spaced over the remainder of the project area. The coal seams are nearly horizontal and the apparent thickness (width) of the intersected coal seams closely approximates the true thickness.
Sample security	• *The measures taken to ensure sample security.*	Sample security is ensured under a chain of custody between Universal Coal personnel and the laboratories. All samples delivered to the lab are signed off by the relevant personnel.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Regular site inspections, verification of exploration procedures and activities are undertaken by the independent competent person. The laboratories undertake internal audits and check, in line with international standards, to ensure their analysis results are consistent and reporting is correct. Coal quality and physical data is extensively reviewed and validated within the borehole database as part of the coal modelling procedures.
Section 2: Reporting of Exploration Results		
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.*	Universal Coal Development III (Pty) Ltd holds title to a mining right (MP30/5/1/1/2/10027MR), which was granted by the Department of Mineral Resources on 25 July 2014.Universal Coal Development III (Pty) Ltd is a joint venture between Universal Coal plc (50.29% ownership) and black economic empowerment entity, Unity Rocks Mining (Pty) Ltd (49.71% ownership). The following portions of the farm Brakfontein 264IR are included in the mining right application: • Portions 6, 8, 9, 10, 20, 26, 30 and the remaining extent. Surface rights are not owned by Universal coal, but access agreements are in place. Current land use is mainly dominated by commercial farming activities.
Exploration	• *Acknowledgment and appraisal of exploration by other parties.*	Historical exploration was done by Ingwe Coal and Brakfontein Navigation Steam Collieries. The data is mainly sourced from the

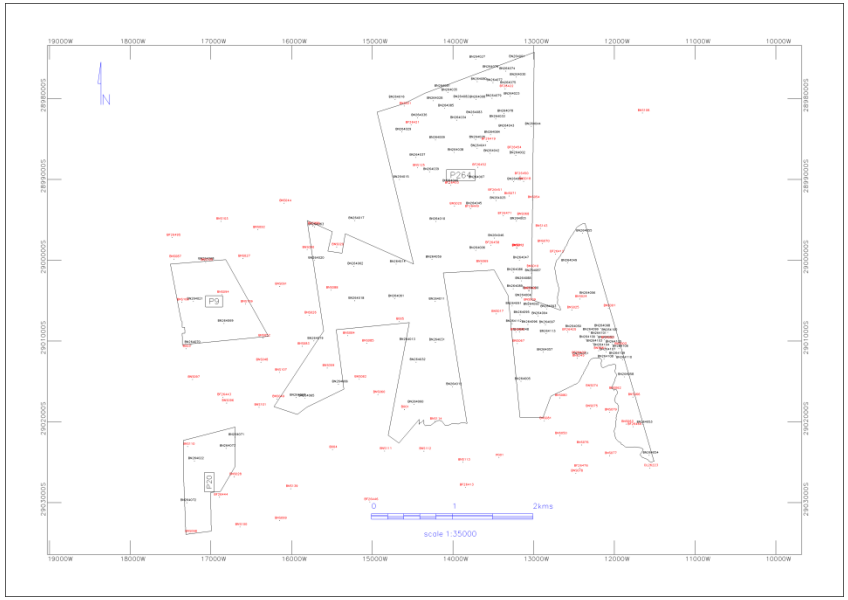
done by other parties		Council of Geosciences in South Africa. A total of 114 historical boreholes are available. These boreholes are generally logged and sampled to a lower standard than currently employed by Universal Coal. The historic borehole data was used in previous resource estimations, it omitted from the latest geological model due to sufficient borehole coverage form boreholes drilled by Universal coal since 2009.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The main Karoo Basin: - Filled between the Late Carboniferous and Middle Jurassic periods; - Lithostratigraphically subdivided into the Dwyka, Ecca and Beaufort groups, succeeded by the Molteno, Elliot and Clarens Formations and the Drakensburg Formation (volcanics); - The coal bearing Ecca Group has been divided into three sub-units: the Pietermaritzburg; Vryheid and Volksrust Formations.  The Witbank Coalfield: - The coal-bearing Vryheid Formation attains a thickness of 70m to 200m in the Witbank Coalfield; - Here the Vryheid Formation consists of five coarsening-upward sequences with coal seams associated predominantly with the coarser-grained fluvial facies at the top of each sequence; - The No. 2, 4, 5 and 1 seams are of economic interest.

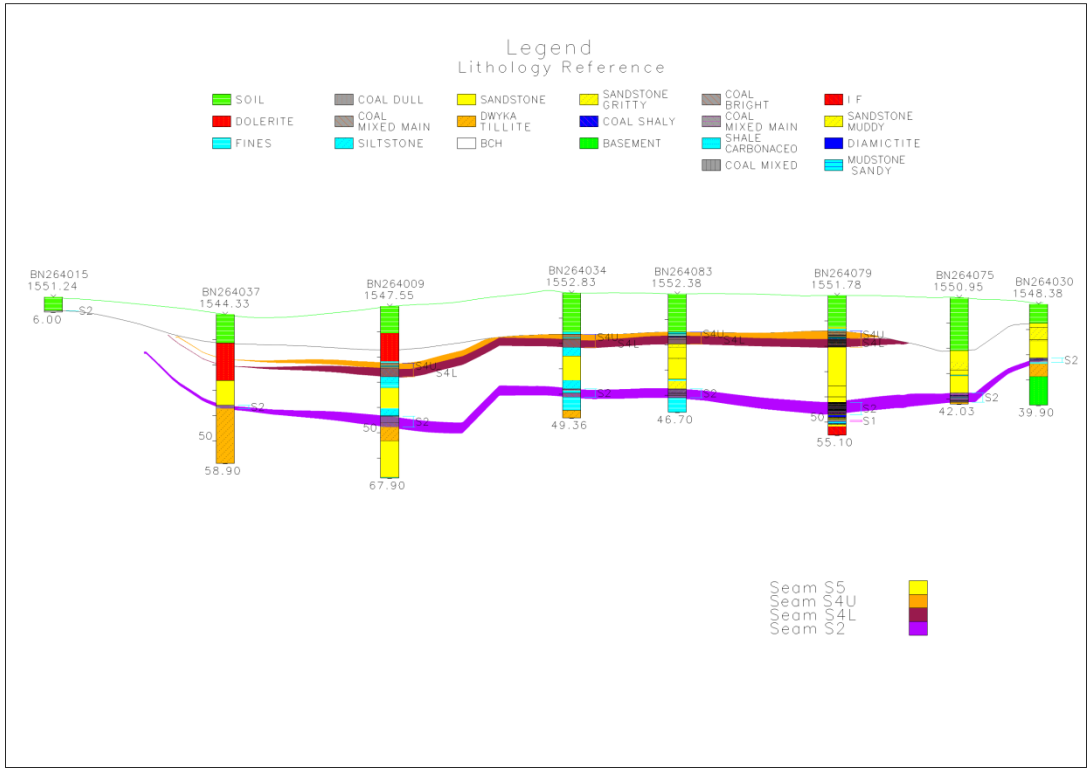


Local Geology:

- The Brakfontein Project is underlain by a 40m to 100m thick succession of sandstone, shale and coal of the Vryheid Formation;
- Represents a multiple seam deposit type hosting the No. 4, No. 2, No. 1 seams
- The typical lithostratigraphic sequence at Brakfontein is illustrated below:

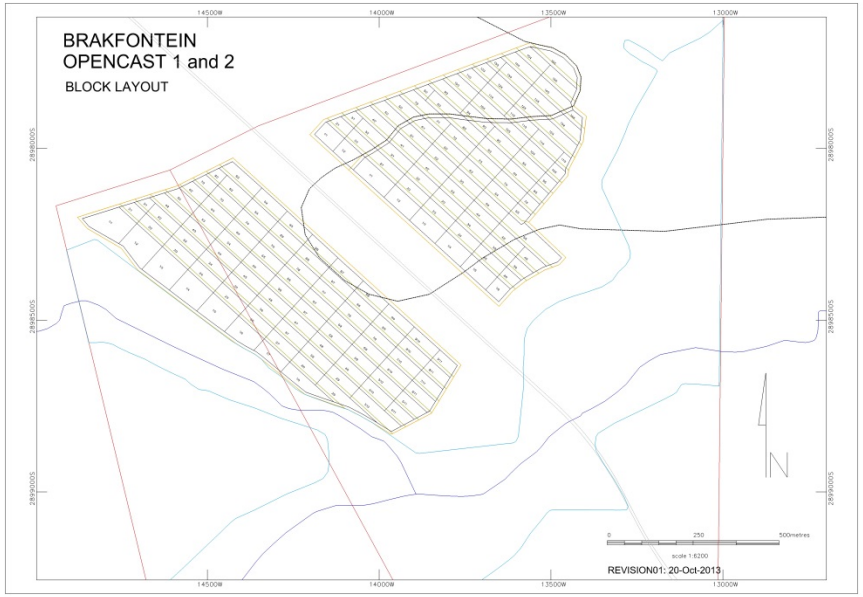
		 - The coal seams are characteristically near horizontal and often split by shale and sandstone bands
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* - *easting and northing of the drill hole collar* - *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* - *dip and azimuth of the hole* - *down hole length and interception depth* - *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly*	A full list of details of drill holes used in the Resource Estimate can be found in Annexure 3a. All drill holes are drilled vertical. All relevant borehole information is part of the borehole database. This includes the collar coordinates, end of hole depths, dip, coal seam intersection depths and lithological (both general and detailed) intersection widths.

	explain why this is the case.	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	All seams where multiple coal quality samples are taken are given a composite value (generated within the Minex software), weighing each quality by thickness and in situ density, with the exception of in situ density which is weighted on thickness. No quality truncations are applied within the resource modelling process. Not applicable. Not applicable.
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 (eg 'down hole length, true width not known').*	The coal seams are nearly horizontal and the apparent thickness (width) of the intersected coal seams closely approximates the true thickness. Coal seam qualities are not related to the thickness of these intersections.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported.* • *These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	All appropriate diagrams are contained within the Brakfontein Competent Persons Report, Jan 2016. Both plan and section views are presented in the report. A plan showing the borehole locations as well as a cross section is displayed below: 

		
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 exploration results within the Brakfontein area have been reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	A number of additional geology-related studies have been completed during the feasibility study. These include: - A Geotechnical Investigation; - Coal wash simulation and ultimate analytical studies; - Geohydrological study.
Further work	• *The nature and scale of planned further work (eg 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.*	More infill drilling will be done in future to provide more detail for the planned opencast and underground resource areas All potential resources areas are identified and presented as part of the CPR.

Section 3: Estimation and Reporting of Mineral Resources		
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.*	All the exploration data and analytical results are imported into a Geobank database and subjected to validation routines. - Lithological descriptions are verified against the down hole geophysical logs, and coal seam correlations are validated. - Coal sample positions are verified against coal seam occurrences, and raw coal analyses compared to lithological descriptions. - A number of analytical tests and routines are used to validate all the raw and washability data as received from the laboratory. - Anomalies are identified, queried and corrected where possible, otherwise flagged and removed from the final modelling dataset prior to geological modelling and resource calculation
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 did not undertake a site visit but are familiar with the area and geology from past work experience. Geologists employed by Gemecs, reporting directly to the competent person have been working on site during the exploration programme.
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.*	Confidence in the geological interpretation is high: Exploration boreholes cover the whole project area and confirmed the continuity of the seams and coal quality. Imminent mineable resource areas are covered with a denser spaced drilling pattern, with a higher level of confidence. Boreholes are geologically detailed logged, acceptably sampled and data used was independently validated. No alternative interpretations are done. The Mineral Resource estimation is primarily guided by the local geology. Continuity in geology and quality is primarily affected by basement topography as well as dolerite dykes and sills. All these factors are considered in the geological estimation and reporting.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation.* • *Method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and* • *Whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *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.*	The geological model is created from base principles using Geovia Minex software. Modelling methodology followed is in line with the norm applied to model and estimate similar deposits in the Witbank coal field, South Africa. Any data interpolation is limited to 150m from the last known data point. The general growth algorithm (general gridding) is used to generate the geological model. Previous resource estimates were also done by Gemecs and reported on in the CPR. Appropriate cut offs and practical mineability factors are included into the resource estimation process. Various coal quality products, both primary and secondary products are included in the resource estimation and discussed in the CPR. No other elements are estimated or reported on, but the normal proximate, CV and TS coal qualities. Grids are modelled on a 50x50m cell size. Total coal seams are modelled with no sub selections made.
Estimation and modelling techniques (continued)	• *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.*	All variables are correlated by means of the same coal seam horizon. Provision is made for any geological discontinuities by applying a geological loss factor to the estimated resource tonnages. Areas known not to have any coal seams present within the prospect are excluded from the resource estimation. Computer generated grids are checked against the actual point input data to ensure that the model honours the input data, and that reported values are within required ranges.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	All coal quality values are reported on an air dried basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	Coal quality cut offs are applied to report between high and low volatile coal products. Coal seam thickness is applied to exclude thin, potentially uneconomical coal seams.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining*	Some resource areas are classified to be either mineable by means of opencast or underground methods. Basic assumptions of seam thickness, depth below surface and in situ strip ratios are applied to determine the definition thereof. A full list of assumptions is listed in the CPR. No other mining assumptions are made, as this will be part of future mining studies.

	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.	
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.*	No metallurgical assumption or any wash plant factors are applied to the estimation. All coal qualities, products and yields are reported on a theoretical borehole basis. The coal from the Brakfontein project will have to be upgraded by means of wash plant processing to achieve a saleable product suitable for the local or export markets. Yields and products reported are typical of what can be achieved from this resource.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	All environmental issues are part of the Environment management plans as submitted as part of the mining licence, NEMA and Water Use application. Known environmental sensitive areas have been excluded from the mineable opencast coal resource areas.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	No bulk density have been determined or measured.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie 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.*	Resource classification of the coal seams are applied according to the guidelines as described in the Australian Guidelines for Estimating and reporting of Inventory coal, coal resources and coal reserves (2012). In the Measured and inferred categories, a closer than suggested point density was applied at Brakfontein. Only boreholes with both seam intersection as well as coal quality variables are used to determine the resource categories. Resource categories used is in line with the competent person's view of the geology in the area.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	No external reviews were done. All results are reviewed by Universal Coal's project geologist.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent* • *Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be*	Details on the resource categories are stated in the CPR. A detailed geostatistical study is not deemed to be a pre requisite for classifying the local coal resources. Coal resource estimations are detailed in the CPR.

	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.*	
Section 4: Estimation and Reporting of Ore Reserves		
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 Ore Reserve Estimate is based on the Mineral Resource estimate completed on 26 May 2014 by Nico Denner of Gemecs, who is a Competent Person as defined by the 2012 JORC Code. - The Mineral Resource estimate is based on a geologically model prepared in Minex (Refer to Section 3 above). Universal Coal's chief geologist is familiar with the deposit and was responsible for providing guidance to the geological interpretation and domain wireframe generation used in the creation of the model. - Only the Northern Open Cast Resource Areas is converted to Ore Reserves using Minex Mine Planning and Scheduling software, targeting a constant production rate of 1.2 million tons per annum (Mtpa) on a constant basis over an 8 year life of mine. **This can be termed Phase 1 of the project.** 
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 had on several occasions visited the Brakfontein project and surrounding areas. Other Universal Coal staff and independent consultants responsible for the preparation of the Ore Reserve estimate and compilation of the Pre-Feasibility study also made several visits to the project.
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.*	A Pre-Feasibility study has been completed for the Brakfontein project.

Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	- The structure of the geological model allows only for a thickness of greater or equal to 0.5m to be used. - A 14 % Volatile cut-off was applied to the in situ quality.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg 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.*	- The classification of Coal Reserves into Proved and Probable categories has been based on the "Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves (The JORC Code) 2012 edition". - The Resource model (geological model) used for the estimation of Coal Reserves is the same model used for the estimation of Coal Resources. - The mining methods assumed for the Brakfontein northern open cast area include conventional truck-shovel methods with some assistance from bulk dozer push. The following mine design parameters were deemed appropriate for the northern open cast block: ▪ Type of operation: Load and Haul Surface Strip Mining ▪ Minimum mineable strip length: 200m ▪ Minimum width of mining strip: 50m ▪ Bench width on Hards: 25m ▪ Wall batter effective angle 75 degrees ▪ Minimum coal seam thickness after losses: 0.5m ▪ Buffer from wetland and/or 100 year flood line: 50m ▪ Geological loss applied: 15% ▪ Total mining loss on reserve: 2.5% ▪ Extraction losses: 95.6% for the 4U seam, 95% for the 4L seam and 90.4% for the 2 seam. ▪ Contamination applied: 100 mm from each of the roof and floor ▪ These factors will require revision when sufficient reconciliation data is available from primary coal mining. - Final pit slope design parameters were recommended by the competent person, based on geotechnical logging of existing drill core of selected holes and laboratory testing. - Loading and haulage are achieved by a conventional truck and backhoe excavator fleet with four 100 ton excavators, sixteen 40 t ADT and two D10 dozers. - The Ore Reserve is estimated within an open pit design that includes ramps and safety berms on the pit walls. - A life of mine production schedule was generated and showed that ROM coal can be presented to the ROM stockpile in sufficient quantity in each year of the mine life to satisfy the assumptions regards costs used in the Ore Reserve estimate. - Infrastructure required to support the proposed open pit mining operation includes boxcut, access, maintenance and haul roads, water management, including pipelines and pumps, storm water drains, a pollution control dam, security fencing, lighting, weighbridges and a fuel depot, electrical infrastructure, offices and maintenance workshops, waste dumps and ROM coal stockpiles . - No Inferred Coal Resources were utilised in the mining studies.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	- Brakfontein processing would entail crushing and screening only, treating 100 000 tons of ROM coal per month. - No bulk sample or pilot scale test work was undertaken. - Prior to processing, the raw coal quality data was diluted by adding 'contamination', ie. shale and/or stone normally associated with the mining operation due to the inclusion of extraneous roof, floor or inter-seam partings with the raw coal. - Brakfontein project will produce domestic coal with product qualities (air dried) suitable for sale to the South African domestic power utility Eskom. - There are no deleterious elements present, such as would necessitate special attention during treatment.
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 Brakfontein Project has an approved National Environmental Management Act (NEMA) Authorisation, an approved Mining Right, EMPR, Social and Labour Plan (SLP). Water Use Licence and Waste Licence applications were submitted and are awaiting approval. It is assumed that approval for the Water Use and Waste licences will be obtained. - A detailed Environmental Impact Assessment (EIA) was undertaken during the Pre-Feasibility study by Digby Wells and Associates and forms the basis for the abovementioned licences. - The recommendations and commitments of the EIA and SLP have been taken into consideration in the Ore Reserve estimate and there are no other factors likely to have a material impact on the estimate. - Waste water would be retained in a pollution control dam (PCD), the design and position having been incorporated into the

		approved EIA, NEMA, EMPR, Waste Licence and Water Use Licence application.
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.*	- None of the required infrastructure currently exists on the project area and would be required to be constructed during future commissioning of the operation. - The project area has sufficient land available for the required infrastructure, but acquisition or lease of the surface rights would be required. - Sufficient water, power and road infrastructure exists on/close to the project area to support the proposed operation. - Sufficient labour is available from the town of Delmas, 25km from the project area and no accommodation would be required on the proposed operation.
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 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.*	- The actual assumed mining costs are not disclosed in this document as they are commercially sensitive. - Capital costs for the infrastructure at Brakfontein (including Mining (incl box-cut, crushing and screening, discard co-disposal facility, earthworks, buildings, roads and bridges, fencing, water, storm water, electricity, maintenance vehicles, staff & ancillaries, information software and hardware, acquisition of land, legal costs and rehabilitation bonds) have been estimated as part of the Pre-Feasibility study. Capital cost inputs have been applied based on the results of the individual expert contributions and are in real terms. - Mine operating costs have been estimated with a combination of first principle calculations, and life of mine (long term) cost estimates. Mining costs vary with strip ratio and waste rock classification (free-dig or hard waste) - hard waste and coal have a higher extraction cost due to blasting and grade control charges (for coal). Crushing and screening costs are distributed over the range of processing throughput rates for the purposes of estimating a total unit cost of processing. General and Administration unit costs for the site were estimated. Costs of major consumables (fuel, electrical power, steel, chemicals) are based on a combination of supplier contracts and market intelligence. - No allowances for deleterious elements are necessary or have been made. - Coal product specifications include limits for these, and coal is produced and sold within specifications. - Estimates for transportation charges and government royalties and taxes have been obtained from Government legislation or from existing medium-term coal sales agreements between Universal Coal and relevant parties. - No export penalties have been included in the estimate of Coal Reserves. - The long term USD/ZAR exchange rate assumed is commercially sensitive and is not inconsistent with actual long term historical average exchange.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	- The actual assumed coal prices are not disclosed in this document as they are commercially sensitive. - For export thermal coal the pricing has been based on guidance obtained from the market analysts relating to a Richards Bay export thermal coal price (RB1) done. - Eskom coal sales pricing and transportation charges are based on existing medium-term coal sales agreements between Universal Coal and Eskom.
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.*	- Product tonnage forecasts for Brakfontein are primarily driven by Ore Reserve controls and internal analyses of market trends based on independent marketing reviews. - Consensus amongst these analysts is that domestic (Eskom) and worldwide demand for thermal coals will continue to increase over the long term. The price forecasts from market analysts take into account the forecast relationship between supply and demand on regional and worldwide bases.
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.*	- Net present values are not reported in this document, however the NPV and IRR confirms the economic viability of the Brakfontein project. - The assumptions and inputs to the economic analysis to produce the net present value (NPV) in the study include: ▪ The Mine will produce 9.62mt ROM over a life of mine of 9 years from the 4 and 2 seams. The average annual ROM production is Run of Mine is 1 200 000 tpa. ▪ The average stripping ratio is 3.34:1. The stripping ratio peaks in year 8 at 4.62:1. ▪ The ore is processed in a crush and screening unit at 100,000 tpm. ▪ The total product yield (Eskom) is 100% and the mine produces a total product of 9.62mt. ▪ Coal is sold ex gate, free-on-truck. ▪ The coal prices applied are based on the price forecast by market analysts. ▪ Refer to “Costs” above for details on assumptions of costs, royalties and taxes used in the economic analysis. ▪ A discount rate of 10% was applied. - The confidence of the economic inputs complies with the requirements of a Pre-Feasibility study.
Social	• *The status of agreements with key stakeholders and matters leading*	- A detailed Social and Labour Plan (SLP) was developed in conjunction with all stakeholders as part of UCDIII’s mining right

	to social licence to operate.	application. The SLP was approved by the Department of Mineral Resources and entails commitments relating to human resource development and local economic development. - The costs relating to the SLP commitments have been taken into consideration in the economic analysis of the Brakfontein project.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	- The material naturally-occurring risks expected to impact the proposed Brakfontein operation are: ▪ Environmental – The area includes a number of wetlands that constitutes protected areas. A 100m buffer zone from the wetlands has been incorporated in the mine design. Berms will also be placed along the buffer zone to protect the wetlands. Excess water generated during mining will captured by pollution control dams to prevent contamination of the wetlands. ▪ The following regulatory approvals are in place: ▪ Mining Right and EMPR. ▪ National Environmental Management Act (NEMA) Authorisation. ▪ The following regulatory approvals are outstanding: ▪ Water Use Licence – processing of the application by Government is in progress. ▪ Waste Disposal Licence – processing of the application by Government is in progress. ▪ No coal marketing arrangements or supplier agreements for mining, processing, fuel, railing, port handling, and electricity are in place – are expected to be sought as part of the next stage of development. ▪ The Measured Resource in the southern open cast (OCS) and the underground (UG) areas have been excluded at this stage and are expected to be incorporated in future.
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).*	The Coal Reserves are classified as Proved Coal Reserves based on the JORC (2012) Code. The basis for classification of Coal Reserves is the Coal Resource category polygons (Measured) for each seam within the open cast north area, in conjunction with the calculated profits and other modifying factors.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	- The Coal Reserve estimate has been prepared by an external independent mining consultancy Mindset Mining Consultants (Pty) Ltd. The Competent Persons are employees of Mindset and suitably qualified and experienced to act in that capacity. - No external audit of the reserve estimate has been conducted.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.* • *Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	- The design, schedule and financial model on which the Ore Reserve is based has been completed to a Pre-Feasibility standard, with a corresponding level of confidence. - Modifying factors, the quantum of which was determined by experienced and independent geological, mining, processing, environmental and marketing experts was applied to the Brakfontein project on a global scale.

Annexure 3a: Drill Hole Data Summary for the Brakfontein Project

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
B001	Core	WGS84	South African	-14603.00	-2901847.00	1551.10	31.85	0	-90
B002	Core	WGS84	South African	-17378.00	-2899497.00	1580.10	38.10	0	-90
B003	Core	WGS84	South African	-17308.00	-2901096.00	1590.10	98.44	0	-90
B004	Core	WGS84	South African	-15493.00	-2902344.00	1552.00	25.30	0	-90
B005	Core	WGS84	South African	-14665.00	-2900758.00	1556.90	45.72	0	-90
BF26401	Core	WGS84	South African	-12095.69	-2900989.30	1549.00	38.84	0	-90
BF26402	Core	WGS84	South African	-12458.39	-2901176.30	1532.00	29.87	0	-90
BF26409	Core	WGS84	South African	-13220.38	-2900890.30	1556.00	36.27	0	-90
BF26412	Core	WGS84	South African	-12729.69	-2899924.30	1552.00	42.60	0	-90
BF26413	Core	WGS84	South African	-13847.28	-2902810.29	1534.00	13.41	0	-90
BF26419	Core	WGS84	South African	-13576.98	-2898530.80	1551.00	50.01	0	-90
BF26421	Core	WGS84	South African	-14518.78	-2898326.80	1563.00	71.17	0	-90
BF26422	Core	WGS84	South African	-13354.00	-2897879.00	1557.00	51.56	0	-90
BF26425	Core	WGS84	South African	-12577.09	-2900890.30	1530.00	26.11	0	-90
BF26440	Core	WGS84	South African	-12135.29	-2901612.29	1535.00	70.69	0	-90
BF26441	Core	WGS84	South African	-12144.00	-2901584.00	1536.50	86.17	0	-90
BF26443	Core	WGS84	South African	-16851.87	-2901694.79	1587.00	92.07	0	-90
BF26444	Core	WGS84	South African	-16892.27	-2902932.29	1577.00	90.95	0	-90
BF26445	Core	WGS84	South African	-15700.18	-2902869.79	1563.00	53.40	0	-90
BF26446	Core	WGS84	South African	-15030.28	-2902990.79	1555.00	56.05	0	-90
BF26449	Core	WGS84	South African	-13782.68	-2899365.30	1537.00	14.02	0	-90
BF26450	Core	WGS84	South African	-13168.28	-2898959.30	1532.00	39.47	0	-90
BF26451	Core	WGS84	South African	-13494.78	-2899163.30	1535.00	39.50	0	-90
BF26452	Core	WGS84	South African	-13691.74	-2898850.84	1547.00	47.24	0	-90
BF26453	Core	WGS84	South African	-14030.84	-2899073.34	1543.00	49.07	0	-90
BF26454	Core	WGS84	South African	-13256.14	-2898636.84	1539.00	35.97	0	-90
BF26458	Core	WGS84	South African	-13530.54	-2899813.84	1552.00	38.40	0	-90
BF26466	Core	WGS84	South African	-11766.45	-2902060.33	1540.00	67.44	0	-90
BF26471	Core	WGS84	South African	-13375.74	-2899451.34	1543.00	44.02	0	-90
BF26476	Core	WGS84	South African	-12430.95	-2902575.33	1545.00	36.91	0	-90
BF26495	Core	WGS84	South African	-17478.33	-2899720.34	1580.00	84.40	0	-90
BN264001	Core	WGS84	South African	-13226.26	-2897511.74	1554.26	53.30	0	-90
BN264002	Core	WGS84	South African	-13222.03	-2898701.47	1531.11	53.39	0	-90
BN264003	Core	WGS84	South African	-13213.59	-2899516.01	1549.58	53.32	0	-90
BN264004	Core	WGS84	South African	-13149.09	-2900464.69	1552.42	37.85	0	-90
BN264005	Core	WGS84	South African	-13157.43	-2901499.61	1530.73	11.30	0	-90
BN264006	Core	WGS84	South African	-13718.63	-2899878.54	1558.43	17.32	0	-90
BN264007	Core	WGS84	South African	-13726.56	-2899003.74	1534.49	11.30	0	-90
BN264008	Core	WGS84	South African	-13716.58	-2898010.86	1555.98	59.32	0	-90
BN264009	Core	WGS84	South African	-14217.20	-2898512.43	1547.55	67.90	0	-90
BN264010	Core	WGS84	South African	-14213.56	-2899520.43	1548.56	6.00	0	-90
BN264011	Core	WGS84	South African	-14219.94	-2900510.56	1576.08	59.28	0	-90
BN264012	Core	WGS84	South African	-14006.73	-2901564.50	1544.86	29.30	0	-90
BN264013	Core	WGS84	South African	-14585.17	-2901011.28	1562.67	52.31	0	-90
BN264014	Core	WGS84	South African	-14704.64	-2900048.39	1562.10	57.43	0	-90
BN264015	Core	WGS84	South African	-14663.21	-2899000.98	1551.24	6.00	0	-90
BN264016	Core	WGS84	South African	-14717.53	-2898011.81	1562.20	59.32	0	-90
BN264017	Core	WGS84	South African	-15216.07	-2899510.09	1549.27	24.91	0	-90
BN264018	Core	WGS84	South African	-15217.49	-2900501.55	1565.23	47.27	0	-90
BN264019	Core	WGS84	South African	-15723.55	-2900998.68	1576.08	107.30	0	-90
BN264020	Core	WGS84	South African	-15714.11	-2900003.48	1559.04	71.32	0	-90
BN264021	Core	WGS84	South African	-17215.97	-2900509.50	1590.43	109.97	0	-90
BN264022	Core	WGS84	South African	-17203.05	-2902483.85	1587.72	116.76	0	-90
BN264023	Core	WGS84	South African	-13292.09	-2897971.47	1546.72	53.32	0	-90
BN264024	Core	WGS84	South African	-13247.82	-2899026.41	1538.72	65.38	0	-90
BN264025	Core	WGS84	South African	-13464.68	-2899261.19	1544.17	59.32	0	-90
BN264026	Core	WGS84	South African	-13720.08	-2898508.31	1546.06	51.68	0	-90
BN264027	Core	WGS84	South African	-13718.74	-2897515.84	1560.14	74.39	0	-90
BN264028	Core	WGS84	South African	-14244.43	-2898026.22	1562.04	65.32	0	-90
BN264029	Core	WGS84	South African	-14634.65	-2898411.45	1550.96	54.09	0	-90
BN264030	Core	WGS84	South African	-13216.90	-2897734.15	1548.38	39.90	0	-90
BN264031	Core	WGS84	South African	-14217.67	-2901015.19	1560.44	65.30	0	-90
BN264032	Core	WGS84	South African	-14457.39	-2901261.28	1557.52	89.30	0	-90
BN264033	Core	WGS84	South African	-13470.76	-2898252.87	1546.42	47.22	0	-90
BN264034	Core	WGS84	South African	-13954.59	-2898267.12	1552.83	49.36	0	-90
BN264035	Core	WGS84	South African	-14064.47	-2897923.84	1560.93	83.15	0	-90
BN264036	Core	WGS84	South African	-14438.73	-2898236.05	1557.36	95.70	0	-90
BN264037	Core	WGS84	South African	-14459.99	-2898728.64	1544.33	58.90	0	-90
BN264038	Core	WGS84	South African	-13986.97	-2898665.68	1540.26	51.79	0	-90
BN264039	Core	WGS84	South African	-14290.90	-2898905.42	1543.70	61.97	0	-90
BN264040	Core	WGS84	South African	-14051.76	-2899048.21	1537.50	23.98	0	-90
BN264041	Core	WGS84	South African	-13700.48	-2898614.27	1542.81	21.90	0	-90

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
BN264042	Core	WGS84	South African	-13541.20	-2898677.45	1536.17	44.51	0	-90
BN264043	Core	WGS84	South African	-13357.75	-2898368.52	1539.94	50.70	0	-90
BN264044	Core	WGS84	South African	-13029.35	-2898345.10	1540.28	35.34	0	-90
BN264045	Core	WGS84	South African	-13759.90	-2899328.61	1543.63	38.83	0	-90
BN264046	Core	WGS84	South African	-13486.84	-2899726.11	1553.21	39.60	0	-90
BN264047	Core	WGS84	South African	-13177.41	-2899999.31	1550.62	49.57	0	-90
BN264048	Core	WGS84	South African	-13176.66	-2900888.89	1545.58	13.90	0	-90
BN264049	Core	WGS84	South African	-12581.17	-2900034.06	1536.78	23.88	0	-90
BN264050	Core	WGS84	South African	-12529.05	-2900850.56	1526.27	41.53	0	-90
BN264051	Core	WGS84	South African	-12436.28	-2901186.79	1527.067	35.80	0	-90
BN264052	Core	WGS84	South African	-12124.43	-2900985.38	1541.98	30.90	0	-90
BN264053	Core	WGS84	South African	-11645.00	-2902034.35	1540.89	40.66	0	-90
BN264054	Core	WGS84	South African	-11569.43	-2902413.29	1538.72	53.55	0	-90
BN264055	Core	WGS84	South African	-12394.76	-2899666.44	1546.06	20.18	0	-90
BN264056	Core	WGS84	South African	-12352.72	-2900437.53	1529.40	17.51	0	-90
BN264057	Core	WGS84	South African	-12881.86	-2901138.20	1534.46	9.47	0	-90
BN264058	Core	WGS84	South African	-11877.24	-2901443.68	1541.79	19.37	0	-90
BN264059	Core	WGS84	South African	-14260.26	-2899990.36	1563.80	12.19	0	-90
BN264060	Core	WGS84	South African	-14481.69	-2901783.84	1546.50	37.91	0	-90
BN264061	Core	WGS84	South African	-14723.43	-2900474.49	1573.16	53.13	0	-90
BN264062	Core	WGS84	South African	-15229.16	-2900074.39	1558.12	17.04	0	-90
BN264063	Core	WGS84	South African	-15716.88	-2899587.80	1554.67	35.53	0	-90
BN264065	Core	WGS84	South African	-15834.79	-2901708.37	1565.86	57.05	0	-90
BN264066	Core	WGS84	South African	-15419.27	-2901534.16	1566.82	107.15	0	-90
BN264067	Core	WGS84	South African	-15943	-2901700	1561.00	50.20	0	-90
BN264068	Core	WGS84	South African	-17077.33	-2900013.31	1585.77	66.70	0	-90
BN264069	Core	WGS84	South African	-16837.39	-2900782.65	1578.57	82.60	0	-90
BN264070	Core	WGS84	South African	-17247.06	-2901045.22	1590.84	100.97	0	-90
BN264071	Core	WGS84	South African	-16702.35	-2902189.50	1580.68	77.60	0	-90
BN264072	Core	WGS84	South African	-17298.15	-2903000.81	1590.38	84.50	0	-90
BN264073	Core	WGS84	South African	-16811.54	-2902328.09	1581.40	72.05	0	-90
BN264074	Core	WGS84	South African	-13347.42	-2897660.99	1554.82	39.05	0	-90
BN264075	Core	WGS84	South African	-13337.47	-2897835.05	1550.95	42.03	0	-90
BN264076	Core	WGS84	South African	-13553.01	-2897638.32	1559.01	63.76	0	-90
BN264077	Core	WGS84	South African	-13504.66	-2897802.92	1556.45	72.8	0	-90
BN264078	Core	WGS84	South African	-13370.88	-2898184.48	1543.78	39.09	0	-90
BN264079	Core	WGS84	South African	-13516.48	-2897996.61	1551.78	55.1	0	-90
BN264080	Core	WGS84	South African	-13699.95	-2897790.22	1559.549	81.88	0	-90
BN264081	Core	WGS84	South African	-14151.57	-2897874.88	1561.189	70.6	0	-90
BN264082	Core	WGS84	South African	-13917.56	-2898009.32	1557.664	58.18	0	-90
BN264083	Core	WGS84	South African	-13755.84	-2898202.54	1552.375	46.7	0	-90
BN264084	Core	WGS84	South African	-13535.35	-2898447.04	1543.005	48.8	0	-90
BN264085	Core	WGS84	South African	-14105.93	-2898118.74	1557.988	60.8	0	-90
BN264086	Core	WGS84	South African	-13253.06	-2900147.38	1554.553	54.87	0	-90
BN264087	Core	WGS84	South African	-13029.06	-2900158.89	1548.483	36.08	0	-90
BN264088	Core	WGS84	South African	-13149.86	-2900255.22	1553.206	21.46	0	-90
BN264089	Core	WGS84	South African	-13253.93	-2900352.52	1556.452	66	0	-90
BN264090	Core	WGS84	South African	-13056.39	-2900375.98	1549.413	40.21	0	-90
BN264091	Core	WGS84	South African	-13267.77	-2900566.41	1557.713	35.85	0	-90
BN264092	Core	WGS84	South African	-13049.35	-2900575.38	1547.4	32.65	0	-90
BN264093	Core	WGS84	South African	-12837.77	-2900602.14	1537.32	21.1	0	-90
BN264094	Core	WGS84	South African	-12946.73	-2900688.70	1541.69	27.73	0	-90
BN264095	Core	WGS84	South African	-13169.05	-2900675.95	1551.67	26.93	0	-90
BN264096	Core	WGS84	South African	-13071.76	-2900795.07	1542.00	18.39	0	-90
BN264097	Core	WGS84	South African	-12854.05	-2900797.66	1534.19	23.96	0	-90
BN264098	Core	WGS84	South African	-12170.04	-2900841.75	1541.28	48.85	0	-90
BN264099	Core	WGS84	South African	-12313.32	-2900888.12	1532.46	34.2	0	-90
BN264100	Core	WGS84	South African	-12355.34	-2900981.00	1529.60	38.64	0	-90
BN264101	Core	WGS84	South African	-12214.61	-2900934.33	1536.94	26.66	0	-90
BN264102	Core	WGS84	South African	-12079.16	-2900893.29	1544.08	43.26	0	-90
BN264103	Core	WGS84	South African	-12266.32	-2901029.44	1532.43	23.8	0	-90
BN264104	Core	WGS84	South African	-12180.34	-2901079.67	1536.21	46.2	0	-90
BN264105	Core	WGS84	South African	-12029.59	-2901040.61	1544.67	52.12	0	-90
BN264106	Core	WGS84	South African	-11945.16	-2901095.08	1546.85	54.08	0	-90
BN264107	Core	WGS84	South African	-12103.30	-2901134.81	1539.63	54.8	0	-90
BN264108	Core	WGS84	South African	-12129.20	-2901222.40	1534.96	37.77	0	-90
BN264109	Core	WGS84	South African	-11986.36	-2901183.21	1544.87	41.82	0	-90
BN264110	Core	WGS84	South African	-11899.65	-2901234.02	1546.10	37.18	0	-90
BN264112	Core	WGS84	South African	-13267.23	-2900785.33	1552.40	21.3	0	-90
BN264113	Core	WGS84	South African	-12846.21	-2900910.38	1532.15	22.2	0	-90
BNS001	Core	WGS84	South African	-12075.00	-2900594.00	1545.30	38.84	0	-90
BNS002	Core	WGS84	South African	-12528.00	-2900721.00	1533.00	29.87	0	-90
BNS003	Core	WGS84	South African	-11938.00	-2901066.00	1542.30	43.05	0	-90
BNS009	Core	WGS84	South African	-13063.00	-2900521.00	1556.00	35.71	0	-90

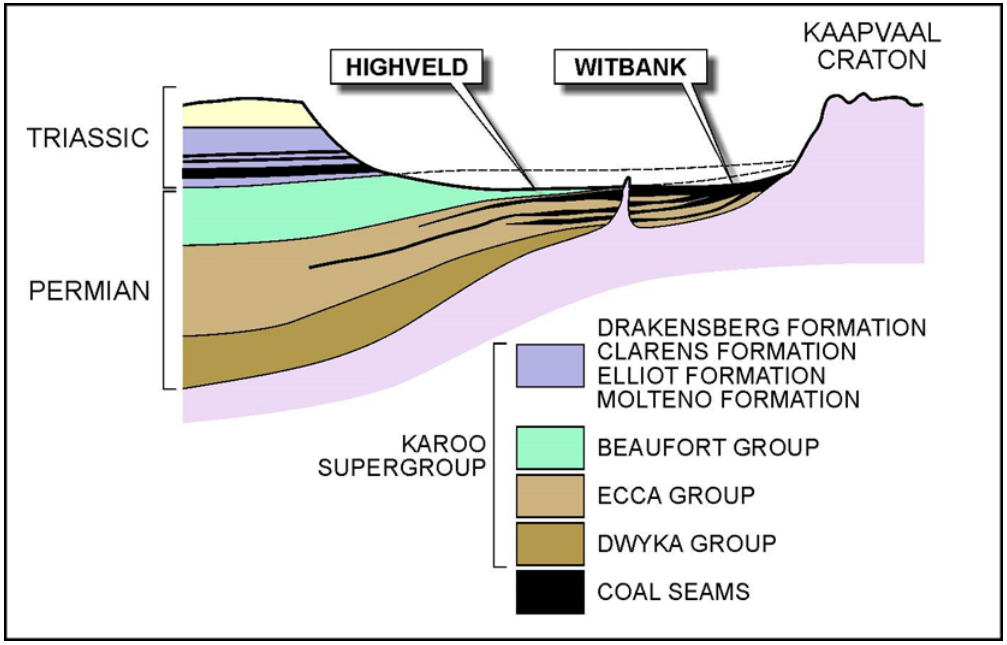
Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
BNS010	Core	WGS84	South African	-13028.00	-2900106.00	1545.30	38.46	0	-90
BNS011	Core	WGS84	South African	-13208.00	-2899846.00	1552.90	29.77	0	-90
BNS012	Core	WGS84	South African	-13212.00	-2899849.00	1551.40	46.89	0	-90
BNS017	Core	WGS84	South African	-13463.00	-2900664.00	1565.10	27.66	0	-90
BNS018	Core	WGS84	South African	-13125.00	-2899024.00	1537.70	46.18	0	-90
BNS020	Core	WGS84	South African	-13981.00	-2899331.00	1543.80	22.83	0	-90
BNS021	Core	WGS84	South African	-14605.00	-2898092.00	1566.70	72.36	0	-90
BNS024	Core	WGS84	South African	-12429.00	-2900481.00	1530.10	30.56	0	-90
BNS025	Core	WGS84	South African	-12528.00	-2900616.00	1527.00	26.06	0	-90
BNS026	Core	WGS84	South African	-15781.00	-2900681.00	1578.80	83.18	0	-90
BNS027	Core	WGS84	South African	-16602.00	-2899980.00	1576.40	78.64	0	-90
BNS028	Core	WGS84	South African	-16709.00	-2902679.00	1574.00	74.55	0	-90
BNS029	Core	WGS84	South African	-15441.00	-2899836.00	1553.90	40.23	0	-90
BNS044	Core	WGS84	South African	-16092.00	-2899295.00	1556.30	51.87	0	-90
BNS048	Core	WGS84	South African	-16380.00	-2901263.00	1578.80	74.35	0	-90
BNS049	Core	WGS84	South African	-16178.00	-2901717.00	1578.80	84.28	0	-90
BNS050	Core	WGS84	South African	-12677.00	-2902173.00	1548.40	30.56	0	-90
BNS052	Core	WGS84	South African	-16353.00	-2900963.00	1574.30	81.81	0	-90
BNS053	Core	WGS84	South African	-15286.00	-2902139.00	1520.90	40.92	0	-90
BNS054	Core	WGS84	South African	-13014.00	-2899252.00	1545.30	53.36	0	-90
BNS059	Core	WGS84	South African	-15558.00	-2901334.00	1554.50	90.70	0	-90
BNS060	Core	WGS84	South African	-14930.00	-2901663.00	1542.30	83.18	0	-90
BNS061	Core	WGS84	South African	-12195.00	-2901120.00	1536.20	44.22	0	-90
BNS062	Core	WGS84	South African	-12006.00	-2901614.00	1534.70	40.69	0	-90
BNS063	Core	WGS84	South African	-11853.00	-2902028.00	1536.20	35.13	0	-90
BNS066	Core	WGS84	South African	-11771.00	-2901694.00	1537.10	36.96	0	-90
BNS067	Core	WGS84	South African	-13203.00	-2901031.00	1541.70	24.99	0	-90
BNS068	Core	WGS84	South African	-13146.00	-2899460.00	1549.60	59.97	0	-90
BNS069	Core	WGS84	South African	-13653.00	-2900046.00	1560.00	35.20	0	-90
BNS070	Core	WGS84	South African	-12893.00	-2899796.00	1549.00	48.01	0	-90
BNS071	Core	WGS84	South African	-13305.00	-2899206.00	1541.70	44.32	0	-90
BNS074	Core	WGS84	South African	-12294.00	-2901584.00	1536.50	26.01	0	-90
BNS075	Core	WGS84	South African	-12295.00	-2901836.00	1544.10	41.53	0	-90
BNS076	Core	WGS84	South African	-12408.00	-2902287.00	1545.30	37.21	0	-90
BNS077	Core	WGS84	South African	-12060.00	-2902419.00	1537.70	40.23	0	-90
BNS078	Core	WGS84	South African	-12478.00	-2902637.00	1549.00	28.65	0	-90
BNS079	Core	WGS84	South African	-12059.00	-2901881.00	1540.80	45.57	0	-90
BNS080	Core	WGS84	South African	-12678.00	-2901704.00	1536.50	25.48	0	-90
BNS081	Core	WGS84	South African	-12869.00	-2901987.00	1536.50	32.69	0	-90
BNS082	Core	WGS84	South African	-15161.00	-2901473.00	1545.90	52.12	0	-90
BNS083	Core	WGS84	South African	-15867.00	-2901065.00	1569.70	80.57	0	-90
BNS084	Core	WGS84	South African	-15305.00	-2900933.00	1574.30	83.03	0	-90
BNS085	Core	WGS84	South African	-15069.00	-2901028.00	1569.70	78.49	0	-90
BNS086	Core	WGS84	South African	-13011.00	-2900087.00	1563.60	46.91	0	-90
BNS087	Core	WGS84	South African	-17456.00	-2899986.00	1580.40	91.59	0	-90
BNS088	Core	WGS84	South African	-15513.00	-2900371.00	1560.00	30.48	0	-90
BNS089	Core	WGS84	South African	-15738.00	-2899577.00	1560.60	38.81	0	-90
BNS090	Core	WGS84	South African	-15807.00	-2899873.00	1560.30	64.77	0	-90
BNS091	Core	WGS84	South African	-16146.00	-2900325.00	1567.90	71.55	0	-90
BNS092	Core	WGS84	South African	-16418.00	-2899623.00	1574.00	80.09	0	-90
BNS093	Core	WGS84	South African	-16282.00	-2901581.00	1565.10	80.01	0	-90
BNS094	Core	WGS84	South African	-16864.00	-2900426.00	1580.40	94.82	0	-90
BNS096	Core	WGS84	South African	-16804.00	-2901768.00	1587.40	95.88	0	-90
BNS097	Core	WGS84	South African	-17226.00	-2901476.00	1592.00	98.98	0	-90
BNS098	Core	WGS84	South African	-17260.00	-2903386.00	1591.70	107.44	0	-90
BNS099	Core	WGS84	South African	-16148.00	-2903222.00	1579.50	90.04	0	-90
BNS100	Core	WGS84	South African	-16639.00	-2903301.00	1585.30	97.92	0	-90
BNS101	Core	WGS84	South African	-16403.00	-2901820.00	1572.80	72.67	0	-90
BNS103	Core	WGS84	South African	-16875.00	-2899519.00	1568.80	51.23	0	-90
BNS105	Core	WGS84	South African	-17064.00	-2900027.00	1575.80	76.83	0	-90
BNS106	Core	WGS84	South African	-17361.00	-2900519.00	1581.90	101.50	0	-90
BNS107	Core	WGS84	South African	-16147.00	-2901388.00	1575.80	82.78	0	-90
BNS108	Core	WGS84	South African	-11653.00	-2898179.00	1587.10	89.92	0	-90
BNS109	Core	WGS84	South African	-16570.00	-2900543.00	1571.50	44.98	0	-90
BNS110	Core	WGS84	South African	-17288.00	-2902306.00	1594.70	103.07	0	-90
BNS111	Core	WGS84	South African	-14847.00	-2902362.00	1539.20	31.01	0	-90
BNS112	Core	WGS84	South African	-14360.00	-2902363.00	1531.60	39.14	0	-90
BNS113	Core	WGS84	South African	-13877.00	-2902500.00	1534.70	13.41	0	-90
BNS114	Core	WGS84	South African	-14226.00	-2901994.00	1537.70	9.25	0	-90
BNS125	Core	WGS84	South African	-14438.00	-2898857.00	1543.50	52.93	0	-90
BNS139	Core	WGS84	South African	-16011.00	-2902828.00	1568.80	48.67	0	-90
BNS143	Core	WGS84	South African	-12918.00	-2899607.00	1552.00	64.31	0	-90
BNS145	Core	WGS84	South African	-12461.00	-2901213.00	1527.60	47.32	0	-90
BNS146	Core	WGS84	South African	-13062.00	-2900379.00	1552.30	53.34	0	-90

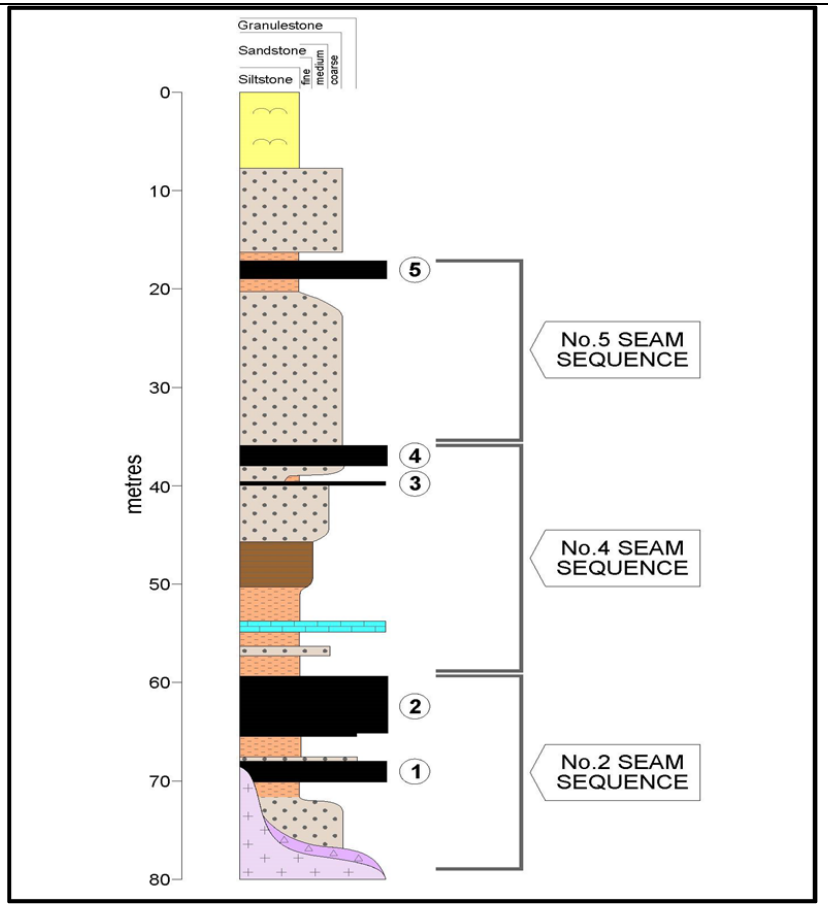
Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
BNS148	Core	WGS84	South African	-13029.00	-2900644.00	1549.90	55.47	0	-90
DL26223	Core	WGS84	South African	-11562.25	-2902570.83	1537.00	35.00	0	-90
EN30181	Core	WGS84	South African	-17056.13	-2900592.84	1600.00	92.12	0	-90
EN30182	Core	WGS84	South African	-17056.13	-2900592.84	1600.50	78.65	0	-90
P001	Core	WGS84	South African	-13430.00	-2902444.00	1538.90	20.42	0	-90

Annexure 4: JORC Code (2012) Table 1 for the Arnot South Resources and Reserves

Criteria	JORC Code explanation	CP Comments
Section 1: Sampling Techniques and Data		
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	- All the drilling data used in this estimation is historic and no record of the sampling techniques used is available, however, after independent examination of the available data the samples are considered to have been collected by experienced geologists using acceptable industry procedures and standards. - Detailed sampling of coal seams typically is undertaken only once the coal seam is logged accurately and in detail. Sample increments are based on variations in coal characteristics in conjunction with density data obtained from wireline logs. - It is reasonable to assume that samples were bagged, correctly tagged and transported to the Laboratory for analyses and testing.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so by what method, etc.).*	- After examination of the available data it is reasonable to assume that all past drilling was diamond drilling using conventional equipment and TNW core size. This is borne out by the mass of coal sample reported which corresponds to standard TNW core. - Drilling was vertical and not oriented. - A list of historical drill holes used in this estimation is attached hereto as Annexure 5a.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. Whether sample sizes are appropriate to the grain size of the material being sampled.*	- All the drilling data used in this estimation is historic and no record of the sample recoveries is available. - Core recovery is recorded by the geologist in the field and is a standard logging procedure. It is reasonable to assume that recoveries were recoded historically and where recovery for a seam fell below acceptable levels the hole was re-drilled.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	- All the drilling data used in this estimation is historic and no record of the geological and geotechnical logging procedure is available. - However, after examination of the available data the logging is considered to have been done by experienced geologists to a level of detail to support appropriate Mineral Resource estimation. - It is reasonable to assume that the cores were logged following industry-accepted coal lithological descriptions, procedures and methods and was quantitative in nature.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field*	- It is reasonable to assume that whole coal core was sampled, bagged on site and transported to a laboratory for testing as is standard procedure in the South African coal exploration industry. - Coal laboratories in South Africa comply with South African Bureau of Standards for sample preparation and sub sampling and analyses. - It is reasonable to assume that all coal samples were crushed to a top size of 25mm before analyses, a size deemed appropriate for the type and nature of the coal at Arnot South.

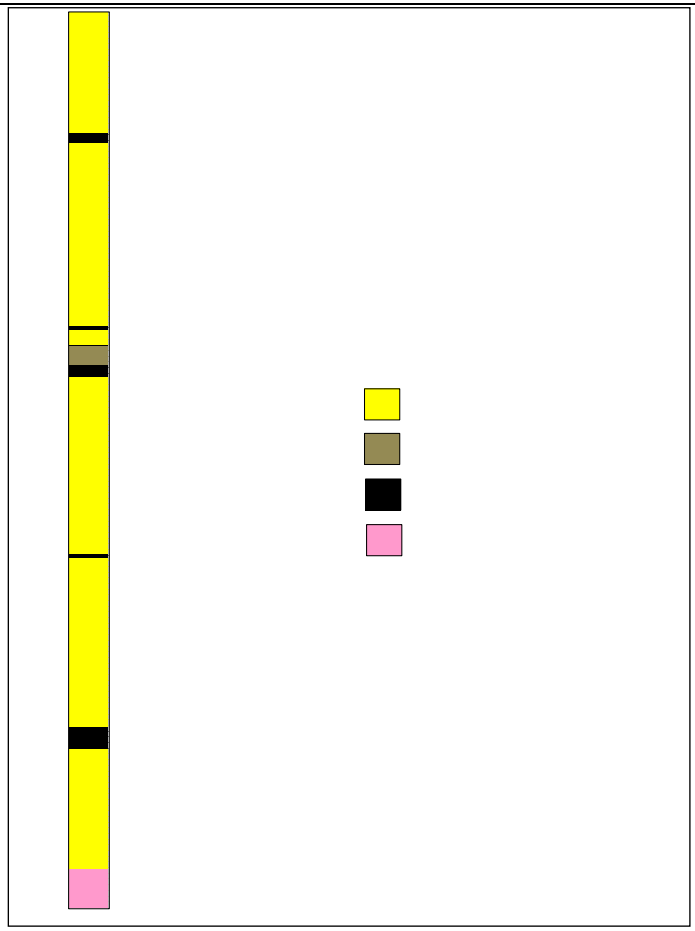
	duplicate/second-half sampling. • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	- No records of the analytical and laboratory procedures historically used are available, however, after examination of the available data the analyses are considered to have been completed by accredited laboratories that would have complied with South African Bureau of Standards for sample preparation and sub sampling and analyses. - The quality of certain data, especially the wash tables gives a poor level of confidence, because of incomplete and varying wash instructions. - It is standard procedure for South African coal laboratories to, where irregular analytical results are detected, re-analyse a duplicate sample. Typically where this procedure does not resolve the irregularity a duplicate sample would have been sent to an external laboratory for verification. It is reasonable to assume that this quality control procedure was adopted for the Arnot South historical analyses.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	No record of any verification of the historic data is available and could not be confirmed, however, it is reasonable to assume that documentation of primary data, data entry procedures, data verification and data storage (physical and electronic) protocols did adhere to acceptable industry norms.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	- Borehole co-ordinates were recorded in the Excel-based historic database obtained from Exxaro and the Council for Geoscience. - There is no evidence of any certified surveyors submitting certified co-ordinates and elevations, however it is reasonable to assume that borehole coordinates and elevations were accurately surveyed by certified surveyors. - Grid used in historic databases: South African LO29 grid system, Cape datum, subsequently converted to Hartbeeshoek 94 (WGS84) datum by Universal Coal.
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.* • *Whether sample compositing has been applied.*	- Exploration boreholes are distributed irregularly, with spacing varying between 500m and 1000m. - The data distribution is sufficient to meet the JORC limits for classification of Indicated and Inferred resources. - Sample compositing was applied.
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.*	- The distribution of the Coal Measures at Arnot South is controlled by a NNE-SSW trending palaeo-low/channel restricted to the western part of the project area, and is generally flat-lying. A number of dolerite sills and dykes are present. - The coal seams are nearly horizontal and the apparent thickness (width) of the intersected coal seams closely approximates the true thickness.
Sample security	• *The measures taken to ensure sample security.*	No record of measures taken to ensure sample security during the historic drilling is available, however, it is reasonable to assume that appropriate protocols and procedures existed and were adhered to.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	- No records of audits or reviews of sampling techniques during historic drilling campaigns are available, however, it is reasonable to assume that such audits were conducted by Goldfields and Exxaro. - Gemecs, on behalf of Universal Coal, captured the historic data in Geobank and conduct an independent audit and validation.
Section 2: Reporting of Exploration Results		
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.*	- Universal Coal Development VII (Pty) Ltd entered into a binding agreement to acquire the prospecting right MP30/5/1/1/2/360PR from Exxaro, totalling 15,212 hectares in size. - Universal Coal Development VII (Pty) Ltd is a 50%:50% (pre-funding) joint venture between Universal Coal plc and black economic empowerment entity, Ndalamo Resources (Pty) Ltd. - The transaction remains subject to the fulfilment, or to the extent possible, the waiver of suspensive conditions of transactions of this nature such as Ministerial consent in terms of section 11 of the Mineral Resources and Petroleum Development Act 28 of 2002 (as amended) ("MPRDA").
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	The following companies have been involved in exploration at Arnot South since prospecting first began in the 1970's: Goldfields, Eyesizwe and Exxaro. At total of 275 holes was drilled historically of which data is available from 201 boreholes. The holes intersected the following coal seams: No. 4, No. 3 and No. 2. The historical assay data included raw assay values and those

		washed at density fractions (t/m3) F1.35, F1.4, F1.45, F1.5, F1.55, F1.6, F1.65, F1.7, F1.75 and F1.80.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The main Karoo Basin: - Filled between the Late Carboniferous and Middle Jurassic periods; - Lithostratigraphically subdivided into the Dwyka, Ecca and Beaufort groups, succeeded by the Molteno, Elliot and Clarens Formations and the Drakensburg Formation (volcanics); - The coal bearing Ecca Group has been divided into three sub-units: the Pietermaritzburg; Vryheid and Volksrust Formations.  The Witbank Coalfield: - The coal-bearing Vryheid Formation attains a thickness of 70m to 200m in the Witbank Coalfield; - The Vryheid Formation consists of five coarsening-upward sequences with coal seams associated predominantly with the coarser-grained fluvial facies at the top of each sequence; - The No. 5, 4, 2, and 1 seams are of economic interest.

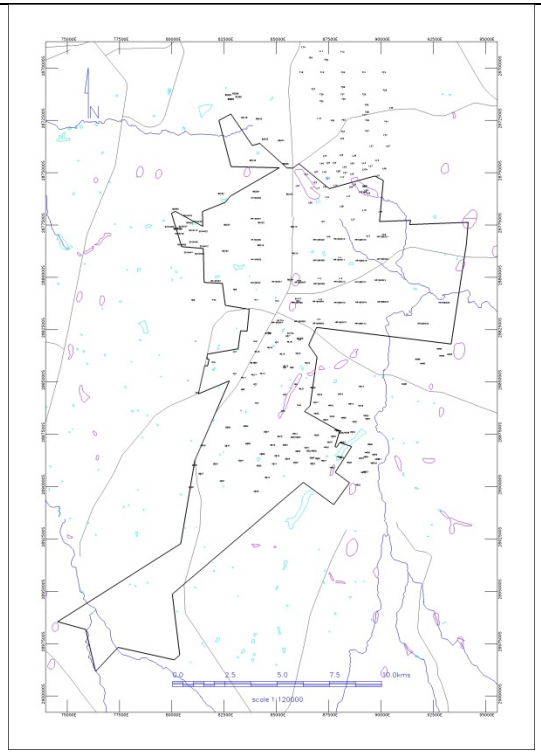


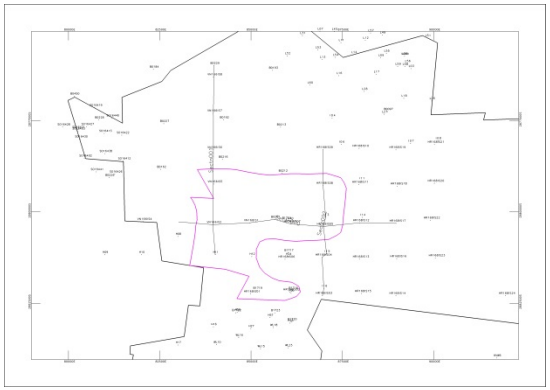
Local Geology:

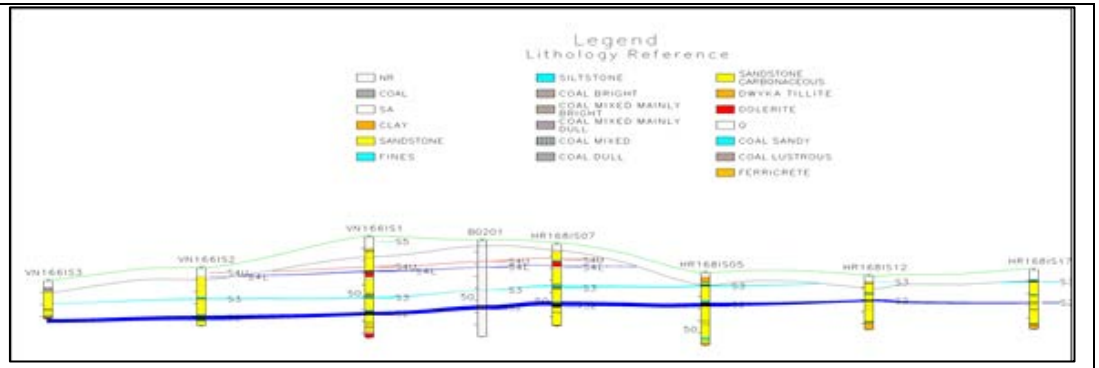
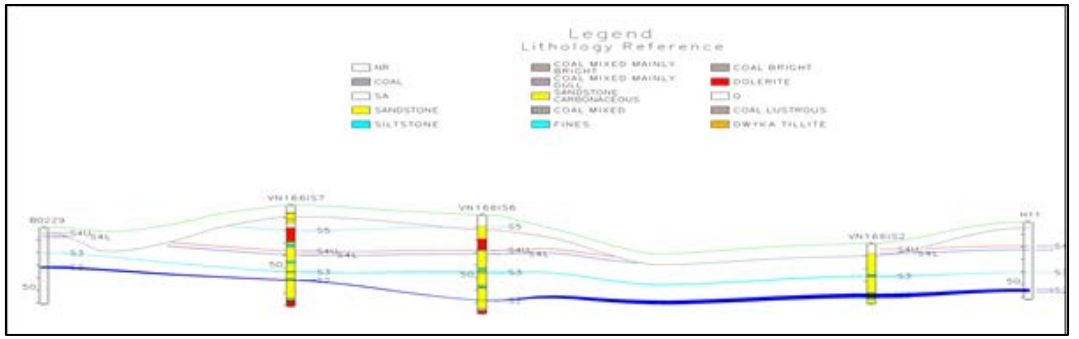
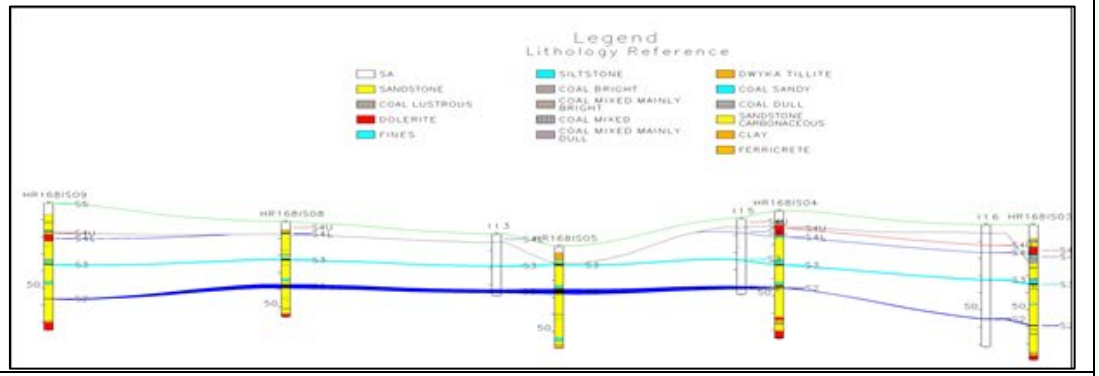
- The Arnot South Project is underlain by a 15m to 160m thick succession of sandstone, shale and coal of the Vryheid Formation;
- Represents a multiple seam deposit type hosting the No. 4, No. 3 and No. 2 seams;
- The typical lithostratigraphic sequence at Arnot South is illustrated below:

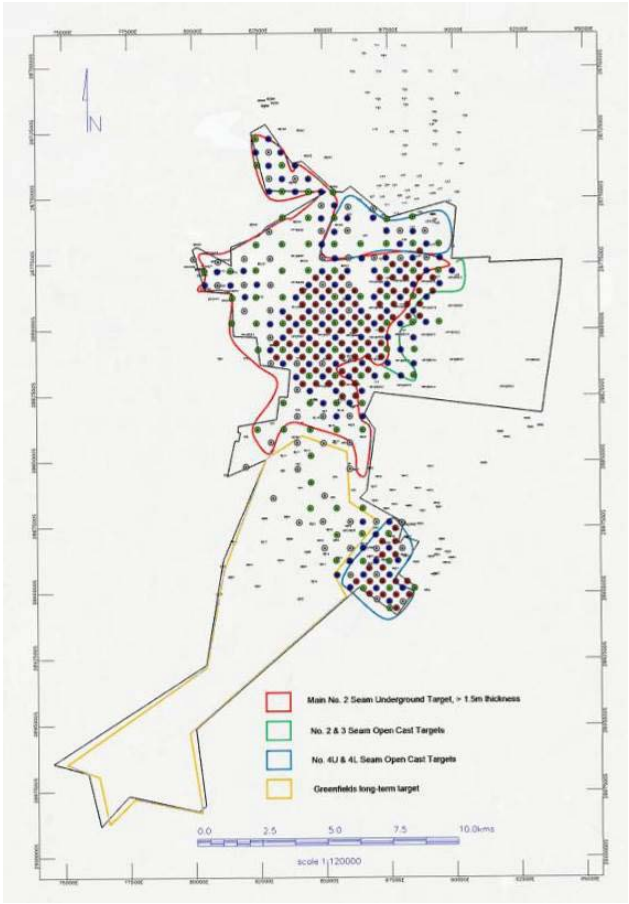
		 - The coal seams are near horizontal and often split by shale and sandstone bands. - Various dolerite sills and dykes are present displacing or cutting out the coal seams locally.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* - *easting and northing of the drill hole collar* - *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* - *dip and azimuth of the hole* - *down hole length and interception depth* - *hole length.*	- A full list of drill holes used in the Resource estimate is attached hereto. - All drill holes have been modelled as vertical.

	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	All seams where multiple coal quality samples exists are given a composite value (generated within the Minex software) weighting each quality by thickness and relative density.
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 coal seams are nearly horizontal and the apparent thickness (width) of the intersected coal seams closely approximates the true thickness.
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.*	- A plan of the Arnot South project area with drill hole collar positions and appropriate sectional views is presented below:


N
0.0
2.5
5.0
7.5
10.0kms
scale 1:120000

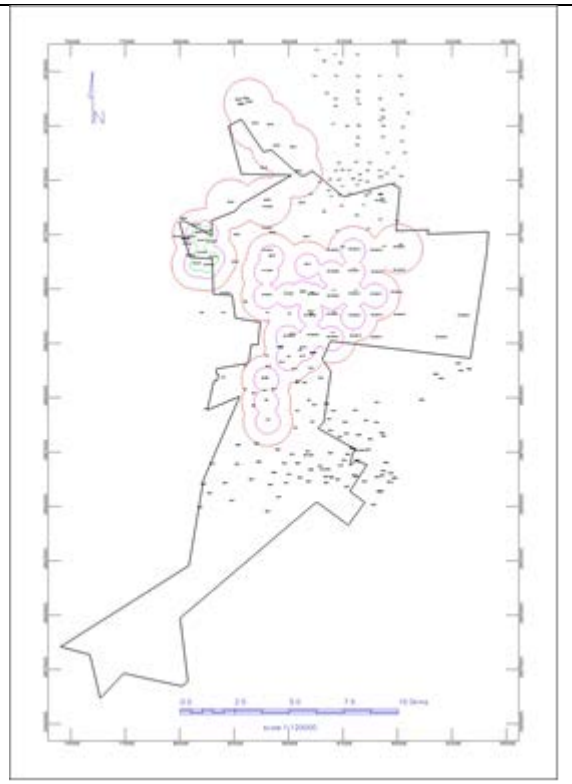


		  
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Results for 201 of 275 holes drilled historically are available and have been used in the resource estimation.

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.*	Universal Coal commissioned Edgar Stettler & Associates, an independent geophysical consultancy, to interpret available public domain airborne magnetic data. The interpretation confirmed the presence of a number of dolerite sills and dykes within the project area. The intrusives impact the coal seams to a variable degree and have been taken into consideration in the resource estimation.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Universal Coal is planning a significant drilling campaign aimed at increasing the drilling and coal quality sample density to 250m grid spacing. The planned drilling will entail a total of 565 holes at a total cost of A$3.6 million over a three year period. The proposed drilling is summarised in the diagram below. 

Section 3: Estimation and Reporting of Mineral Resources		
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.*	- All the available historical exploration data and analytical results were imported into a GBIS database and subjected to validation routines. ▪ Lithological descriptions were verified and coal seam correlations validated. ▪ Coal sample positions were verified against coal seam occurrences, and raw coal analyses compared to lithological descriptions. ▪ A number of analytical tests and routines were used to validate all the raw and washability data. ▪ Anomalies were identified, queried and corrected where possible, otherwise flagged and removed from the final modelling dataset prior to geological modelling and resource estimation.
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 did not undertake a site visit but is familiar with the area and geology from past work experience.
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.*	- Confidence in the geological interpretation is moderate to low: Borehole coverage and density confirmed the nature, continuity of the seams and coal quality, however, some missing borehole data and limited investigations on the impact of intrusives reduces the confidence levels. - It is reasonable to assume that the historical boreholes were geologically logged, acceptably sampled and analysed. - The Mineral Resource estimation is primarily guided by geology. - Continuity in geology and quality is primarily affected by intrusives, structures and thickening of in-seam stone bands. - Future planned infill drilling at 250m intervals will allow more accurate geological information.
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 main target seam, Seam No. 2, extends approximately 7km along strike (NNE-SSW) and 5km perpendicular to strike with an approximate average thickness of 2.64m. - The depth of cover to the S2 seam ranges from 15m in the west and east to 120m in the central area. - The current resource extent covers 33.6 km^2.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation.* • *Method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and* • *Whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *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.*	- Geological modelling and resource estimation were performed using Geovia Minex™ software. - Sections were used across the resource area to ensure all these correlations are consistent, and were verified against the lithological logging. - The stratigraphical sequence was verified in Minex (including gaps and overlaps) before structural modelling commenced. The coal seams and partings were modelled, based on the average borehole spacing in the project area. Roof and floor surfaces were created in 3D for each layer, as well as a thickness grid for each seam. - The surface topography was created using the borehole collars together with the 1:50000 topographic surface contours to construct a surface elevation contours in Minex, covering all of the potential coal resource area. - Coal resources are reported only where coal qualities are present. - Raw coal qualities were modelled for each seam. - Qualities modelled are: RD (Relative density), CV (Calorific Value), AS (Ash), IM (Inherit Moisture), FC (Fixed carbon), VM (Volatile matter) and TS (Total Sulphur). All qualities reported hereafter are on an air dried basis. - Only the washed coal qualities for the Exxaro boreholes were used for wash simulation purposes.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated as in situ using the in situ density estimation method using air dried moisture and air dried relative density laboratory values.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	A raw ash cut off of 50% (air dried) and volatile matter cut-off of 18% (air dried) have been applied to the deposit, however none of seams contain an air dried raw ash of greater than 45% and a volatile matter content of less than 18%.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining*	A minimum seam thickness cut-off of 0.5m was applied to all seams.

	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.	
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.*	Universal Coal has determined, based on the washability tests done by Exxaro that the S2 seam could be a multi-product supplier of export thermal quality coal with an ash as low as 15% (air dried basis) and domestic thermal coal with a calorific value of 21.5 Mj/kg (air dried basis) for power generation (Eskom).
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	- It is the Competent Person's opinion that there are no limiting environmental factors at this stage of the project development other than regulations relating to mining adjacent to wetlands, which should be managed through applying buffer zones and wetland offsets. - The regulatory framework in South Africa makes provision for waste and process residue disposal and the project area has suitable areas available to host such facilities.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	- The density used in the tonnage calculation is relative density determined in the laboratory according to ISO 5072:1997. The apparent relative density is determined by weighing a sample suspended in water, allowing the sample to drain to remove surface liquid and then reweighing the sample in air. - All coal samples submitted to the laboratory was subjected to RD determination.
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.*	- Borehole spacing up to 500m was used to classify a measured resource, up to 1000m to classify an indicated resource and up to 2000m was used to classify an inferred resource. - Only boreholes where the relevant seam was analysed were considered as point observations to be used for resource classification. - The figure below to illustrate resource classification of S2 seam at Arnot South (red = inferred, maroon = indicated and blue = measured).

		
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	There have been no audits undertaken on the Resource 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 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.*	- The Competent Person applied the principles of the JORC code 2012 in estimating the Resources at Arnot South. - To date no geostatistical studies have been undertaken to ascertain the confidence in drill hole spacing for the purposes of resource estimation. - Factors that could affect the accuracy of the resource estimate include dolerite intrusives and structures between completed drill holes, seam wash outs, thickening of in-seam stone bands and incomplete historical data. - Further infill drilling will be conducted at 250m intervals and should assist in improving confidence in the geological model and resource estimate.

Annexure 4a: Drill Hole Data Summary for the Arnot South Project

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
B0096	Core	Cape	South African	85404.22	-2874668	1700.7	80.77	0	-90
B0097	Core	Cape	South African	88743.21	-2877248	1645.9	39.93	0	-90
B0148	Core	Cape	South African	83840.22	-2874503	1677.3	57.91	0	-90
B0162	Core	Cape	South African	82527.23	-2878832	1660.5	54.86	0	-90
B0192	Core	Cape	South African	84247.22	-2877477	1676.4	82.3	0	-90
B0193	Core	Cape	South African	85591.22	-2876117	1694.7	88.39	0	-90
B0201	Core	Cape	South African	85650.22	-2880204	1667.3	79.55	0	-90
B0212	Core	Cape	South African	85855.22	-2878940	1664.2	82.3	0	-90
B0213	Core	Cape	South African	85810.22	-2877675	1679.4	96.01	0	-90
B0216	Core	Cape	South African	84217.22	-2878559	1659.6	67.06	0	-90
B0226	Core	Cape	South African	81109.23	-2879060	1650.7	65.23	0	-90
B0227	Core	Cape	South African	82610.23	-2877580	1655.5	60.96	0	-90
B0228	Core	Cape	South African	80824.23	-2877480	1619.9	35.66	0	-90
B0229	Core	Cape	South African	83988.22	-2875990	1657.5	60.96	0	-90
B0450	Core	Cape	South African	80151.23	-2876827	1641.3	50.29	0	-90
B1717	Core	Cape	South African	86015.22	-2881119	1671.8	71	0	-90
B1718	Core	Cape	South African	86137.22	-2882155	1649	66.87	0	-90
B1719	Core	Cape	South African	85161.22	-2882155	1664.2	63.9	0	-90
B1720	Core	Cape	South African	86106.22	-2883008	1630	41.03	0	-90
B1721	Core	Cape	South African	85954.22	-2880234	1671.8	58.4	0	-90
B1722	Core	Cape	South African	84582.22	-2882764	1664.2	87.1	0	-90
B1723	Core	Cape	South African	85649.22	-2882765	1645.9	78.6	0	-90
B3068	Core	Cape	South African	85929.22	-2886255	1725.6	74.92	0	-90
B32/HD32	Core	Cape	South African	86640.01	-2888386	1662	120.65	0	-90
B37/HD37	Core	Cape	South African	85877.22	-2887735	1665.2	74.8	0	-90
B3874	Core	Cape	South African	82793.23	-2871580	1664	25.79	0	-90
GB01	Core	Cape	South African	84493.22	-2887471	1644.01	59.49	0	-90
GB02	Core	Cape	South African	86954.21	-2888746	1672.18	104.44	0	-90
GB03	Core	Cape	South African	85401.22	-2888096	1647	67.06	0	-90
GB04	Core	Cape	South African	83520.22	-2887198	1655.01	71.17	0	-90
GB05	Core	Cape	South African	82657.23	-2887258	1672.9	89.08	0	-90
GB06	Core	Cape	South African	83610.22	-2888035	1651.9	71.4	0	-90
GB07	Core	Cape	South African	86688.21	-2888714	1663.8	77.32	0	-90
GB08	Core	Cape	South African	84299.22	-2888531	1632.47	46.49	0	-90
GB09	Core	Cape	South African	86003.21	-2888397	1664.75	85.42	0	-90
GB10	Core	Cape	South African	85139.22	-2887691	1631.61	43.33	0	-90
GB11	Core	Cape	South African	84883.22	-2889001	1647.3	63.42	0	-90
GB12	Core	Cape	South African	85005.26	-2888617	1641.9	57.28	0	-90
GB13	Core	Cape	South African	84794.55	-2888104	1629.2	48.72	0	-90
GB14	Core	Cape	South African	84540.35	-2889655	1659.5	77.29	0	-90
GB15	Core	Cape	South African	84012.16	-2890317	1665	86.49	0	-90
GB16	Core	Cape	South African	83272.6	-2888846	1639.1	62.48	0	-90
GB17	Core	Cape	South African	82630.4	-2888140	1655.5	73.46	0	-90
GB18	Core	Cape	South African	81470.63	-2888124	1685.2	106.78	0	-90
GB19	Core	Cape	South African	82065.37	-2889004	1663.4	89.2	0	-90
GB20	Core	Cape	South African	81064.26	-2889062	1675.3	104.78	0	-90
GB21	Core	Cape	South African	82385.36	-2889820	1668.6	90.98	0	-90
GB22	Core	Cape	South African	86709.26	-2888993	1656.4	70.74	0	-90
GB23	Core	Cape	South African	85899.92	-2888937	1670.1	78.03	0	-90
GB24	Core	Cape	South African	85507.59	-2888763	1657.7	42.47	0	-90
GB25	Core	Cape	South African	84141.84	-2889089	1643.5	56.36	0	-90
GB26	Core	Cape	South African	80895.82	-2890116	1688.5	157.56	0	-90
GB27	Core	Cape	South African	81363.38	-2889474	1682.3	114.54	0	-90
H08	Core	Cape	South African	82996.22	-2880672	1643	53	0	-90
H11	Core	Cape	South African	84021.22	-2881172	1662	61.76	0	-90
H12	Core	Cape	South African	85021.22	-2881222	1663	70.79	0	-90
H16	Core	Cape	South African	83971.22	-2883147	1660	69.75	0	-90
H17	Core	Cape	South African	82996.22	-2883647	1670	60.92	0	-90
H18	Core	Cape	South African	81971.23	-2884147	1645	55.58	0	-90
H20	Core	Cape	South African	85371.22	-2884397	1643	49.02	0	-90
H21	Core	Cape	South African	82996.22	-2884697	1670	68.9	0	-90
H22	Core	Cape	South African	83971.22	-2885197	1661	66.87	0	-90
H23	Core	Cape	South African	81196.23	-2885597	1669	62.64	0	-90
H24	Core	Cape	South African	86021.22	-2881222	1669	71	0	-90
H25	Core	Cape	South African	86096.22	-2882222	1650	66.87	0	-90
H27	Core	Cape	South African	84996.22	-2883197	1654	51.88	0	-90
H28	Core	Cape	South African	86071.22	-2883047	1632	41.08	0	-90
H29	Core	Cape	South African	83971.22	-2884172	1660	62.07	0	-90
H40	Core	Cape	South African	86071.22	-2880247	1668	58.4	0	-90
H44	Core	Cape	South African	84046.22	-2886097	1649	58.29	0	-90
H45	Core	Cape	South African	85296.22	-2886472	1619	42.45	0	-90
H46	Core	Cape	South African	86071.21	-2886197	1630	35.2	0	-90

Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
H56	Core	Cape	South African	84621.22	-2882747	1667.25	87.1	0	-90
H57	Core	Cape	South African	85521.22	-2882897	1645.92	78.6	0	-90
H64	Core	Cape	South African	85921.22	-2885197	1618	72.25	0	-90
H66	Core	Cape	South African	83371.22	-2885447	1662.68	72.45	0	-90
H69	Core	Cape	South African	85721.22	-2884397	1633.73	81.53	0	-90
H70	Core	Cape	South African	85371.22	-2885697	1638	85.75	0	-90
HR168IS01	Core	Cape	South African	84983.8	-2882247	1671.118	84.49	0	-90
HR168IS02	Core	Cape	South African	86068.26	-2882194	1650.943	67.02	0	-90
HR168IS03	Core	Cape	South African	86958.07	-2882291	1653.226	79.23	0	-90
HR168IS04	Core	Cape	South African	86947.42	-2881243	1661.331	74.85	0	-90
HR168IS05	Core	Cape	South African	86984.06	-2880398	1640.553	59.86	0	-90
HR168IS06	Core	Cape	South African	85933.05	-2881296	1662.038	75.4	0	-90
HR168IS07	Core	Cape	South African	86085.48	-2880328	1664.027	67.47	0	-90
HR168IS08	Core	Cape	South African	86975.62	-2879277	1654.912	55.8	0	-90
HR168IS09	Core	Cape	South African	86974.74	-2878296	1665.952	74.62	0	-90
HR168IS10	Core	Cape	South African	87960.98	-2878257	1643.964	35.48	0	-90
HR168IS11	Core	Cape	South African	87952.11	-2879248	1636.23	41.41	0	-90
HR168IS12	Core	Cape	South African	87971.33	-2880297	1638.111	44.68	0	-90
HR168IS13	Core	Cape	South African	87968.14	-2881294	1639.295	45.84	0	-90
HR168IS14	Core	Cape	South African	88970.22	-2882297	1617.322	71.74	0	-90
HR168IS15	Core	Cape	South African	88024.85	-2882237	1636.624	22.24	0	-90
HR168IS16	Core	Cape	South African	88992.09	-2881282	1627.788	42.44	0	-90
HR168IS17	Core	Cape	South African	88972.94	-2880312	1643.16	49.22	0	-90
HR168IS18	Core	Cape	South African	89004.03	-2879292	1618.804	23.9	0	-90
HR168IS19	Core	Cape	South African	88970.63	-2878297	1628.589	32.3	0	-90
HR168IS20	Core	Cape	South African	90022.65	-2879215	1609.928	29.4	0	-90
HR168IS21	Core	Cape	South African	90024.83	-2878151	1649.42	50.54	0	-90
HR168IS22	Core	Cape	South African	89909.53	-2880227	1627.416	22.32	0	-90
HR168IS23	Core	Cape	South African	90047.95	-2881259	1621.84	21.57	0	-90
HR168IS24	Core	Cape	South African	91971.21	-2882297	1603.657	23.1	0	-90
HR168IS25	Core	Cape	South African	92971.18	-2881297	1601.203	11.88	0	-90
I04	Core	Cape	South African	87221.21	-2877422	1650.47	31.95	0	-90
I06	Core	Cape	South African	87471.21	-2878147	1650.84	47.11	0	-90
I07	Core	Cape	South African	89371.21	-2878122	1645.34	32.22	0	-90
I08	Core	Cape	South African	90121.2	-2878047	1651.03	50.22	0	-90
I10	Core	Cape	South African	87021.21	-2872497	1650.05	35.25	0	-90
I11	Core	Cape	South African	88021.21	-2879147	1624.2	23.98	0	-90
I13	Core	Cape	South African	87046.21	-2880147	1647.7	36.28	0	-90
I14	Core	Cape	South African	88046.21	-2880147	1640.87	42.29	0	-90
I15	Core	Cape	South African	87071.21	-2881147	1656.64	44.37	0	-90
I16	Core	Cape	South African	86996.21	-2882097	1653.07	71.52	0	-90
L03	Core	Cape	South African	89380.81	-2876070	1635.9	13.09	0	-90
L06	Core	Cape	South African	89205.61	-2875732	1650.1	9.4	0	-90
L06A	Core	Cape	South African	89205.61	-2875732	1650.1	19.08	0	-90
L09	Core	Cape	South African	88552.41	-2875773	1654.7	13.11	0	-90
L12	Core	Cape	South African	88133.51	-2875298	1651.7	25.7	0	-90
L13	Core	Cape	South African	86951.91	-2875824	1672.4	63.57	0	-90
L14	Core	Cape	South African	87812.81	-2875688	1676.2	54.51	0	-90
L16	Core	Cape	South African	87406.81	-2876263	1663.7	51.59	0	-90
L17	Core	Cape	South African	88427.41	-2876223	1668.9	48.64	0	-90
L18	Core	Cape	South African	89184.31	-2876884	1662.7	37.44	0	-90
L23	Core	Cape	South African	89201.81	-2874935	1666.9	30.71	0	-90
L23A	Core	Cape	South African	89201.81	-2874935	1666.9	47.85	0	-90
L26	Core	Cape	South African	89953	-2876954	1646.3	21.02	0	-90
L27	Core	Cape	South African	88650.51	-2877322	1640.6	27.67	0	-90
L28	Core	Cape	South African	88104.41	-2876695	1648.5	27.66	0	-90
L29	Core	Cape	South African	73566.25	-2887601	1712.3	99.25	0	-90
L31	Core	Cape	South African	86409.22	-2875164	1691.5	62.35	0	-90
L51	Core	Cape	South African	89837.2	-2875232	1672.7	52.32	0	-90
L52	Core	Cape	South African	85995.22	-2875719	1697.5	79.43	0	-90
L53	Core	Cape	South African	86831.21	-2875557	1682.4	72.19	0	-90
L54	Core	Cape	South African	87311.21	-2875761	1681.6	69.7	0	-90
L55	Core	Cape	South African	88709.21	-2875653	1647.1	34.8	0	-90
L56	Core	Cape	South African	89283.21	-2875932	1688.1	51.99	0	-90
L58	Core	Cape	South African	89215.21	-2876017	1638.3	23.98	0	-90
L59	Core	Cape	South African	89018.21	-2876011	1695.7	60.96	0	-90
L60	Core	Cape	South African	86610.21	-2876524	1667.8	60.58	0	-90
L74	Core	Cape	South African	90485.2	-2871860	1713.8	61.76	0	-90
MCA147	Core	Cape	South African	78986.59	-2898230	1655.5	70.41	0	-90
MCA148	Core	Cape	South African	77748.62	-2899871	1692.1	99.31	0	-90
MCA150	Core	Cape	South African	76032.23	-2901103	1673.77	47.48	0	-90
MCA151	Core	Cape	South African	76857.25	-2900576	1641.7	40.41	0	-90
NVW2	Core	Cape	South African	92768.68	-2883505	1624.94	22.4	0	-90
NVW3	Core	Cape	South African	91976.56	-2884207	1628.73	23.68	0	-90

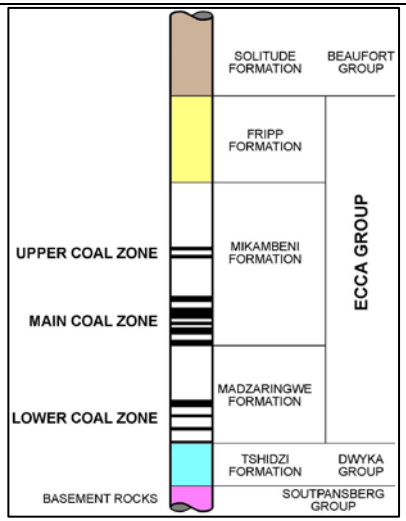
Hole Name	Hole Type	Datum	Grid	Easting (m)	Northing (m)	Elevation (m)	Total Depth (m)	Azimuth	Dip
NVW4	Core	Cape	South African	92892.78	-2883841	1631.7	17.65	0	-90
NVW5	Core	Cape	South African	93260.18	-2883769	1626.62	23.6	0	-90
NVW6	Core	Cape	South African	91731.37	-2884003	1620.63	14.3	0	-90
NVW8	Core	Cape	South African	91082.55	-2885189	1620	28.43	0	-90
SO16402	Core	Cape	South African	80434.43	-2878527	1633.2	46.75	0	-90
SO16403	Core	Cape	South African	80245.74	-2877784	1618.8	41.43	0	-90
SO16412	Core	Cape	South African	81498.15	-2878603	1654.2	65.38	0	-90
SO16413	Core	Cape	South African	80979.03	-2877847	1633.7	49.5	0	-90
SO16419	Core	Cape	South African	80717.2	-2877143	1614.3	25.3	0	-90
SO16421	Core	Cape	South African	80243.09	-2877745	1617.6	40.3	0	-90
SO16422	Core	Cape	South African	81458.78	-2877894	1636.7	51.95	0	-90
SO16426	Core	Cape	South African	81265.51	-2878965	1653.3	67.65	0	-90
SO16427	Core	Cape	South African	80492.36	-2877659	1621.6	9.58	0	-90
SO16430	Core	Cape	South African	80317.35	-2878003	1624.8	39.9	0	-90
SO16438	Core	Cape	South African	80990.2	-2878401	1644.7	65.12	0	-90
SO16440	Core	Cape	South African	81179.7	-2877426	1627.7	45.35	0	-90
VN166IS1	Core	Cape	South African	84970.96	-2880297	1670.241	83.3	0	-90
VN166IS2	Core	Cape	South African	83953.27	-2880348	1644.659	48.02	0	-90
VN166IS3	Core	Cape	South African	83027.49	-2880272	1633.927	31.7	0	-90
VN166IS4	Core	Cape	South African	82046.82	-2880263	1627.664	17.3	0	-90
VN166IS5	Core	Cape	South African	83979.14	-2879235	1636.483	44.04	0	-90
VN166IS6	Core	Cape	South African	83970.19	-2878298	1667.456	78.57	0	-90
VN166IS7	Core	Cape	South African	83968.16	-2877290	1675.249	80.54	0	-90
VN166IS8	Core	Cape	South African	83971.02	-2876297	1654.419	50.5	0	-90
VW06	Core	Cape	South African	89454.2	-2888074	1616	18.8	0	-90
VW07	Core	Cape	South African	89816.2	-2888778	1623.4	16.33	0	-90
VW08	Core	Cape	South African	88189.21	-2886800	1651.95	53.82	0	-90
VW10	Core	Cape	South African	87522.21	-2887965	1650	66.01	0	-90
VW11	Core	Cape	South African	86435.21	-2888231	1665	77.44	0	-90
VW12	Core	Cape	South African	85865.22	-2887564	1646	51.23	0	-90
VW24	Core	Cape	South African	87652.21	-2889179	1606.7	11.79	0	-90
VW25	Core	Cape	South African	87331.21	-2886904	1652.5	59.64	0	-90
VW26	Core	Cape	South African	86901.51	-2887632	1662.8	73.84	0	-90
VW27	Core	Cape	South African	87240.21	-2888855	1643.5	55.19	0	-90
VWF1	Core	Cape	South African	89885.2	-2888779	1619.7	10.41	0	-90
VWFA3	Core	Cape	South African	89627.2	-2888967	1625	16.81	0	-90
VWG3	Core	Cape	South African	89238.2	-2889380	1627.2	23.32	0	-90
VWJ6	Core	Cape	South African	87362.21	-2888207	1649.8	22.56	0	-90
VWJA1	Core	Cape	South African	88002.21	-2888662	1605	10.62	0	-90
VWK5	Core	Cape	South African	87703.34	-2887695	1645	21.11	0	-90
VWN1	Core	Cape	South African	89349.2	-2886853	1616.82	12.08	0	-90
WL10	Core	Cape	South African	84056.08	-2883639	1657.4	46.11	0	-90
WL11	Core	Cape	South African	83409.76	-2884878	1668.1	78	0	-90
WL12	Core	Cape	South African	83847.51	-2884178	1660.4	71.7	0	-90
WL13	Core	Cape	South African	85427.04	-2884327	1647.4	20.9	0	-90
WL14	Core	Cape	South African	84316.14	-2884685	1664.7	53.6	0	-90
WL15	Core	Cape	South African	85260.72	-2883750	1641.4	21.33	0	-90
WL16	Core	Cape	South African	84662.94	-2883446	1652.5	52.06	0	-90
WL17	Core	Cape	South African	83906.85	-2884750	1665.9	63.7	0	-90
WL18	Core	Cape	South African	85607.58	-2883168	1645.9	52.42	0	-90
WL19	Core	Cape	South African	86567.65	-2886001	1663.1	44.61	0	-90
WL20	Core	Cape	South African	86722	-2885362	1622.8	39.1	0	-90
WL21	Core	Cape	South African	86182.16	-2885414	1620.8	30.7	0	-90
WL22	Core	Cape	South African	86463.82	-2884178	1622.9	26.55	0	-90
WL23	Core	Cape	South African	86016.98	-2883724	1630.6	22.26	0	-90

Appendix 1: JORC Code (2012) Table 1 for Berenice Cygnus Resources

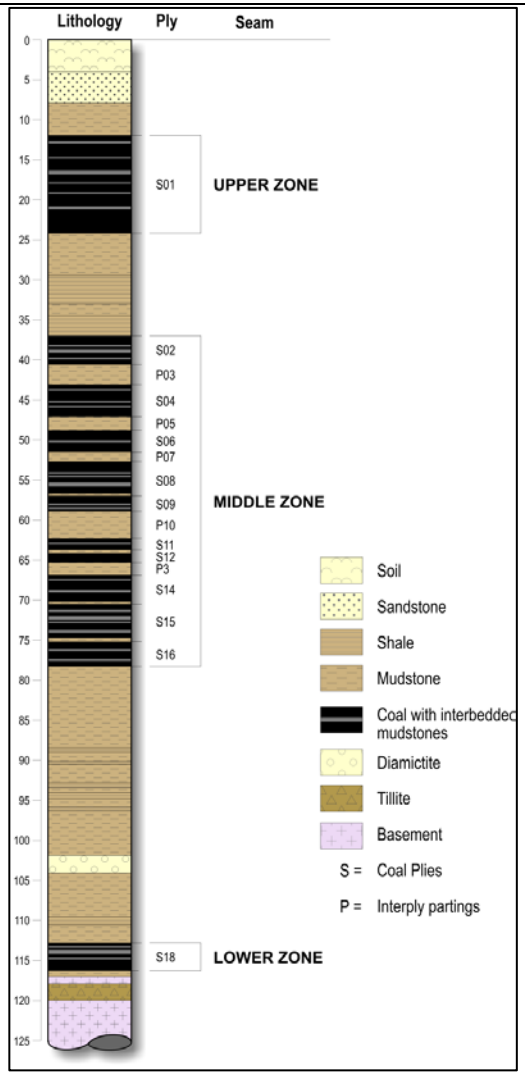
Criteria	JORC Code explanation	CP Comments
Section 1: Sampling Techniques and Data		
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling is used to obtain 1 m samples from which 3 kg is 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.*	- Cores are placed in metal core trays with some transported to a central core storage facility and some logged and sampled on-site. - Detailed sampling of coal seams is undertaken only once the coal seam is logged accurately and in detail. Sample increments are based on variations in coal characteristics in conjunction with density data obtained from wireline logs. - Whole core is sampled as per the South African industry standard and described as required in SANS 10320:2004. - All coal seams and intra seam stone partings intersected are sampled separately. - All coal samples are treated with due care during handling in order to minimise any change to the originally sampled material. The samples are bagged and properly marked and then sent to the laboratories for analyses.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so by what method, etc.).*	- Exploration holes are core holes using conventional TNW/wireline HQ size barrels (60.5 mm core diameter) and T6-146 size barrel (123mm core diameter). - Drilling was vertical and not oriented. - A full list exploration drill holes completed to date is attached hereto as Appendix 2.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. Whether sample sizes are appropriate to the grain size of the material being sampled.*	- An assessment of core recovery is made by the geologist in the field using the recovered thickness versus thickness reported in the geophysical log. If core recovery for a seam falls below 95 % the seam is re-drilled. - Coal is sampled as is from the core and its representivity is dependent upon the core diameter size, i.e. the larger the diameter the more likely the coal is to break close to natural sizing. The core diameter used (60.5mm and 123mm) is deemed appropriate.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	- Exploration boreholes are logged by independent geologists. - Total lengths of boreholes are logged following industry accepted lithological descriptions, procedures and methods. - Logging of the coal and/or carbonaceous shale is recorded down to 1cm. - All logging carried out is qualitative in nature. - All exploration boreholes and intersecting coal are geophysical logged. A standard suite of geophysical sondes are completed, including both long and short-spaced density calibrate internally to units of relative density (g/cc), gamma and calliper. All geophysical tools are calibrated on a regular basis and prior to arrival on site. - Geotechnical logging is done at the discretion of the independent geologist.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	- Sampling of the coal zones is done on a lithological basis. - The whole coal core is sampled, bagged on site to ensure the sampling is representative of the style and type of deposit and the sample size is appropriate for sufficient for the analytical techniques.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times,*	- Core samples are sent for analyses to Bureau Veritas Inspectorate Laboratories in Middelburg, South Africa. - Bureau Veritas Inspectorate is SANAS accredited with certificate number T0313 in accordance with the recognised International Standard ISO/IEC 17025:2005. - For the slim diameter samples (60.5mm) the following tests/analyses are performed:

	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.*	▪ Samples are crushed to a top size of 25mm before analyses. ▪ The raw Relative Density ("RD") is determined. ▪ The sample is air dried to eliminate all surface moisture and the air dried mass recorded. ▪ The air-dried sample is screened into a coarse (-25 to +0.5mm) and a fine (-0.5 to +0.212mm) fraction, and the -0.212mm fraction is reported separately. ▪ On the coarse fraction: • Full washability testing were done on the following RD's F1.30, F1.35, F1.40, F1.45, F1.50, F1.55, F1.60, F1.70, F1.80 and Sinks RD1.80 • Full proximate analyses as well as CV and Sulphur analyses were performed on these fractions. Swelling Index, Roga Index and Phosphorous in coal were only tested if a swell index of more than 2 were observed. ▪ On the fines fraction the same analyses were performed as stated above, but at the following densities only: F1.40, F1.60, F1.80 and Sinks at RD1.80. - Similar testing was done on the large diameter samples (123mm), but core was split into a coarse (-12.5 to +0.5mm) and a fine (-0.5 to +0.212mm) fraction, and remainder fine fraction reported separately (-0.212mm). Only yield, ash and swelling index were analysed and reported for each fraction. - Large diameter cores were also subjected to a complete set of processing tests (drop shatter, wet tumble, dry tumble, sizing and washing/analyses per size fraction, flotation tests on the fine fraction) and coking coal property analyses (ultimate analyses, caking properties, plasticity, dilatation and petrographic analyses) - Where the laboratory detects irregular analytical results a duplicate sample is re- analysed. Where this procedure does not resolve the irregularity a duplicate sample is sent to an external laboratory for verification.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	- All coal intersections are verified against the wireline logs. - Bureau Veritas Inspectorate makes use of custom designed LIMS with traceability to all raw data. All data calculations are done automatically and are first line checked by the laboratory supervisors for duplicate results repeatability and all out of tolerance results are repeated. Completed projects are handed over to the Customer Liaison Officer. Data is extracted to Microsoft Excel where it is pulled into graphs (macro operated) with pre-set limits using calorific value/ash correlation with upper and lower tolerance values. All results are also manually evaluated by experience and all suspect results together with all results that deviate by 2 points below or above the pre-set check value are repeated. All lab results are received both by electronic and hard copy (signed) formats. - All data is electronically imported and stored in an electronic geological data base (Geobank). - Coal quality data is checked and verified in the geological data base. Washability data are normalised to report additional wash fractions if needed within the current range of wash densities.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	- All boreholes are initially positioned by the field geologist using a hand-held GPS with accuracies of ±10m. At completion of each drilling program final collar positions of boreholes are surveyed using a high-accuracy differential GPS (Leica 1200 Dual Frequency GPS with Base Station), operated by professional, qualified surveyors at X-Y accuracies of less than 10mm and Z accuracies of <1 metre. - Grid used: South African LO29 grid system, Hartbeeshoek 94 (WGS84) datum. - A topographic surface was created using the borehole collars, as no surface DTM is yet available. This area is relatively flat lying and the created surface corresponds with the expected topography.
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.* • *Whether sample compositing has been applied.*	- Exploration drilling has been conducted on a staggered grid, spaced at between 500m and 2000m. The data spacing and distribution are sufficient to meet the JORC 2012 limits for classification of Measured, Indicated and Inferred resources and appropriate for the structural provenance of the area. Note that Inferred coal resources are only reported up to 2000m due to structural limitations in the project area. - No sample compositing are applied.
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.*	- The coal measures are preserved within down-faulted (graben-type) structures that strike approximately SSW to NNE and dips towards the north with local deviations towards the north-east or north-west presumably due to block rotation of strata between fault zones or resulting from presently undetected cross-faulting. Dips generally vary between 1.5°-6°. - The coal seams are horizontal to sub-horizontal and the apparent thickness (width) of the intersected coal seams does not always approximate the true thickness. - The orientation of sampling achieves unbiased sampling of possible structures.
Sample security	• *The measures taken to ensure sample security.*	- Sample security is ensured under a chain of custody between Universal Coal personnel and the laboratories.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	- Regular site inspections, verification of exploration procedures and activities are undertaken by the Universal Coal Chief Geologist and an independent consultant from Gemecs. - The laboratories undertake internal audits and check, in line with international standards, to ensure their analysis results are consistent and reporting is correct. - Gemecs, on behalf of Universal Coal, capture and validate the data in Geobank.
Section 2: Reporting of Exploration Results		
Mineral	• *Type, reference name/number, location and ownership including agreements or material*	- Universal Coal Development II (Pty) Ltd holds title to a Prospecting Right (number LP30/5/1/1/2/376PR) for coal over

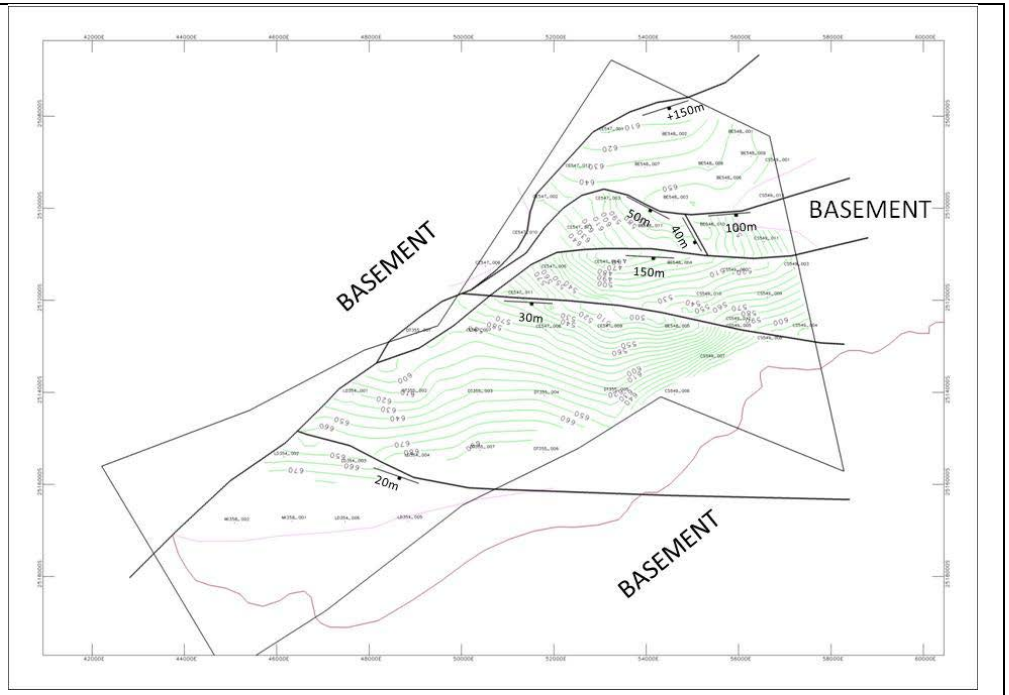
tenement and land tenure status	*issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	an area including the Berenice property and has submitted an application for a Mining Right over an area measuring 6,595 hectares. - Universal Coal Development V (Pty) Ltd holds title to a Prospecting Right (number LP30/5/1/1/2/1276PR) for coal over an area including the Cygnus property measuring 12,299 hectares. - Universal Coal Development II (Pty) Ltd is a joint venture between Universal Coal plc (50% ownership) and black economic empowerment entity, Bono Lithihi Investment Group (Pty) Ltd (50% ownership). - Universal Coal Development V (Pty) Ltd is a joint venture between Universal Coal plc (50% ownership) and black economic empowerment entity, Solar Spectrum Trading 365 (Pty) Ltd (50% ownership).
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	- Previous exploration was carried out by Trans-Natal Coal Corporation, Goldfields of SA and Rio Tinto Mining and Exploration. - None of the historic exploration data has been used by Universal Coal in the resource estimations.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Soutpansberg/Tuli Coal Field: - Represents Karoo-aged sediments deposited within smaller Limnic Karoo basins located outside of the main Karoo basin, typically structurally controlled grabens within the Limpopo Mobile Belt and Soutpansberg-age rocks. The strata dips at 2°-20° northwards, terminating against east-west trending strike faults forming the northern margins of the grabens; - This Soutpansberg coal field is characterised by intensive faulting. Dislocations both parallel to strike and at a high angle thereto are common and sub-divide the coalfield into numerous irregular-sized blocks. Displacements vary between 20m and 200m. The Tuli coal field is structurally less complex; - The coal zones are developed within the Ecca Group in strata (Mikambeni and Madzaringwe Formations) that are the local representatives of the Vryheid and Volksrust Formations of the Main Karoo basin. The Ecca Group is unconformably overlain by a sandstone package of the Fripp Formation which generally forms a useful stratigraphic marker. Above the Fripp Formation the Solitude Formation of the Beaufort Group occurs in the deeper areas and comprises mostly siltstone and red mudstone/shale. The Ecca Group strata are underlain by varying thicknesses of the Tshidzi Formation (equivalent of the Dwyka Group); - The Soutpansberg/Tuli coal deposits are classified as a 'thick interbedded coal seam'-type deposit [SAMREC Code (2007) and SANS10320:2004] consisting of multi-seam coal-mudstone associations (coal zones), some 40m thick, with up to seven discrete Coal Zones; - Where developed, the coal component of the seams/zones is generally high in vitrinite content and the coal rank (carbon/energy content) is low, steadily increases towards the east as well as to a more limited extent with depth. Local Geology: - The Berenice Cygnus project is located within the "B"-block of the Mopane sector of the Soutpansberg coalfield; - The coal-bearing strata are deposited in a half-graben, fault-bounded toward the north-west and sub-outcropping towards the south-east; - The full Karoo Sequence is present with the coal-rich Ecca Formation underlain by tillites and diamictites of the Tshidzi Formation (Dwyka Group) and overlain by the sandstone package of the Fripp Formations. In the deeper parts of the basin the Fripp Formation is overlain by siltstones and red mudstone/shales of the Beaufort Group; - A schematic generalised stratigraphic column for the Berenice Cygnus area appears in the following illustration:

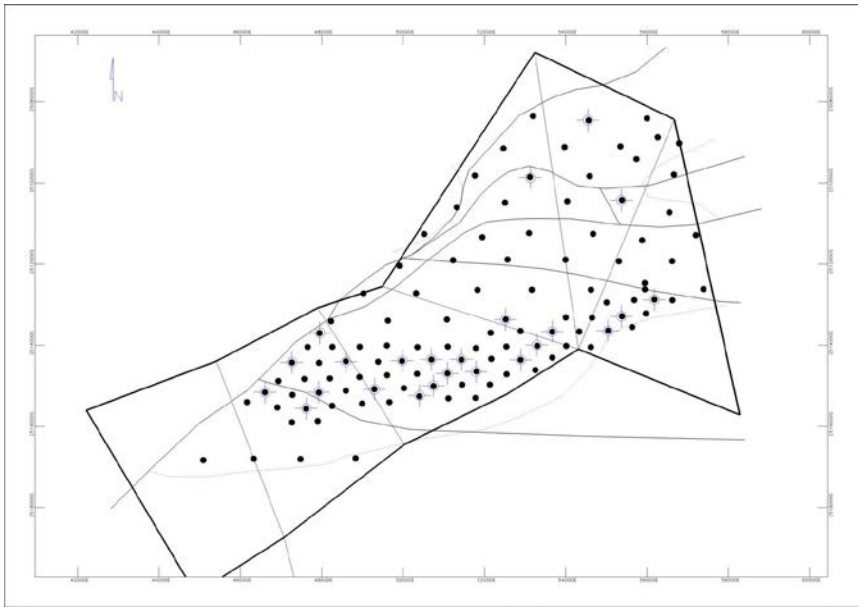


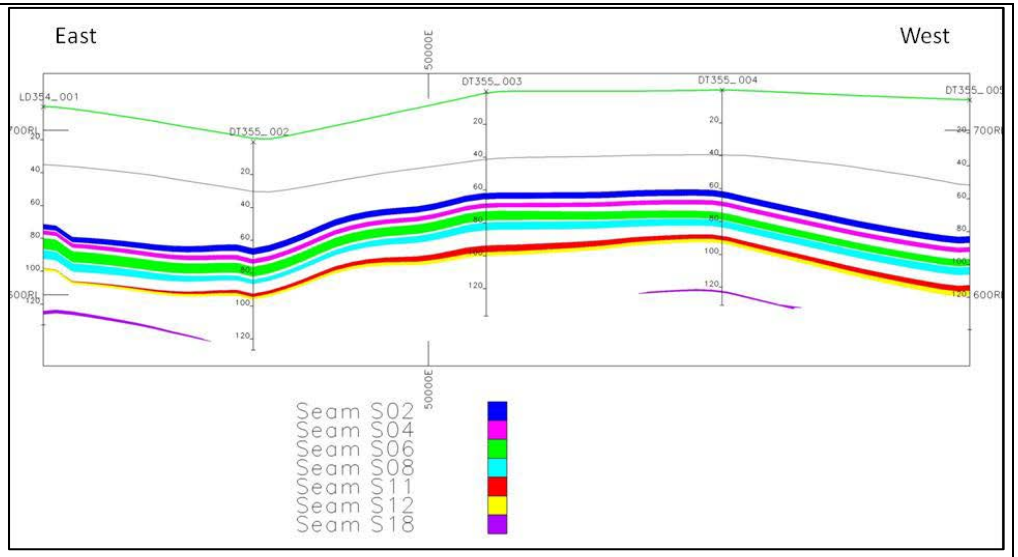
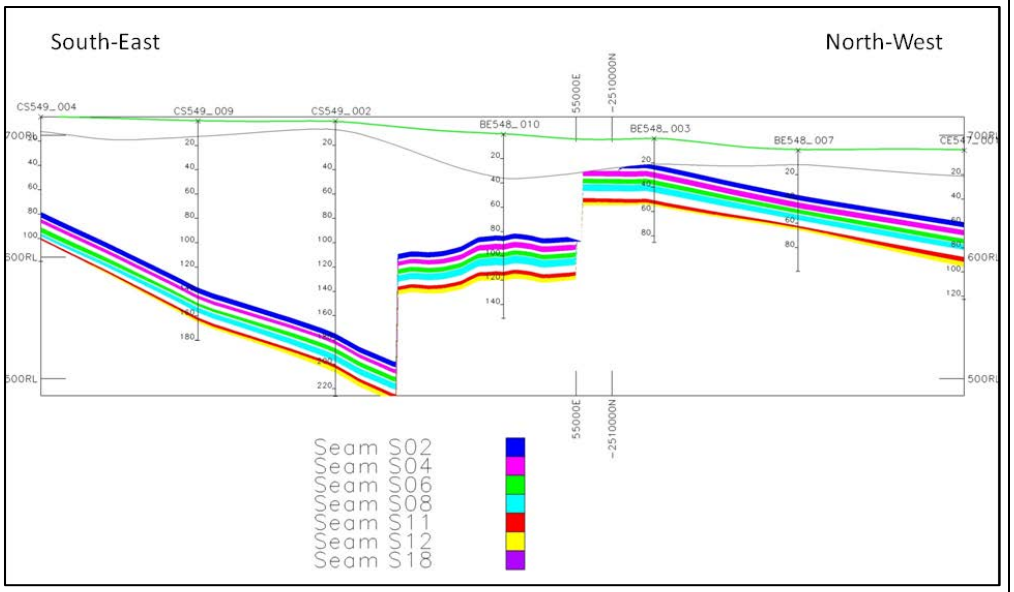
- The coal deposits of this locality consist typically of bright coal/carbonaceous mudstone associations, forming a series of composite coal 'zones';
- Three coal zones can be identified and are named from top to bottom, namely the Upper, Main and Lower Coal Zones;
- The Upper and Main Coal Zones consist mostly of interlaminated to inter-bedded mudstone, coal and shale, while the Lower Zone, where developed, tends to be formed of a number of relatively thin coal beds or seams separated by non-carbonaceous or carbonaceous partings;
- The coal zones locally consist of up to eighteen "coal plies"(S) as illustrated below:



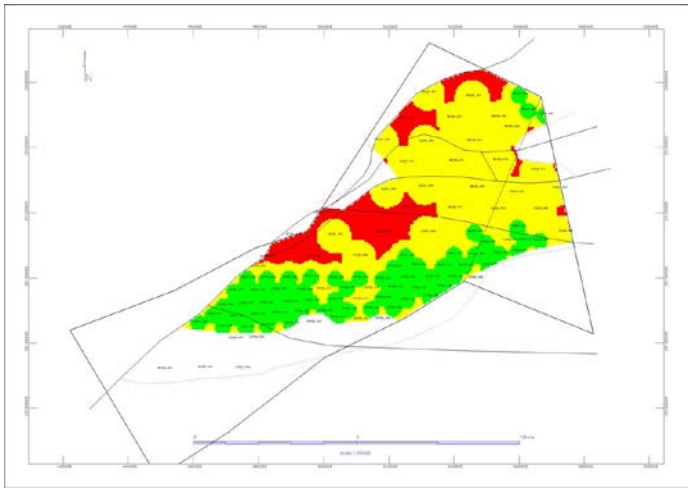
- Dislocation of the coal measures by faulting both parallel to strike and at an angle thereto is indicated. The western section of the coal-bearing area appears to be structurally more stable than further towards the north-east and east:

		 - Weathering depth recorded in drill-holes range from 3.7m to 58.2m with an average of 26m. Due to weathering and denudation effects the coal zones in some areas are absent or the chemical characteristics of the coal have been adversely affected.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* - *easting and northing of the drill hole collar* - *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* - *dip and azimuth of the hole* - *down hole length and interception depth* - *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	- A full list of details of drill holes used in the Resource Estimate can be found in Appendix 2. - All drill holes have been used and modelled as vertical.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	- All seams where multiple coal quality samples are taken are given a composite value (generated within the Minex software) weighting each quality by thickness and relative density, with the exception of relative density which is weighted on thickness.
Relationship between mineralisation widths and intercept	• *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 (eg 'down hole length, true width not known').*	- The coal measures are preserved within down-faulted (graben-type) structures that strike approximately SSW to NNE and dips towards the north with local deviations towards the north-east or north-west presumably due to block rotation of strata between fault zones or resulting from presently undetected cross-faulting. Dips generally vary between 1.5°-6°.

lengths		
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.*	- A plan of the Berenice Cygnus project area with drill hole collar positions and appropriate sectional views are presented below:  *Black dots small diameter, blue cross large diameter holes*

		 
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 exploration results within the Berenice Cygnus areas have been reported.
Other substantive	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey*	- A number of additional geology-related studies have been completed at Berenice-Cygnus to date. These include: ▪ A preliminary geotechnical investigation.

exploration data	*results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	▪ Bulk samples - coal wash simulation and metallurgical test work (coking coal properties). ▪ A geohydrological study. ▪ A scoping study.
Further work	• *The nature and scale of planned further work (eg 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.*	- Infill drilling at 250m x 250m spacing at is planned for the Southern and Northern Resource Areas at Berenice Cygnus - to improve confidence levels. - A pre-feasibility study for Berenice Cygnus is planned to commence in 2016.
Section 3: Estimation and Reporting of Mineral Resources		
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.*	- All the exploration data and analytical results are imported into a Geobank database and subjected to independent validation routines. ▪ Lithological descriptions are verified against the down hole geophysical logs, and coal seam correlations are validated. ▪ Coal sample positions are verified against coal seam occurrences, and raw coal analyses compared to lithological descriptions. ▪ A number of analytical tests and routines are used to validate all the raw and washability data as received from the laboratory. ▪ Anomalies are identified, queried and corrected where possible, otherwise flagged and removed from the final modelling dataset prior to geological modelling and resource calculation.
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 undertook a number of site visits to the Berenice Cygnus project and is familiar with the area and geology. - The Competent Person reviewed geological logging and field procedures and is satisfied with the data collection procedures and protocols.
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.*	- Confidence in the geological interpretation is moderate to high - Borehole coverage and density confirmed the nature, continuity of the seams and coal quality. - Boreholes are geologically detailed logged, acceptably sampled and data used is independently validated. - The Mineral Resource estimation is primarily guided by geology. - Continuity in geology and quality is primarily affected by fault displacement, basement topography and variation in ply and parting thicknesses. - It is recommended that future exploration involve infill drilling at 250m intervals and geophysical surveys to allow more accurate geological interpretation and improve resource confidence levels.
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 coal seams (Upper and Main Zones) at Berenice Cygnus extend approximately 12km along strike and 15km perpendicular to strike with an approximate average combined thickness of 27m for the target economic plies. - The seams sub-outcrop in the south and along certain faults and reach depths of up to 260m.
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 is chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and* • *Whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation is 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.*	- Geological modelling and Resource estimation are performed using Gemcom Minex™ software. - Sections are used across the resource area to ensure all the correlations are consistent, and are verified against the lithological logging as well as downhole geophysical logs. - The modelling database is set up to model the individual coal plies. - Historical boreholes were not included in the modelling process due to the lack of detail on the coal plies. - A three dimensional structural model, raw coal quality model as well as washability model was created for all the coal plies. - The surface topography is created using the borehole collars, and verified with topography maps and surface contours. - Each coal seam, ply and partings are modelled on a grid of 50x50m, based on the average borehole spacing in the project area. - Coal extrapolation is limited to 500m from the last borehole with data. - The final structural model is created, using the topographic surface, weathering limit and base surface as cutting surfaces to remove coal where it intersects these surfaces. - Due to the complexity of the ore body structure, and little additional information at hand to interpret any detailed structures, only the major fault structures and basement features were included in the modelling process. As more detail information i.e. aeromagnetic surveys, infill drilling become available, these structural models will be enhanced accordingly. - The stratigraphic sequence is verified in Geobank as well as in Minex (including gaps and overlaps) before structural modelling commenced.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	- Tonnages are estimated as in situ using the in situ density estimation method using air dried moisture and air dried relative density laboratory values.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	- A maximum raw ash value cut-off at 65% was applied to reported coal tonnages.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the*	- A minimum seam thickness of 0.5 metres is applied to the resource estimate. - Coal resources were split into potential Opencast and potential Underground resources by applying the following

	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.	criteria: ▪ Opencast areas – Resource areas where the strip ratio is equal or less than 3:1 (cubic metres/tonne). Areas are subdivided by fault boundaries. ▪ Underground areas – Resource areas where the strip ratio is more than 3:1 (cubic metres/tonne). Areas are subdivided according to faults boundaries.
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.*	- Universal Coal has determined, following washability studies and coking property assessment done by Inspectorate and the CSIR Centre for Mining Innovation, that the seams are suitable to produce a primary soft coking coal product and a secondary thermal product for domestic power generation (Eskom).
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	- It is the Competent Person's opinion that there are no limiting environmental factors at this stage of the project development at Berenice Cygnus other than regulations relating to mining adjacent to wetlands, which are managed through applying buffer zones as applied for and granted (Mining Right, NEMA and Water Use Licence). - The regulatory framework in South Africa makes provision for waste and process residue disposal and the project area has suitable areas available to host such facilities and the necessary Regulatory approvals for waste disposal have been obtained.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	- The density used in the tonnage calculation is relative density determined in the laboratory according to ISO 5072:1997. The apparent relative density is determined by weighing a sample suspended in water, allowing the sample to drain to remove surface liquid and then reweighing the sample in air. - All coal samples submitted to the laboratory is subjected to RD determination.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie 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.*	- Resource classification is done according to the JORC 2012 code guidelines and appropriately reflects the Competent Person's view of the deposits. - Borehole spacing of 500m is used to classify a measured resource, up to 1000m to classify an indicated resource and up to 2000m to classify an inferred resource at Berenice Cygnus. - Only slim diameter boreholes where the relevant seams are analysed are considered as point observations to be used for resource classification. - The figure below illustrate the resource classification for Berenice Cygnus (Measured – green, Indicated – yellow, Inferred - red): 

Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	- No independent audit or review of the Mineral Resource estimates has been conducted.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.* • *Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	- The Competent Person applied the principles of the JORC 2012 code in estimating the Resources at Berenice Cygnus. - To date no geostatistical studies have been undertaken to ascertain the confidence in drill hole spacing for the purposes of resource estimation. - Factors that could affect the accuracy of the resource estimate include unknown structures between completed drill holes, dolerite dykes and sills, weathering and variation in seam and in-seam stone band thickness. - Infill drilling at 250m intervals and geophysical surveys will assist in improving the confidence in the geological model and resource estimate.

Annexure 2: Drill Hole Data Summary for the Berenice Cygnus Project

BOREID	Easting	Northing	Elevation	TYPE	EOH	AZI	DIP	Coordsys
BE548_001	-55997.180	2508411.000	683.83	A	100.01	0	-90	LO29_WGS84
BE548_002	-54560.840	2508461.100	686.65	A	115.14	0	-90	LO29_WGS84
BE548_003	-54586.870	2509835.600	697.52	A	85.06	0	-90	LO29_WGS84
BE548_03LD	-54592.327	2509838.788	697.60	XLD2	18.00	0	-90	LO29_WGS84
BE548_004	-54672.210	2511256.980	702.29	A	271.59	0	-90	LO29_WGS84
BE548_005	-54620.710	2512633.000	709.61	A	209.45	0	-90	LO29_WGS84
BE548_006	-55738.740	2509414.260	667.12	A	62.17	0	-90	LO29_WGS84
BE548_007	-53971.290	2509118.320	687.81	A	99.21	0	-90	LO29_WGS84
BE548_07LD	-53978.211	2509122.938	688.02	XLD2	8.00	0	-90	LO29_WGS84
BE548_008	-55344.650	2509101.750	661.69	A	56.27	0	-90	LO29_WGS84
BE548_009	-56264.590	2508880.190	692.76	A	70.00	0	-90	LO29_WGS84
BE548_09LD	-56264.037	2508884.518	692.95	XLD2	25.00	0	-90	LO29_WGS84
BE548_010	-55383.610	2510424.160	701.01	A	150.98	0	-90	LO29_WGS84
BE548_011	-54037.900	2510455.050	694.44	A	150.00	0	-90	LO29_WGS84
BE548_012	-53993.498	2511892.654	703.14	AP2	290.18	0	-90	LO29_WGS84
BE548_034	-54332.776	2513662.163	716.79	AP2	123.49	0	-90	LO29_WGS84
BE548_02LD	-54545.394	2508453.661	686.46	LD	93.84	0	-90	LO29_WGS84
BE548_10LD	-55367.367	2510426.628	700.94	LD	132.85	0	-90	LO29_WGS84
CE547_001	-53192.500	2508353.200	687.78	A	122.25	0	-90	LO29_WGS84
CE547_01LD	-53189.943	2508357.826	688.35	XLD2	23.00	0	-90	LO29_WGS84
CE547_002	-51765.330	2509821.140	675.51	A	46.00	0	-90	LO29_WGS84
CE547_003	-53118.520	2509857.400	700.22	A	136.15	0	-90	LO29_WGS84
CE547_004	-53096.870	2511237.960	701.66	A	282.15	0	-90	LO29_WGS84
CE547_005	-51947.690	2511340.160	708.05	A	196.20	0	-90	LO29_WGS84
CE547_006	-50520.180	2511260.310	679.39	BMT	18.50	0	-90	LO29_WGS84
CE547_007	-50318.950	2512720.650	711.43	A	148.99	0	-90	LO29_WGS84
CE547_008	-51829.450	2512638.600	714.60	A	187.48	0	-90	LO29_WGS84
CE547_009	-53163.920	2512633.270	708.38	A	236.15	0	-90	LO29_WGS84

CE547_010	-51321.340	2510601.690	703.93	BMT	34.70	0	-90	LO29_WGS84
CE547_011	-51229.400	2511905.640	713.20	F	150.00	0	-90	LO29_WGS84
CE547_012	-52469.200	2509151.250	694.59	A	90.00	0	-90	LO29_WGS84
CE547_013	-52505.880	2510488.190	702.46	A	100.00	0	-90	LO29_WGS84
CE547_014	-52569.820	2511887.618	711.03	AP2	255.51	0	-90	LO29_WGS84
CE547_015	-49909.646	2512043.505	706.80	AP2	89.08	0	-90	LO29_WGS84
CE547_016	-52523.597	2513364.298	715.23	AP2	190.40	0	-90	LO29_WGS84
CE547_017	-54001.570	2513314.734	713.40	AP2	183.82	0	-90	LO29_WGS84
CE547_018	-53668.196	2513666.922	715.70	AP2	171.01	0	-90	LO29_WGS84
CE547_16LD	-52519.035	2513365.578	715.33	LD2	145.43	0	-90	LO29_WGS84
CE547_18LD	-53668.362	2513662.412	715.71	LD2	109.38	0	-90	LO29_WGS84
CE547_03LD	-53126.257	2509875.530	700.55	LD	130.00	0	-90	LO29_WGS84
CE547_07LD	-50336.098	2512719.752	711.47	XLD	50.00	0	-90	LO29_WGS84
CN54901	-54291.350	2514113.050	713.80	H	107.65	0	-90	LO29WGS
CN54902	-55956.340	2513548.060	718.10	H	78.20	0	-90	LO29WGS
CN54903	-55116.350	2512138.060	705.60	H	270.15	0	-90	LO29WGS
CN54904	-56331.340	2509323.070	688.60	H	84.00	0	-90	LO29WGS
CN54905	-57971.340	2511823.060	704.40	H	186.00	0	-90	LO29WGS
CS549_001	-56788.900	2509025.090	693.62	A	68.12	0	-90	LO29_WGS84
CS549_002	-55877.100	2511412.760	711.90	A	225.89	0	-90	LO29_WGS84
CS549_003	-57201.840	2511288.720	706.98	A	206.00	0	-90	LO29_WGS84
CS549_004	-57387.030	2512618.710	715.35	A	118.62	0	-90	LO29_WGS84
CS549_005	-55946.540	2512623.680	716.08	XF	156.40	0	-90	LO29_WGS84
CS549_006	-54617.560	2514046.090	720.21	A	61.91	0	-90	LO29_WGS84
CS549_007	-55384.580	2513286.910	716.58	A	80.00	0	-90	LO29_WGS84
CS549_008	-56624.900	2512891.910	718.95	A	71.15	0	-90	LO29_WGS84
CS549_009	-56620.060	2511928.550	711.83	A	180.00	0	-90	LO29_WGS84
CS549_010	-55308.540	2511931.500	709.03	A	206.15	0	-90	LO29_WGS84
CS549_011	-56548.760	2510728.680	702.02	A	195.00	0	-90	LO29_WGS84
CS549_012	-55943.710	2512470.530	715.2	A	150.00	0	-90	LO29_WGS84

CS549_013	-56661.380	2509798.460	698.97	BMT	24.77	0	-90	LO29_WGS84
CS549_015	-55971.674	2513217.921	719.38	AP2	120.54	0	-90	LO29_WGS84
CS549_016	-55041.759	2513643.221	719.29	AP2	64.95	0	-90	LO29_WGS84
CS549_017	-56182.151	2512876.139	718.53	AP2	134.84	0	-90	LO29_WGS84
CS549_018	-55685.272	2512888.356	716.34	AP2	168.30	0	-90	LO29_WGS84
CS549_019	-55005.179	2512949.332	713.75	AP2	161.90	0	-90	LO29_WGS84
CS549_020	-54646.890	2513320.793	714.92	AP2	116.16	0	-90	LO29_WGS84
CS549_021	-55632.518	2513553.416	719.81	BP2	43.51	0	-90	LO29_WGS84
CS549_16LD	-55039.367	2513646.226	719.38	LD2	51.20	0	-90	LO29_WGS84
CS549_17LD	-56179.353	2512879.827	718.59	LD2	114.09	0	-90	LO29_WGS84
CS549_07LD	-55371.199	2513290.903	717.05	LD	78.50	0	-90	LO29_WGS84
CS549_12LD	-55926.830	2512471.922	715.44	XLD	50.00	0	-90	LO29_WGS84
DT355_001	-49023.960	2512725.470	684.30	A	71.15	0	-90	LO29_WGS84
DT355_002	-48932.720	2514038.540	693.11	A	126.46	0	-90	LO29_WGS84
DT355_003	-50352.030	2514047.290	723.71	A	136.35	0	-90	LO29_WGS84
DT355_004	-51790.640	2514071.390	724.61	A	130.78	0	-90	LO29_WGS84
DT355_005	-53298.130	2514011.140	718.41	A	139.37	0	-90	LO29_WGS84
DT355_006	-51780.070	2515299.120	728.62	A	60.85	0	-90	LO29_WGS84
DT355_007	-50399.120	2515256.510	729.63	A	82.56	0	-90	LO29_WGS84
DT355_008	-51078.532	2513366.217	693.50	AP2	164.72	0	-90	LO29_WGS84
DT355_009	-49627.783	2513394.586	694.05	AP2	153.56	0	-90	LO29_WGS84
DT355_010	-48228.345	2513409.766	687.00	AP2	88.00	0	-90	LO29_WGS84
DT355_011	-49608.008	2514739.381	700.95	AP2	101.98	0	-90	LO29_WGS84
DT355_012	-51093.066	2514693.561	702.07	AP2	85.14	0	-90	LO29_WGS84
DT355_013	-52545.250	2514714.296	700.89	AP2	127.47	0	-90	LO29_WGS84
DT355_014	-51100.458	2514034.219	697.57	AP2	155.91	0	-90	LO29_WGS84
DT355_015	-49601.130	2514006.425	695.84	AP2	137.72	0	-90	LO29_WGS84
DT355_016	-49386.609	2514407.904	697.83	AP2	131.65	0	-90	LO29_WGS84
DT355_017	-49974.708	2514388.723	700.35	AP2	134.65	0	-90	LO29_WGS84
DT355_018	-50696.978	2514354.228	701.13	AP2	145.03	0	-90	LO29_WGS84

DT355_019	-50342.910	2514704.061	703.15	AP2	141.47	0	-90	LO29_WGS84
DT355_020	-49294.853	2515081.885	702.72	AP2	89.57	0	-90	LO29_WGS84
DT355_021	-50020.650	2515058.518	704.28	AP2	94.41	0	-90	LO29_WGS84
DT355_022	-50746.995	2515007.202	704.46	AP2	121.52	0	-90	LO29_WGS84
DT355_023	-51115.388	2515309.484	706.21	AP2	99.96	0	-90	LO29_WGS84
DT355_024	-49665.129	2515401.846	706.83	AP2	67.68	0	-90	LO29_WGS84
DT355_031	-52153.284	2513694.609	695.90	AP2	148.42	0	-90	LO29_WGS84
DT355_032	-52888.567	2513651.304	715.72	AP2	203.71	0	-90	LO29_WGS84
DT355_033	-54011.817	2514015.512	719.14	AP2	112.16	0	-90	LO29_WGS84
DT355_034	-52539.521	2514031.698	695.76	AP2	154.42	0	-90	LO29_WGS84
DT355_035	-51435.601	2514356.071	699.91	AP2	141.58	0	-90	LO29_WGS84
DT355_036	-52168.993	2514334.962	698.79	AP2	137.58	0	-90	LO29_WGS84
DT355_037	-52890.399	2514361.139	698.35	AP2	167.80	0	-90	LO29_WGS84
DT355_038	-53669.937	2514306.188	720.73	AP2	133.04	0	-90	LO29_WGS84
DT355_039	-53252.999	2514609.866	723.38	AP2	185.42	0	-90	LO29_WGS84
DT355_040	-51803.273	2514647.076	701.63	AP2	144.53	0	-90	LO29_WGS84
DT355_041	-51452.944	2514971.935	703.60	AP2	128.68	0	-90	LO29_WGS84
DT355_042	-52133.940	2514969.754	702.71	AP2	116.82	0	-90	LO29_WGS84
DT355_12LD	-51093.080	2514691.614	702.18	LD2	113.47	0	-90	LO29_WGS84
DT355_13LD	-52547.894	2514711.360	700.98	XLD2	40.00	0	-90	LO29_WGS84
DT355_17LD	-49979.648	2514384.488	700.54	XLD2	52.42	0	-90	LO29_WGS84
DT355_18LD	-50696.032	2514351.888	701.36	LD2	109.04	0	-90	LO29_WGS84
DT355_20LD	-49299.466	2515084.651	702.88	LD2	56.16	0	-90	LO29_WGS84
DT355_22LD	-50745.781	2515001.865	704.35	LD2	68.12	0	-90	LO29_WGS84
DT355_30LD	-49946.718	2513650.359	695.39	XLD2	66.00	0	-90	LO29_WGS84
DT355_35LD	-51435.315	2514351.303	699.93	XLD2	52.69	0	-90	LO29_WGS84
DT355_37LD	-52893.962	2514360.859	698.46	LD2	104.39	0	-90	LO29_WGS84
DT355_40LD	-51793.245	2514649.651	701.64	LD2	93.75	0	-90	LO29_WGS84
DT355_05LD	-53291.732	2513993.687	718.56	LD	109.05	0	-90	LO29_WGS84
DT355_07LD	-50403.846	2515240.175	729.63	LD	79.40	0	-90	LO29_WGS84

LD354_001	-47652.970	2514042.500	714.35	A	132.37	0	-90	LO29_WGS84
LD354_002	-46159.350	2515403.040	715.18	A	128.20	0	-90	LO29_WGS84
LD354_003	-47615.240	2515562.530	701.62	A	112.57	0	-90	LO29_WGS84
LD354_004	-48991.750	2515438.960	714.79	A	68.20	0	-90	LO29_WGS84
LD354_005	-48832.630	2516785.500	713.46	BMT	43.00	0	-90	LO29_WGS84
LD354_006	-47476.430	2516803.850	721.33	A	61.15	0	-90	LO29_WGS84
LD354_007	-48201.486	2514817.458	696.44	AP2	108.85	0	-90	LO29_WGS84
LD354_008	-46932.801	2514881.340	704.89	AP2	143.49	0	-90	LO29_WGS84
LD354_009	-48594.041	2514396.265	694.75	AP2	125.79	0	-90	LO29_WGS84
LD354_010	-47932.123	2514435.454	693.86	AP2	142.28	0	-90	LO29_WGS84
LD354_011	-47267.376	2514425.878	698.70	AP2	154.15	0	-90	LO29_WGS84
LD354_012	-47571.794	2514831.401	696.77	AP2	139.15	0	-90	LO29_WGS84
LD354_013	-48926.772	2514782.819	698.07	AP2	108.37	0	-90	LO29_WGS84
LD354_014	-48592.845	2515118.993	701.26	AP2	98.50	0	-90	LO29_WGS84
LD354_015	-47926.897	2515165.657	698.01	AP2	127.19	0	-90	LO29_WGS84
LD354_016	-47278.815	2515223.278	699.14	AP2	136.29	0	-90	LO29_WGS84
LD354_017	-46601.200	2515160.153	697.94	AP2	132.16	0	-90	LO29_WGS84
LD354_018	-46908.177	2515534.516	702.57	AP2	133.10	0	-90	LO29_WGS84
LD354_019	-48256.369	2515494.488	703.58	AP2	100.02	0	-90	LO29_WGS84
LD354_020	-47901.172	2515868.460	703.96	AP2	86.64	0	-90	LO29_WGS84
LD354_021	-47267.365	2515897.485	703.44	AP2	120.94	0	-90	LO29_WGS84
LD354_022	-47944.884	2513700.404	689.72	AP2	103.17	0	-90	LO29_WGS84
LD354_023	-48260.420	2514040.612	691.22	AP2	130.24	0	-90	LO29_WGS84
LD354_03LD	-47615.020	2515554.605	701.26	LD2	69.02	0	-90	LO29_WGS84
LD354_09LD	-48596.121	2514403.699	694.94	LD2	99.61	0	-90	LO29_WGS84
LD354_11LD	-47264.907	2514420.140	698.68	LD2	117.01	0	-90	LO29_WGS84
LD354_15LD	-47922.689	2515157.836	698.01	LD2	82.71	0	-90	LO29_WGS84
LD354_17LD	-46605.093	2515159.960	698.16	LD2	91.66	0	-90	LO29_WGS84
LD354_22LD	-47954.626	2513695.586	689.68	LD2	78.57	0	-90	LO29_WGS84
LD354_03LD	-47619.531	2515548.173	701.12	XLD	50.00	0	-90	LO29_WGS84

MI358_001	-46327.080	2516795.340	727.98	A	52.52	0	-90	LO29_WGS84
MI358_002	-45087.330	2516830.200	723.34	A	66.10	0	-90	LO29_WGS84
W128	-52220.000	2511475.000	706.00	H	229.84	0	-90	LO29WGS
Y127	-53800.000	2513025.000	711.00	H	165.88	0	-90	LO29WGS