



Statement of Coal Resources and Coal Reserves for Resource Generation Limited

ASX Release

23 January 2017

Introduction

Resource Generation Limited (**Resgen**) holds various Coal Mining Tenements in South Africa through its subsidiaries Ledjadja Coal (Proprietary) Limited (**Ledjadja**), (the owner of the Boikarabelo Coal Mine), and Waterberg One Coal (Proprietary) Limited (**Waterberg One**). Ledjadja and Waterberg One are ventures between Resgen (74% ownership) and black economic empowerment entity, Fairy Wing Trading 136 (Proprietary) Limited (26% ownership).

Ledjadja holds title to the Mining Right and Tenements listed in the schedule below:

Asset	Farm	Project Area	Size (ha)	Holder	Attributable Share	Mining Right number	Comments
Boikarabelo Coal Mine	Witkopje 238LQ	Ledjadja #1	9018	Ledjadja Coal (Pty) Ltd	1) Resource Generation Ltd. 74% 2) Fairy Wing Trading 136 (Pty) Ltd. 26%	169MR (previously identified as MPT15/2012MR)	Granted 20 April 2011 Expiry 19 April 2044
	Draai Om 244 LQ	Ledjadja #2					
	Kalkpan 243 LQ	Ledjadja #3					
	Osorno 700 LQ	Ledjadja #4					
	Zeekoevley 241 LQ	Ledjadja #5					
	Vischpan 274 LQ	Ledjadja #6					
	Kruishout 271 LQ	Ledjadja #7					

Waterberg One Coal holds title to Prospecting Rights over the farms Koert Louw Zyn Pan 234 LQ (Project Area Waterberg #1) (Prospecting Right number PR678/2007), and the farms Lisbon19 LQ (Project Area Waterberg #2) and Zoetfontein 22 LQ (Project Area Waterberg #3) (Prospecting Right number PR720/2007).

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The Coal Resources and Coal Reserves estimate for Boikarabelo Coal Mine has been updated in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, (The JORC Code, 2012 Edition) (**the JORC Code 2012**).

This update of the Coal Resources and Coal Reserves estimates relate specifically to the Ledjadja #1 and Ledjadja #3 project areas where an optimised mine design has now been completed. These two project areas make up 27% of Resgen's Coal Resources and 46% of Resgen's Coal Reserves.

Resgen has previously secured export offtake contracts and has developed a dual export/domestic business model intending to service both export customers and domestic power stations. This model has resulted in a meaningful increase in the Net Present Value (NPV) and Internal Rate of Return (IRR) of the project.

The previously announced 2010 estimated Coal Resources and Coal Reserves (**"the 2010 Release"**) was based on a single, low quality product for sale to domestic power stations.

An updated statement of those estimated Coal Resources and Coal Reserves as at 31 December 2016 is included below.

Statement of Coal Resources and Coal Reserves

The total Coal Resources base is summarised in the Table below:

Project Area	Area (hectares)	Coal Resources (Mt)	Coal Reserves (Mt)
Ledjadja #1 and Ledjadja #3 (*)	830.0	994.81	267.09
Ledjadja #1 and Ledjadja #2(**)(i)	877.0	1479.6	-
Waterberg #1 (***) (i)	536.0	426.3	314.2
Waterberg #1(**)(i)	706.0	551.7	-
Total	2,949.0	3,711.61	581.29

(*)- determined by applying the JORC Code 2012

(**)- determined by applying the JORC Code 2004; and relates to the Inferred Resources of the Project Area

(***)- determined by applying the JORC Code 2004, and relates to the Measured and Indicated Resources of the Project Area

Note (i) -This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

This new business model for the Boikarabelo Coal Mine has resulted in the following variations to the 2010 Release:

Coal Resources

The Measured and Indicated Tonnes of 664.2 million tonnes have increased to 994.81 million tonnes. This is attributable to an increase in the Measured Resource Area as a result of additional drilling.

Coal Reserves

The Marketable Coal Reserves have reduced from 430.6 million tonnes to 267.09 million tonnes and are now based on:

- an export quality product with an average of 14% ash and an average 25.73 MJ/kg calorific value determined on an Air Dried (AD) basis; and
- a domestic power station product with an average 19.5 MJ/kg calorific value and an average 31.43 % ash determined on an AD basis.

The export quality product has an average yield of 23.68% and the domestic power station product has an average yield of 19.61 %. This equates to an overall average yield of 43.3%.

The run of mine (ROM) of 616.85 million tonnes equates to a life of mine in excess of 40 years at an annual production rate of 15.12 million tonnes and sales for a similar period at a rate of 6.55 million tonnes per annum (Production Target). The material assumptions on which this Production Target is based are (see Section 2 Coal Reserves below and Section 4 of Appendix 1 for more detail):

- open pit truck and shovel terrace operation,
- minimum coal seam/mining height thickness of 0.5m,
- dual product mine applying a minimum total yield cut off of 24%,
- appropriate pit slope angles (overall 45°),
- appropriate mining recovery factors, dilution and contamination, and
- beneficiation of the coal for a dual product in a high density beneficiation plant and applying appropriate plant factors.

This Production Target is based purely on Probable Coal Reserves and these Coal Reserves have been signed off by the Competent Persons.

The following information prescribed by the JORC Code 2012 is included in this Release:

- Section One and Section Two detail the Coal Resources and Coal Reserves as at 31 December 2016 with respect to the Boikarabelo Coal Mine. A comparison to the 2010 Release is also shown.
- **Appendix 1** provides a summary of important assessment and reporting criteria used at the Boikarabelo Coal Mine for reporting of Coal Resources and Coal Reserves in accordance with the Table 1 checklist in the JORC Code 2012.
- **Appendix 2** provides borehole co-ordinates and collar elevations.

The Inferred Coal Resources and Coal Reserves for Ledjadja #1 and Ledjadja #2 and the Coal Resources for Waterberg #1 will be subject to review and update under the JORC Code 2012 during the 2017 calendar year and will be released to the market once this review and update has been completed and approved.

Competent Persons' Statement

The information contained in this Release which relates to estimates of Coal Resources and Coal Reserves is based on and accurately reflects reports prepared by Competent Persons named beside the respective information in the Table below. Mr Ben Bruwer is a Principal Consultant with VBKom (Pty) Ltd (VBKOM). Mr Riaan Joubert is the Principal Geologist employed by Ledjadja.

Summary of Competent Persons responsible for Coal Resources and Coal Reserves

Competent Person	Area of Competency	Professional Society	Year of Registration	Membership Number
R. Joubert	Coal Resources	SACNASP*	2002	400040/02 Member
B. Bruwer	Coal Reserves	SAIMM**	1994	701068 Member

*SACNASP - South African Council for Natural Scientific Professions

** SAIMM - Southern African Institute of Mining and Metallurgy

The above-named Competent Persons both consent to the inclusion of material in the form and context in which it appears in this Release. Both individuals are members of a Recognised Professional Organisation in terms of the JORC Code 2012, and both have a minimum of five years' relevant experience in relation to the mineralisation and type of deposit being reported on by them to qualify as Competent Persons as defined in the JORC Code 2012.

Neither Mr Bruwer, nor VBKOM has a material interest or entitlement, direct or indirect, in the securities of Resource Generation Ltd. Mr Joubert holds no shares in Resource Generation Limited.

About Resource Generation Ltd:

Resource Generation Ltd. (Resgen) is an emerging ASX and JSE-listed energy company, currently developing the Boikarabelo Coal Mine in South Africa's Waterberg region. The Waterberg accounts for around 40% of the country's currently known coal resources. Resgen's primary shareholders are the Public Investment Corporation of South Africa SOC Limited (PIC), Noble Resources International Pte Limited and Altius Investment Holdings (Pty) Limited.

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STATEMENT OF COAL RESOURCES AND COAL RESERVES

Section 1 – Coal Resources

The Table below is an extract from the 2010 Release containing an estimate of the Coal Resources:

Farm	Project Reference	Inferred Resources	Indicated Resources	Measured Resources	Total Coal Resources
Witkopje South & Kalkpan	Ledjadia #1, Ledjadia # 3			664.2	664.2
Draai Om	Ledjadia #2	791.3			791.3
Witkopje	Ledjadia #1	688.3			688.3
Waterberg One	Waterberg #1			426.3	426.3
Waterberg One	Waterberg #1		551.7		551.7
Total		1,479.6	551.7	1,090.5	3,121.8

- Coal Resources are inclusive of Coal Reserves.
- Rounding figures may cause computational discrepancies.
- Figures are reported at 100% irrespective of percentage attributable to Resource Generation Limited.
- Tonnages are quoted in metric tonnes on an Air Dried Basis (AD) and million tonnes are abbreviated as Mt.

The Table below summarises the revised Coal Resources estimate as at 31 December 2016 applying the JORC Code 2012:

Project Area	Coal Resource Category	Gross Tonnes In situ (GTIS) (Mt)	Geological Losses (%)	Total Tonnes In situ (TTIS) (Mt)	Mineable Tonnes In situ (MTIS) (Mt)
Ledjadia #1, Ledjadia # 3	Measured	1,011.99	10	910.79	910.79
Ledjadia #1, Ledjadia # 3	Indicated	93.36	10	84.02	84.02
	Total	1,105.35		994.81	994.81

- Coal Resources are inclusive of Coal Reserves.
- Rounding figures may cause computational discrepancies.
- Figures are reported at 100% irrespective of percentage attributable to Resource Generation Limited.
- Tonnages are quoted in metric tonnes on an Air Dried Basis (AD) and million tonnes are abbreviated as Mt.
- MTIS tonnage is equivalent to TTIS as no theoretical height cut offs have been applied as a result of the mining method.

In accordance with Listing Rule 5.8.1 and 5.9.1, the following summary is provided of information material to understanding the reported estimates of Coal Resources at 31 December 2016. Further detail is included in Appendix 1 – JORC Code, 2012 Edition- Table 1

Coal Resources

Geology and geological interpretation

The coal deposits of the Waterberg Coalfield occur in the Grooteegeluk and Vryheid Formations of the Karoo Supergroup. These formations and their numerous coal zones vary in thickness from a few centimetres to several metres.

The interpreted sub-crop of the Boikarabelo Coal Mine specifically consists of the following formations:

- the Eendragtpan Formation (Triassic – Beaufort Group) which consists of barren sediments and overlies the coal zones,
- the Grooteegeluk Formation (Permian – Upper Ecca Group), which consists of intercalated bright coal (zones 5 to 11) and mudstone and contains the majority of the Coal Resources in the coalfield, and
- the Goedgedacht or Vryheid Formation (Permian – Middle Ecca Group), which consists predominantly of dull coal (zones 1 to 4) with minor carbonaceous mudstone and sandstone intercalations.

The Grooteegeluk Formation consists of cyclical repetitions of mudstone and coal with the coal seams named from the base upwards. Individual plies are named and correlated according to the Grooteegeluk Coal Mine (located in the Waterberg Coalfield) nomenclature. Faure et al. (1996) describe divisions applied to the Ecca Group coals in the Ellisras (Waterberg) Basin by staff of the Grooteegeluk Coal Mine. The predominantly dull coal seams (1, 2, 3, 4 and 4A) of the Goedgedacht Formation retained the original numbering. The remaining seams were re-classified by the Grooteegeluk Coal mine staff into zones 5 to 11. (Faure K, Willis J.P, Dreyer J.C. 1996. The Grooteegeluk Formation of the Waterberg Coalfield, South Africa: facies, paleo-environment and thermal history- evidence from organic and clastic matter. International Journal of Coal Geology, 29, 147-186.).

These Zones are further divided into coal seam plies which constitute the coal samples within each zone. This comprises of a sequence of sample names that group plies together in each classic Waterberg Zone. These samples can be correlated across the entire Waterberg Coalfield. A typical Waterberg borehole has 11 coal zones from Zone 1 at the base to Zone 11 at the top. The lower three zones do not comprise of alternating plies but are more typical uniform coal seams.

The Eendragtpan Formation provides a thin covering of 25-35m thickness over the majority of the area and thus preserves the Grooteegeluk and Goedgedacht Formations.

The Grooteegeluk Formation was intersected during the drilling programme and varying thicknesses for the coal zones 1 to 11 have been reported.

Drilling techniques

The drilling and drilling techniques that were employed during the drilling programme included the following:

- Diamond Cored (DC) boreholes were drilled and it was conventional TNW size (60.5mm). The boreholes were drilled vertically,
- Reverse Circulation (RC) drilling was done in between the DC holes. The RC boreholes were drilled vertically,
- T6-146 (123mm) boreholes were drilled for bulk sample purposes,
- the boreholes were logged down the hole geophysically, and
- the geophysical borehole log was used in the logging of the boreholes and to determine the sample depth intervals.

Sampling and sub-sampling techniques

The sampling methods and sampling techniques employed at Ledjadja were as follows:

- the whole core was transported to an onsite core storage facility,
- the geophysical borehole logs were used in the logging of the boreholes and the determination of the sample depth intervals,
- all coal seams and intra seam stone partings intersected were sampled separately,
- the whole core was sampled as per South African Industry standard, and
- sample intervals and the unique sample numbers were included in the borehole log.

Sample analysis method

The sampling was done according to the litho-stratigraphy utilizing the geophysical log and the whole coal core was sampled. The sample analyses and methods used at Ledjadja can be summarized as follows:

- the samples were bagged in double bags, the borehole number, sample number and sample width were recorded on the sample tags,
- all samples received at the laboratories were entered into a Laboratory Integrated Management System (LIMS) by means of a code,
- the samples were air dried, weighed and automatically recorded in the LIMS. Relative densities of each sample were determined and entered into LIMS,
- the samples were crushed to 25mm top size (size deemed appropriate for the type and nature of the coal deposit). The crushed samples were screened and divided into -0.5mm and +0.5-25mm fractions,
- proximate analyses (raw) were done on the fractions and analyses done include: inherent moisture, ash content, volatile matter content, fixed carbon by difference, raw gross calorific value (MJ/kg) and total sulphur content, and
- washability tests (Float and Sink) were done on all diamond cored borehole samples. Wash fractions were set at relative densities from 1.35, 1.4, 1.45, 1.5, 1.55, 1.6, 1.7, 1.8, 1.9, 2.0, 2.1, 2.2 and Sink2.2. After the washing process, all wash fractions were submitted for gross calorific value, inherent moisture, volatile matter, total sulphur and ash content.

Criteria used for classification (including drill spacing)

The geological model (structural and quality models) was created in Geovia Minex™ software and used to estimate the Coal Resources. Sections were drawn across the Coal Resources area to ensure that all correlations were consistent. The sections were correlated and verified using the geophysical log and lithological log. The following were modelled:

- coal ply thickness, roof and floor depths, roof and floor elevations, the topography and the limit of weathering,
- the limit of weathering was used as a limiting horizon and no Coal Resources were estimated above the limit of weathering, and
- the modelling was done on a 50mX50m grid and extrapolation was limited to 500m from the last borehole and terminated against known areas of no coal development.

The Coal Resources were classified into Measured Coal Resources and Indicated Coal Resources utilising the following:

- the Coal Resources were estimated using geostatistical analyses and variograms were constructed,
- the variograms indicated that there is little change in the raw ash variability within the Coal Resources,
- a borehole spacing of 500m was used for Measured Coal Resources and a 1000m for Indicated Coal Resources, and
- a 0.5m seam thickness cut-off and a cut-off of > 65% ash was applied on the coal zones to establish the overall Coal Resources.

Estimation methodology

The Competent Person applied the principles of the JORC Code 2012 in estimating the Coal Resources at Boikarabelo Coal Mine as follows:

- the Coal Resources were estimated using geostatistical analyses,
- the distance of interpolation between boreholes was determined by plotting variograms which indicated that there is little change in the raw ash variability within the Coal Resources, and
- a borehole spacing of 500m was used for Measured Coal Resources and a 1000m spacing was used for Indicated Coal Resources.

Cut-off grades, including the basis for selected cut of grades

The cut-off grades applied in the Coal Resources estimation were:

- a 0.5m seam thickness cut-off was applied to all coal zones,
- a cut-off of > 65% ash was applied on the coal zones to establish the overall Coal Resources, and
- a geological loss of 10% was applied.

Mining and metallurgical methods and parameters and other material modifying factors considered to date

Consideration was given to a number of mining methods, including open pit and underground. The optimal mine design has been based on an open pit terrace mine. In addition, consideration was given to the following:

- a minimum coal ply thickness of 0.5m was applied to the Coal Resource estimate,
- the extent of the Mining Right,
- geological constraints, and
- environmental constraints.

Various metallurgical studies were carried out to establish the beneficiation characteristics of the coal plies and their combined reaction in the coal beneficiation process.

Section 2 – Coal Reserves

The 2010 Coal Reserves estimate was based on a single product for domestic power station consumption of 19.5 MJ/kg calorific value (AD).

The Table below is an extract from the 2010 Release summarising the Coal Reserves:

Coal Reserves Category	Product (Mt)
Probable	430.6

The Table below summarises the revised Coal Reserves estimate, based on a dual export/domestic business model as at 31 December 2016 and applying the JORC Code 2012:

Coal Reserve Category	MTIS (Mt)	MTIS (Yield & plant cut-offs) (Mt)	Mining Loss (%)	ROM Tonnes (Mt)	Primary Product (Mt)	Secondary Product (Mt)
Probable	994.81	649.32	5%	616.85	146.00	121.09

In accordance with Listing Rule 5.8.1 and 5.9.1, the following summary is provided of information material to understanding the reported estimates of Coal Reserves at 31 December 2016. Further detail is included in Appendix 1 below, as set out in the JORC Code, 2012 Edition

Coal Reserves

Material assumptions and outcomes from an optimised mine design and technical studies that have been completed

The material assumptions applied in the Coal Reserve estimation process include the following:

- a detailed mine design was done and the mining method selected is a truck and shovel open pit terrace mine,
- a mining recovery factor of 95% was applied and was considered to be appropriate for the mining method and the large band of multiple coal seams considered,
- minimum mining widths of 0.5m were applied in the geological model and subsequently in the mine modelling which was deemed appropriate for the mining equipment employed,
- no Inferred Coal Resources were included in the mine plan,
- all relevant infrastructure required to execute the life of mine plan relevant for the type and size of the mine was considered,
- a mine schedule, based and constrained by the throughput rate of the mine equipment selected, was developed, and
- appropriate factors, including dilution and losses, were applied with the agglomeration of mining horizons.

Criteria used for classification (including the classification of the mineral resources on which the ore reserves are based and the confidence in the modifying factors applied)

The principles of the JORC Code 2012 was used in estimating the Coal Resources. The criteria and classification are listed below:

- the Coal Resources were estimated using geostatistical analyses and the distance of interpolation to be used between boreholes was determined by plotting variograms of the raw ash content of the coal zones, and
- the Coal Resources were classified into Measured and Indicated Coal Resources.

Mining method selected and other mining assumptions, including mining recovery factors and dilution factors

An optimised mine design exercise was completed which indicated that an open pit terrace truck and shovel mine was the preferred option. The main principals of this mining design are:

- the establishment of a box-cut,
- pre-stripping of the overburden, and
- once steady-state mining operations have been established, roll-over backfill of the overburden will be carried out.

The key mining Modifying Factors, based on the results of the various studies conducted by Resgen are:

- a cut-off of > 65% ash content,

- a minimum coal ply thickness of 0.5m,
- a geological loss of 10%, applied to the tonnage of the Coal Resources,
- a mining extraction factor of 10%,
- a practical plant yield of 90% was applied on the export quality product,
- a yield cut-off of 24%,
- a mining recovery factor of 95%,
- a mining dilution factor of 5%,
- a contamination factor of 0.1m of both the roof and floor of the mining horizons,
- an overall pit slope angle of 45⁰,
- a minimum bench width of 60m,
- all seams will be mined together, and no stop-start operation or separate stockpiles will be required, and
- the inclusion of two 75kt blending stockpiles.

No Inferred Coal Resources have been included in the mine plan.

Processing method selected and other processing assumptions, including recovery factors and allowances made for deleterious elements

The processing design and assumptions considered included the following:

- a coal handling and processing plant that has been based on a dense medium separation process to produce two different quality products. Density separation is a well-known and widely used method to upgrade ROM coal to saleable clean coal products,
- the discarded material will be placed in the mining void in accordance with the mine design, and
- a practical plant yield (plant recovery) of 90% was applied on the export quality product.

Basis of cut-off grades or quality parameters applied

The quality parameters that were applied were based on a dual export/domestic business model and are:

- an export quality product with an average of 14% ash and an average 25.73 MJ/kg calorific value determined on an AD basis, and
- a domestic power station product with an average 19.5 MJ/kg calorific value and an average 31.43 % ash determined on an AD basis.

Economic assumptions

The key economic factors and parameters that were considered (using both internal and externally sourced information) in determining the financial viability of the Boikarabelo Coal Mine Project and associated Production Target are listed below:

- the forecast costs of bulk services, water and electricity,
- the forecast costs of consumables, magnetite and flocculants,
- the costs associated with logistics, including rail and port transport and handling costs,
- the potential sales price achieved for the products produced,
- the estimated capital costs of the project itself; and
- the forecast mining costs and beneficiation costs.



Appendix 1- JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> 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 sounds, 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 representation 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. 	<ul style="list-style-type: none"> Diamond Cored (TNW 60.5mm) boreholes were drilled to below the last coal intersection using conventional drilling equipment. The boreholes were drilled vertically. Coal recoveries were in excess of 95%. The core was packed in steel core trays. The boreholes were logged geophysically. The drilling programme was overseen by qualified geologists. The whole core was transported to an onsite core storage facility. Care was taken during transport of the core to retain the integrity of the core in the boxes. The boreholes were logged in detail and the geophysical borehole log was used in the logging of the boreholes and to determine the sample depth intervals. The logging and sampling were done by qualified geologists. Standard measuring tapes were used. All coal seams and intra seam stone partings intersected were sampled separately. The whole core was sampled as per South African Industry standard. Sample intervals and the unique sample numbers were included in the borehole log.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> › The samples were bagged, marked and sent to laboratories for analyses. › Reverse Circulation (RC) drilling was done between diamond cored boreholes. The RC boreholes were geophysically logged. › All the Boreholes were drilled vertically.
<i>Drilling techniques</i>	<ul style="list-style-type: none"> › 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.). 	<ul style="list-style-type: none"> › The Diamond Cored boreholes that were drilled were done using conventional TNW size (60.5mm). They were drilled vertically and not orientated. › The RC drilling that was done was conventional RC drilling. › T6-146 (123mm) boreholes were drilled for bulk sample purposes.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> › Borehole core depths were measured at the end of each core run and recorded. › Core recovery was assessed by the geologist when logging. The recovered core thickness was compared with the thickness from the geophysical log. › A borehole was re-drilled if the coal recovery was below 95%. › The borehole core was transported to a central core store where it was logged and sampled from the core trays. › Core losses were recorded in the field log.
<i>Logging</i>	<ul style="list-style-type: none"> › 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, channel, etc.) photography. › The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> › Boreholes were logged by independent qualified geologists. › Total lengths of boreholes were logged according to industry accepted lithological descriptions, protocols and methods. › Logging of the core was done down to 1cm scale. › Logging is qualitative in nature. › All boreholes were geophysically logged. A standard suite of geophysical sounds were done namely: Long Spaced Density, Short Spaced Density, Gamma and Caliper. The geophysical logging was done by independent contractors and the geophysical tools were

Criteria	JORC Code explanation	Commentary
		<p>calibrated on a regular basis before being deployed on site.</p> <ul style="list-style-type: none"> › Borehole chip samples from the RC drilling were logged by qualified geologists. › Boreholes were not geotechnically logged as a standard. › Specific boreholes were drilled where geotechnical data is required i.e. the box-cut position.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> › 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 representation 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. 	<ul style="list-style-type: none"> › Sampling was done according the litho-stratigraphy utilizing the geophysical log. › The whole coal core was sampled. › The samples were not dried and the boreholes were sampled as received as soon as possible after drilling. › Care was taken to ensure that all the material including the fine coal for a particular interval was sampled. › The samples were bagged on site. › The samples were bagged in double bags, the borehole number, sample number and sample width were written on the sample tags. › One sample tag was placed inside the bag with the coal sample, a second sample tag was secured to the outside of the sample bags. The borehole number, sample number and sample width were written on the sample bags with paint markers. › The samples were delivered to the laboratories by road transport by the responsible geologist overseeing the drilling programme. › Duplicate sampling was not undertaken. › The sample size was appropriate to the grain size of the material being sampled.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> › 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, 	<ul style="list-style-type: none"> › The majority of the core samples were sent to ALS Limited - ALS Energy Division, Coal Services South Africa Laboratory (ALS Witlab), previously known as Witlab. ALS Witlab is accredited with the South African National Accreditation body (SANAS), accreditation number T0478.

Criteria	JORC Code explanation	Commentary
	<p>etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</p> <p>› 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.</p>	<p>SANAS is the national body responsible for carrying out accreditations in respect of conformity assessment, as mandated through the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act (Act 19 of 2006).</p> <p>› Some samples were sent to Advanced Coal Technology Laboratory (ACT). ACT was subsequently purchased by Bureau Veritas. Bureau Veritas is accredited with the South African National Accreditation body (SANAS), accreditation number T0313. SANAS is the national body responsible for carrying out accreditations in respect of conformity assessment, as mandated through the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act (Act 19 of 2006).</p> <p>› Some samples were sent to South African Bureau of Standards Laboratory Coalspec (SABS Coalspec). SABS Coalspec is accredited with the South African National Accreditation body (SANAS), accreditation number T0230. SANAS is the national body responsible for carrying out accreditations in respect of conformity assessment, as mandated through the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act (Act 19 of 2006).</p> <p>› At the time of analyses of the bulk of the samples both ACT and ALS Witlab were not accredited. These laboratories are now SANAS accredited and they are accredited according to professional laboratory standard – ISO 17025.</p> <p>› For each core sample the following analyses were performed:</p> <ul style="list-style-type: none"> • all samples received at ALS Witlab, ACT and SABS were entered into a Laboratory Integrated Management System (LIMS) by means of a code, • samples were air dried, weighed and automatically recorded in the LIMS. Relative densities of each sample were determined and entered into LIMS. Samples were bagged in encoded bags, • samples were crushed to 25mm top size (size deemed appropriate for the type and nature of the coal deposit). The crushed samples were screened and divided into -0.5mm and +0.5-25mm fractions,

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> proximate analyses (raw) were done on the fractions as follows: inherent moisture content according to ISO 331, ash content based on ISO1171:97, volatile matter content based on ISO562:98 and fixed carbon by difference. Raw gross calorific value (MJ/kg) was based on ISO1928:95 and total sulphur content was based on ASTM: D4239-04a, washability tests (Float and Sink) were done on all diamond cored borehole samples. Wash fractions were set at relative densities from 1.35, 1.4, 1.45, 1.5, 1.55, 1.6, 1.7, 1.8, 1.9, 2.0, 2.1, 2.2 and Sink2.2. All fractions were weighed, checked, verified and captured in the LIMS. All float and sink fractions were dried and weighed and all weights were recorded on LIMS. After the washing process all wash fractions were submitted for gross calorific value, inherent moisture, volatile matter, total sulphur and ash content, the calculation of cumulative values for each cut-point density and of reconstituted raw coal values for each washability test sample was carried out, and ultimate analyses, ash analyses were done on selective samples only. <p>› All crushing and splitting equipment was thoroughly cleaned and inspected after each sample. Crushing equipment was selected so as to not generate excess fines. Internal audits were carried out monthly in accordance with the ALS Witlab audit schedule. Random checks by independent consultants were carried out on an ad-hoc basis to check crusher and mill product compliance and washing density accuracy.</p> <p>› The three laboratories are recognised as leading coal laboratories in South Africa and abroad. The laboratories carry out all analytical procedures in accordance with international standards. A detailed analytical programme designed by Resgen and followed by the laboratories ensured that all necessary analytical elements of the Coal Resources were covered. All routine analyses were carried out in accordance with their respective ISO international standards, for ash content ISO 1171:97, for inherent moisture content ISO 331, for volatile</p>

Criteria	JORC Code explanation	Commentary
		<p>matter content ISO 562:98, for total sulphur content ASTM-D 4239-04a and for calorific value ISO 1928:98.</p> <ul style="list-style-type: none"> › Further special analyses in accordance with ISO standards were carried out on composite samples which allowed for the total nature of the Coal Resources to be established. This detailed analysis programme affords Resgen a wide field of insight as to how to best utilise the Coal Reserves or Coal Resources economically and environmentally. › Samples were analysed by twin stream duplicate analysis, results were automatically entered into LIMS and any abnormalities were flagged. The equipment and sampling processes were regularly checked using certified standards and reference material. Any analytical discrepancies were scheduled for re-analysis. The laboratories also participated in proficiency testing (Round Robins) with other laboratories such as ALS Limited Group – Global Services, Yanka Laboratories (Pty) Ltd. and SABS Coalspec Laboratory. Control charts for each specific area were used, and accepted levels of repeatability were sustained. All reports were generated automatically by LIMS. These reports were vetted by a Competent Person.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> › All coal intersections were verified against the geophysical logs. › An independent Competent Person reviewed the results and validated the coal sampling. › The laboratories made use of a custom designed LIMS with traceability to all raw data. Data calculations were done automatically, checked by laboratory supervisors for duplicate results and repeatability. Out of tolerance results were repeated. › Data was extracted to Microsoft Excel spreadsheets where it was displayed in graphs with pre-set limits using calorific value/ash correlation with upper and lower tolerance levels. Results were evaluated by experienced personnel and results that deviated from the pre-set tolerance values were repeated. › Sample results were both reported and received in electronic and hard copy formats.

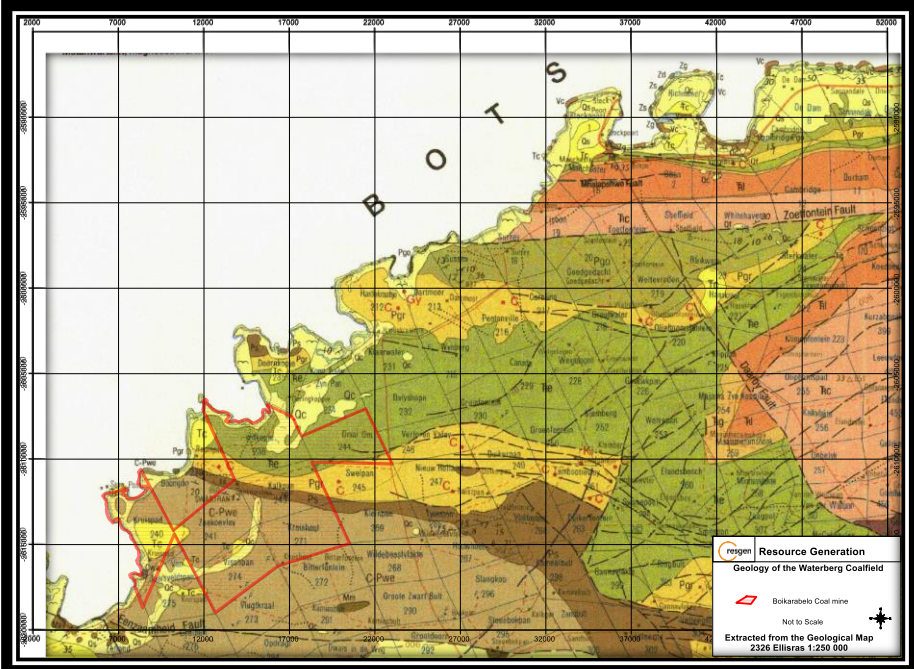
Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> › All data was electronically imported and stored in an electronic geological database – Micro Mine (Pty) Ltd. Geobank (Geobank) geological data base software was used as the database. › Coal quality data was checked and verified in the geological database. › Unreliable data was flagged and removed from the database. › Lithology interval, coal seam intervals, borehole survey data and sample intervals with sample numbers were recorded on the field log sheets in hardcopy format. › All borehole data was transferred to the Geobank geological database. › Checks were carried out to ensure that sample intervals and lithology intervals corresponded.
<i>Location of data points</i>	<ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> › All boreholes were initially positioned by geologists using a hand-held GPS with accuracies of +/- 10m. At the completion of each drilling programme final collar positions of the boreholes were 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 less than 1 metre. › Grid used: South Africa LO27 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 and verify hole collar elevations, and for detailed mine and surface infrastructure planning (1m contour intervals). Relevant surface features (e.g. roads) were surveyed for accuracy.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> › Data spacing for reporting of Exploration Results. › Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. › Whether sample compositing has been applied. 	<ul style="list-style-type: none"> › Exploration drilling was conducted on a grid, spaced at approximately 500mX500m. The data spacing and distribution were sufficient to meet the JORC Code 2012 limits for classification of Measured, Indicated and Inferred Coal Resources, and were appropriate for the structural and quality modelling. › No sample compositing was applied.

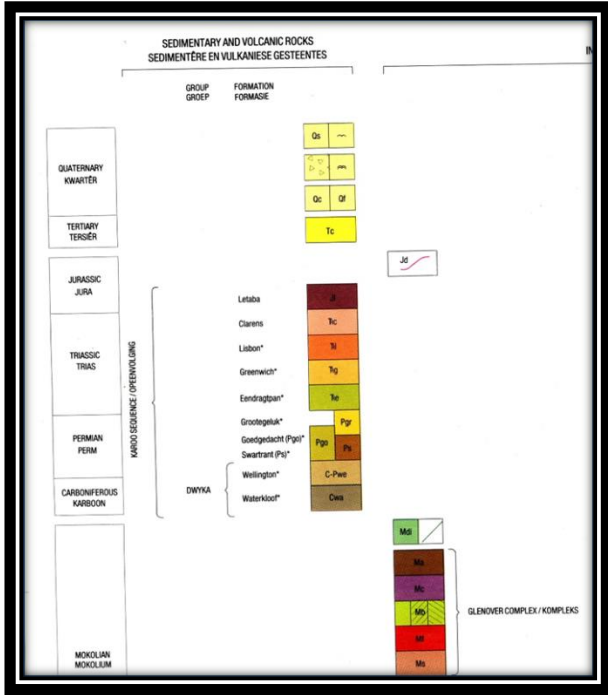
Criteria	JORC Code explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> › Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. › If 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. 	<ul style="list-style-type: none"> › No major structures are present that have an influence on the coal quantities. › Coal seams are near horizontal, and an even-spaced drilling grid was applied across the area. › The orientation of the sampling achieved unbiased sampling of the deposit.
<i>Sample security</i>	<ul style="list-style-type: none"> › The measures taken to ensure sample security. 	<ul style="list-style-type: none"> › The samples were bagged in double bags, with the borehole number, sample number and sample width being written on the sample tags. › One sample tag was placed inside the bag with the coal sample, and a second sample tag was secured to the outside of the sample bags. The borehole number, sample number and sample width was written on the sample bags with paint markers. › The samples were delivered to the laboratories by road transport by the responsible geologist overseeing the drilling programme. › Sample security was ensured under a chain of custody between Resgen contractor geologists and the laboratories.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> › The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> › Regular site inspections, verification of exploration procedures and activities were undertaken by the Competent Person. › The laboratories undertook internal audits and “Round Robin” checks between laboratories, in line with international standards, were undertaken to ensure their analysis results were consistent and reporting was correct. › Venmyn Deloitte conducted an audit of all the Geological drilling, Logging and Modelling and an independent validation of the Geobank database.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary																												
Mineral tenement and land tenure status	<div><div>›</div><div>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.</div></div> <div><div>›</div><div>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</div></div>	<div><div>›</div><div>Resgen holds various Coal Mining Tenements in South Africa through its subsidiaries Ledjadja, (the owner of the Boikarabelo Coal Mine), and Waterberg One. Ledjadja and Waterberg One are ventures between Resgen (74% ownership) and black economic empowerment entity, Fairy Wing Trading 136 (Proprietary) Limited (26% ownership).</div></div> <div><div>›</div><div>Ledjadja holds title to the Mining Right and Tenements listed in the schedule below:</div></div> <table><tr><th>Asset</th><th>Farm</th><th>Project Area</th><th>Size (ha)</th><th>Applicant</th><th>Attributable Share</th><th>Mining Right number</th><th>Comments</th></tr><tr><td rowspan="7">Boikarabelo Coal Mine</td><td>Witkopje 238LQ</td><td>Ledjadja #1</td><td rowspan="7">9018</td><td rowspan="7">Ledjadja Coal (Pty) Ltd</td><td rowspan="7">1) Resource Generation Ltd. 74% 2) Fairy Wing Trading 136 (Pty) Ltd. 26%</td><td rowspan="7">169MR (previously identified as MPT15/2012MR)</td><td rowspan="7">Granted 20 April 2011 Expiry 19 April 2044</td></tr><tr><td>Draai Om 244 LQ</td><td>Ledjadja #2</td></tr><tr><td>Kalkpan 243 LQ</td><td>Ledjadja #3</td></tr><tr><td>Osorno 700 LQ</td><td>Ledjadja #4</td></tr><tr><td>Zeekovley 241 LQ</td><td>Ledjadja #5</td></tr><tr><td>Vischpan 274 LQ</td><td>Ledjadja #6</td></tr><tr><td>Kruishout 271 LQ</td><td>Ledjadja #7</td></tr></table> <div><div>›</div><div>Waterberg One Coal holds title to Prospecting Rights over the farms Koert Louw Zyn Pan 234 LQ (Project Area Waterberg #1) (Prospecting Right number PR678/2007 expiring 21 May 2016; Mining Right application submitted November 2015) and the farms Lisbon19 LQ (Project Area Waterberg #2) and Zoetfontein 22 LQ (Project Area Waterberg #3) (Prospecting Right number PR720/2007).</div></div>	Asset	Farm	Project Area	Size (ha)	Applicant	Attributable Share	Mining Right number	Comments	Boikarabelo Coal Mine	Witkopje 238LQ	Ledjadja #1	9018	Ledjadja Coal (Pty) Ltd	1) Resource Generation Ltd. 74% 2) Fairy Wing Trading 136 (Pty) Ltd. 26%	169MR (previously identified as MPT15/2012MR)	Granted 20 April 2011 Expiry 19 April 2044	Draai Om 244 LQ	Ledjadja #2	Kalkpan 243 LQ	Ledjadja #3	Osorno 700 LQ	Ledjadja #4	Zeekovley 241 LQ	Ledjadja #5	Vischpan 274 LQ	Ledjadja #6	Kruishout 271 LQ	Ledjadja #7
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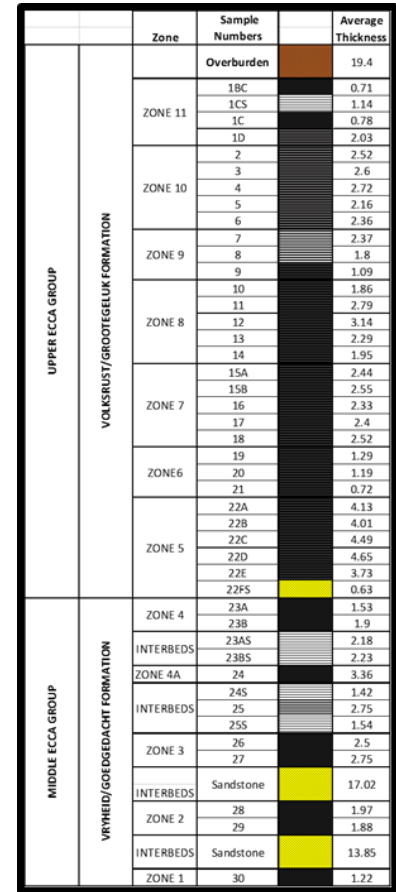
Criteria	JORC Code explanation	Commentary
<i>Exploration done by other parties</i>	› Acknowledgment and appraisal of exploration by other parties.	› No historic exploration data has been used by Resgen in the Coal Resources estimations.
<i>Geology</i>	› Deposit type, geological setting and style of mineralisation.	<p>› The coal deposits of South Africa are hosted in sedimentary rocks of the Karoo Supergroup. The Karoo sedimentary rocks were deposited in a large retro-foreland basin which developed on the Kaapvaal Craton and filled between the Late Carboniferous and Middle Jurassic periods. The Karoo Supergroup is subdivided into the Dwyka, Eccca and Beaufort Groups, succeeded by the Molteno, Elliot, Clarens and Drakensburg Formation (as per the South African Committee for Stratigraphy (SACS), 1st edition published in 1980 as Handbook 8 of the Geological Survey). The coals range in age from Early Permian (Eccca Group) through to Late Triassic (Molteno Formation) and are predominantly bituminous to anthracitic in rank.</p> <p>› The coal deposits of the Waterberg Coalfield occur in the Grootegeluk and Vryheid Formations of the Karoo Supergroup. These formations and their numerous coal zones vary in thickness from a few centimetres to several metres.</p> <p>› The interpreted sub-crop of the Boikarabelo Coal Mine specifically consists of the following formations:</p> <ul style="list-style-type: none"> • the Eendragtspan Formation (Triassic – Beaufort Group) which consists of barren sediments and overlies the coal zones, • the Grootegeluk Formation (Permian – Upper Eccca Group), which consists of intercalated bright coal (zones 5 to 11) and mudstone and contains the majority of the Coal Resources in the coalfield, and • the Goedgedacht or Vryheid Formation (Permian – Middle Eccca Group), which consists predominantly of dull coal (zones 1 to 4) with minor carbonaceous mudstone and sandstone intercalations. <p>› The regional Geology of the Waterberg Coalfield is shown in the figure below, which is an extract of the 2326 Ellisras 1:250 000 Geological Map Sheet: Republic of South Africa. 1:250 000 Geological Series, sheet 2326 Ellisras; Authors: Brandl G., Van Reenen D.D., Van Wyk J.P., et al.; Geol.</p>

Criteria	JORC Code explanation	Commentary
		<p data-bbox="1317 309 1664 336">Survey of South Africa; 1993.</p>  <p data-bbox="1317 1050 2190 1107">The general stratigraphy of the Waterberg Coalfield is shown in the figure below.</p>

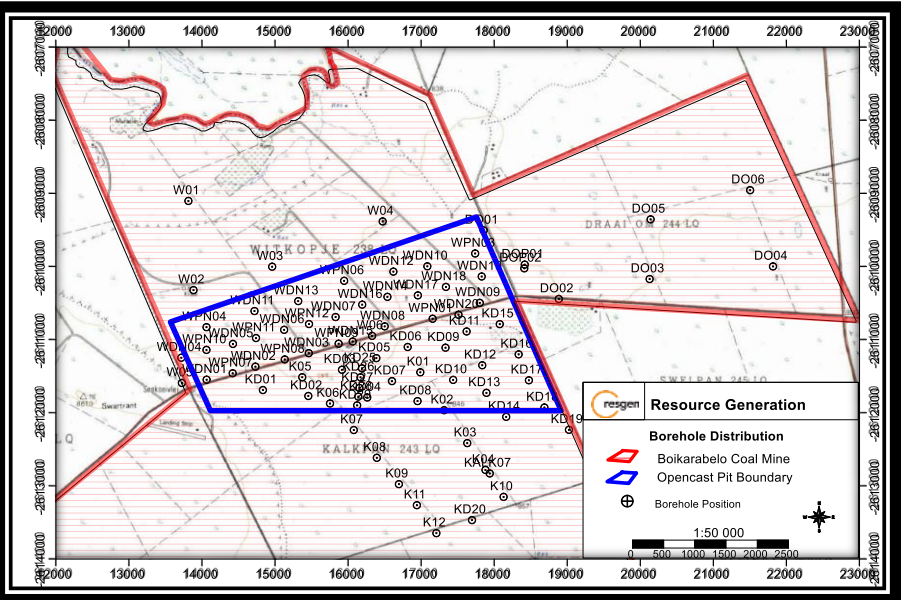
Criteria	JORC Code explanation	Commentary
		 <p>> The Local Geology of the Waterberg Coalfield is as follows:</p> <ul style="list-style-type: none"> the Grootegeluk Formation consists of cyclical repetitions of mudstone and coal with the coal seams named from the base upwards. Individual plies are named and correlated according to the Grootegeluk Coal Mine (located in the Waterberg Coalfield) nomenclature. Faure et al. (1996) describe divisions applied to the Eccia Group coals in the Ellisras (Waterberg) Basin by staff of the Grootegeluk Coal Mine. The predominantly dull coal seams (1, 2, 3, 4 and 4A) of the Vryheid Formation retained the original numbering. The remaining seams were re-classified by the Grootegeluk Coal mine staff into zones 5 to 11. (Faure K, Willis J.P, Dreyer J.C. 1996. The Grootegeluk Formation of the

Criteria	JORC Code explanation	Commentary
		<p>Waterberg Coalfield, South Africa: facies, paleo-environment and thermal history- evidence from organic and clastic matter. International Journal of Coal Geology, 29, 147-186.).</p> <ul style="list-style-type: none"> › These Zones are further divided into coal seam plies which constitute the coal samples within each zone. This comprises of a sequence of sample names that group plies together in each classic Waterberg Zone. These samples can be correlated across the entire Waterberg Coalfield. A typical Waterberg borehole has 11 coal zones from Zone 1 at the base to Zone 11 at the top. The lower three zones do not comprise of alternating plies but are more typical uniform coal seams. › The Eendragtpan Formation provides a thin covering of 25-35m thickness over the majority of the area and thus preserves the Grootegeluk and Goedgedacht Formations. › The Grootegeluk Formation was intersected during the drilling programme and varying thicknesses for the coal zones 1 to 11 have been reported. Intra-basin faults affect the coal bearing formations further to the south and north of the Boikarabelo Coal Mine area, so that the upper zones are either preserved or destroyed through up-lift and erosion. › The boreholes drilled were geo-physically logged and sampled according to the South African National Standard - South African Guide to the Systematic Evaluation of Coal Resources and Coal Reserves (SANS 10320:2004) and correlated with the Grootegeluk Coal Mine coal zones and sample nomenclature. › The Grootegeluk Formation comprising the top zones (Zones 5 to 11) consists of various coal and mudstone seams. These zones are well defined and can be correlated across the coalfield. This formation, from the top of Zone 4 through to Zone 11, is characterised by an increasing ratio of bright coal to dull coal. Each zone typically starts with predominantly bright coal at the base, with the proportion of dull coal increasing towards the top of each zone. The ratio of coal to shale decreases from the base of each zone in an upward direction. The ash content of these zones increases upwards and generally the “better quality” coals are present in Zones 9 to Zone 11 over the majority of the

Criteria	JORC Code explanation	Commentary
		<p>coalfield.</p> <p>› The Grootegeeluk Formation is underlain by the Goedgezicht Formation of the Middle Ecca Group. This formation consists predominantly of dull coal with minor carbonaceous mudstone and sandstone intercalations. The zones occur within a stratigraphic interval of some 40m and have thicknesses ranging from 1.5 metres to 9 metres. Zones 2 and 3 are the best developed coal zones. Zone 1 has not been developed throughout the Boikarabelo Coal Mine area and occurs only in a few isolated intersections.</p> <p>› A Typical Stratigraphic sequence is illustrated below:</p>

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		 <table border="1"> <thead> <tr> <th>Zone</th> <th>Sample Numbers</th> <th>Average Thickness</th> </tr> </thead> <tbody> <tr> <td>Overburden</td> <td></td> <td>19.4</td> </tr> <tr> <td rowspan="4">ZONE 11</td> <td>18C</td> <td>0.71</td> </tr> <tr> <td>1CS</td> <td>1.14</td> </tr> <tr> <td>1C</td> <td>0.78</td> </tr> <tr> <td>1D</td> <td>2.03</td> </tr> <tr> <td rowspan="4">ZONE 10</td> <td>2</td> <td>2.52</td> </tr> <tr> <td>3</td> <td>2.6</td> </tr> <tr> <td>4</td> <td>2.72</td> </tr> <tr> <td>5</td> <td>2.16</td> </tr> <tr> <td rowspan="4">ZONE 9</td> <td>6</td> <td>2.36</td> </tr> <tr> <td>7</td> <td>2.37</td> </tr> <tr> <td>8</td> <td>1.8</td> </tr> <tr> <td>9</td> <td>1.09</td> </tr> <tr> <td rowspan="4">ZONE 8</td> <td>10</td> <td>1.86</td> </tr> <tr> <td>11</td> <td>2.79</td> </tr> <tr> <td>12</td> <td>3.14</td> </tr> <tr> <td>13</td> <td>2.29</td> </tr> <tr> <td rowspan="4">ZONE 7</td> <td>14</td> <td>1.95</td> </tr> <tr> <td>15A</td> <td>2.44</td> </tr> <tr> <td>15B</td> <td>2.55</td> </tr> <tr> <td>16</td> <td>2.33</td> </tr> <tr> <td rowspan="4">ZONE 6</td> <td>17</td> <td>2.4</td> </tr> <tr> <td>18</td> <td>2.52</td> </tr> <tr> <td>19</td> <td>1.29</td> </tr> <tr> <td>20</td> <td>1.19</td> </tr> <tr> <td rowspan="4">ZONE 5</td> <td>21</td> <td>0.72</td> </tr> <tr> <td>22A</td> <td>4.13</td> </tr> <tr> <td>22B</td> <td>4.01</td> </tr> <tr> <td>22C</td> <td>4.49</td> </tr> <tr> <td rowspan="4">ZONE 4</td> <td>22D</td> <td>4.65</td> </tr> <tr> <td>22E</td> <td>3.73</td> </tr> <tr> <td>22FS</td> <td>0.63</td> </tr> <tr> <td>23A</td> <td>1.53</td> </tr> <tr> <td rowspan="4">INTERBEDS</td> <td>23B</td> <td>1.9</td> </tr> <tr> <td>23AS</td> <td>2.18</td> </tr> <tr> <td>23BS</td> <td>2.23</td> </tr> <tr> <td>24</td> <td>3.36</td> </tr> <tr> <td rowspan="4">INTERBEDS</td> <td>24S</td> <td>1.42</td> </tr> <tr> <td>25</td> <td>2.75</td> </tr> <tr> <td>25S</td> <td>1.54</td> </tr> <tr> <td>26</td> <td>2.5</td> </tr> <tr> <td rowspan="4">INTERBEDS</td> <td>27</td> <td>2.75</td> </tr> <tr> <td>Sandstone</td> <td>17.02</td> </tr> <tr> <td>28</td> <td>1.97</td> </tr> <tr> <td>29</td> <td>1.88</td> </tr> <tr> <td rowspan="2">INTERBEDS</td> <td>Sandstone</td> <td>13.85</td> </tr> <tr> <td>30</td> <td>1.22</td> </tr> </tbody> </table>	Zone	Sample Numbers	Average Thickness	Overburden		19.4	ZONE 11	18C	0.71	1CS	1.14	1C	0.78	1D	2.03	ZONE 10	2	2.52	3	2.6	4	2.72	5	2.16	ZONE 9	6	2.36	7	2.37	8	1.8	9	1.09	ZONE 8	10	1.86	11	2.79	12	3.14	13	2.29	ZONE 7	14	1.95	15A	2.44	15B	2.55	16	2.33	ZONE 6	17	2.4	18	2.52	19	1.29	20	1.19	ZONE 5	21	0.72	22A	4.13	22B	4.01	22C	4.49	ZONE 4	22D	4.65	22E	3.73	22FS	0.63	23A	1.53	INTERBEDS	23B	1.9	23AS	2.18	23BS	2.23	24	3.36	INTERBEDS	24S	1.42	25	2.75	25S	1.54	26	2.5	INTERBEDS	27	2.75	Sandstone	17.02	28	1.97	29	1.88	INTERBEDS	Sandstone	13.85	30	1.22
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	22A	4.13																																																																																																														
	22B	4.01																																																																																																														
	22C	4.49																																																																																																														
ZONE 4	22D	4.65																																																																																																														
	22E	3.73																																																																																																														
	22FS	0.63																																																																																																														
	23A	1.53																																																																																																														
INTERBEDS	23B	1.9																																																																																																														
	23AS	2.18																																																																																																														
	23BS	2.23																																																																																																														
	24	3.36																																																																																																														
INTERBEDS	24S	1.42																																																																																																														
	25	2.75																																																																																																														
	25S	1.54																																																																																																														
	26	2.5																																																																																																														
INTERBEDS	27	2.75																																																																																																														
	Sandstone	17.02																																																																																																														
	28	1.97																																																																																																														
	29	1.88																																																																																																														
INTERBEDS	Sandstone	13.85																																																																																																														
	30	1.22																																																																																																														
Drill hole Information	<ul style="list-style-type: none"> › 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 	<ul style="list-style-type: none"> › A full list of drill holes used in the Coal Resource estimate can be found in Appendix 2. › All drill holes have been used and modelled as vertical. 																																																																																																														

Criteria	JORC Code explanation	Commentary
	<p>metres) of the drill hole collar</p> <ul style="list-style-type: none"> › 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. 	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> › All seams where multiple coal quantity samples are taken were given a composite value (generated within the Geovia Minex™ 6.4.2 software (Minex)) weighting each quality by thickness and relative density, with the exception of relative density which is weighted on thickness.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> › 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'). 	<ul style="list-style-type: none"> › 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 does not have a material impact on the Coal Resources estimate. Undulating contacts are honoured in the geological model.
<i>Diagrams</i>	<ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> › A plan of the Boikarabelo Coal Mine Area with drill hole collar positions and appropriate sectional views is presented below: › Borehole distribution is shown in the figure below:

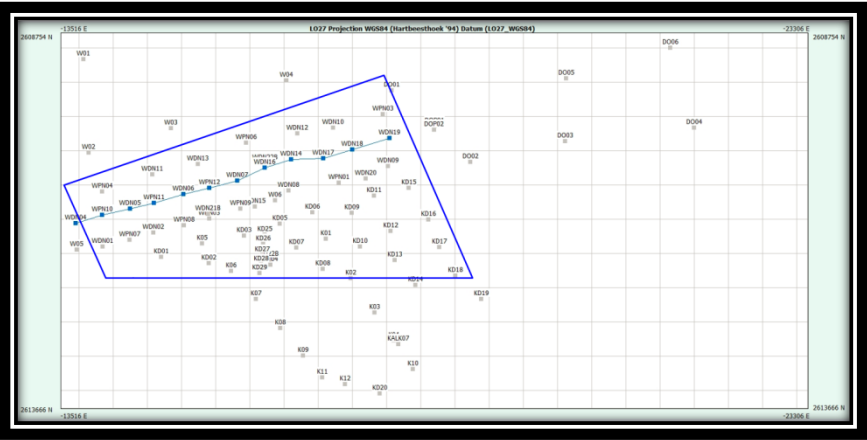
Criteria	JORC Code explanation	Commentary
		

Commentary

➤ In the figures below a plan view and a section, along the section line indicated in the plan view, is shown.

- Plan and North-west South-east section.

The plan view shows a grid of points labeled with codes such as V001, V002, V003, V004, V005, V006, V007, V008, V009, V010, V011, V012, V013, V014, V015, V016, V017, V018, V019, V020, V021, V022, V023, V024, V025, V026, V027, V028, V029, V030, V031, V032, V033, V034, V035, V036, V037, V038, V039, V040, V041, V042, V043, V044, V045, V046, V047, V048, V049, V050, V051, V052, V053, V054, V055, V056, V057, V058, V059, V060, V061, V062, V063, V064, V065, V066, V067, V068, V069, V070, V071, V072, V073, V074, V075, V076, V077, V078, V079, V080, V081, V082, V083, V084, V085, V086, V087, V088, V089, V090, V091, V092, V093, V094, V095, V096, V097, V098, V099, V100, V101, V102, V103, V104, V105, V106, V107, V108, V109, V110, V111, V112, V113, V114, V115, V116, V117, V118, V119, V120, V121, V122, V123, V124, V125, V126, V127, V128, V129, V130, V131, V132, V133, V134, V135, V136, V137, V138, V139, V140, V141, V142, V143, V144, V145, V146, V147, V148, V149, V150, V151, V152, V153, V154, V155, V156, V157, V158, V159, V160, V161, V162, V163, V164, V165, V166, V167, V168, V169, V170, V171, V172, V173, V174, V175, V176, V177, V178, V179, V180, V181, V182, V183, V184, V185, V186, V187, V188, V189, V190, V191, V192, V193, V194, V195, V196, V197, V198, V199, V200, V201, V202, V203, V204, V205, V206, V207, V208, V209, V210, V211, V212, V213, V214, V215, V216, V217, V218, V219, V220, V221, V222, V223, V224, V225, V226, V227, V228, V229, V230, V231, V232, V233, V234, V235, V236, V237, V238, V239, V240, V241, V242, V243, V244, V245, V246, V247, V248, V249, V250, V251, V252, V253, V254, V255, V256, V257, V258, V259, V260, V261, V262, V263, V264, V265, V266, V267, V268, V269, V270, V271, V272, V273, V274, V275, V276, V277, V278, V279, V280, V281, V282, V283, V284, V285, V286, V287, V288, V289, V290, V291, V292, V293, V294, V295, V296, V297, V298, V299, V300, V301, V302, V303, V304, V305, V306, V307, V308, V309, V310, V311, V312, V313, V314, V315, V316, V317, V318, V319, V320, V321, V322, V323, V324, V325, V326, V327, V328, V329, V330, V331, V332, V333, V334, V335, V336, V337, V338, V339, V340, V341, V342, V343, V344, V345, V346, V347, V348, V349, V350, V351, V352, V353, V354, V355, V356, V357, V358, V359, V360, V361, V362, V363, V364, V365, V366, V367, V368, V369, V370, V371, V372, V373, V374, V375, V376, V377, V378, V379, V380, V381, V382, V383, V384, V385, V386, V387, V388, V389, V390, V391, V392, V393, V394, V395, V396, V397, V398, V399, V400, V401, V402, V403, V404, V405, V406, V407, V408, V409, V410, V411, V412, V413, V414, V415, V416, V417, V418, V419, V420, V421, V422, V423, V424, V425, V426, V427, V428, V429, V430, V431, V432, V433, V434, V435, V436, V437, V438, V439, V440, V441, V442, V443, V444, V445, V446, V447, V448, V449, V450, V451, V452, V453, V454, V455, V456, V457, V458, V459, V460, V461, V462, V463, V464, V465, V466, V467, V468, V469, V470, V471, V472, V473, V474, V475, V476, V477, V478, V479, V480, V481, V482, V483, V484, V485, V486, V487, V488, V489, V490, V491, V492, V493, V494, V495, V496, V497, V498, V499, V500, V501, V502, V503, V504, V505, V506, V507, V508, V509, V510, V511, V512, V513, V514, V515, V516, V517, V518, V519, V520, V521, V522, V523, V524, V525, V526, V527, V528, V529, V530, V531, V532, V533, V534, V535, V536, V537, V538, V539, V540, V541, V542, V543, V544, V545, V546, V547, V548, V549, V550, V551, V552, V553, V554, V555, V556, V557, V558, V559, V560, V561, V562, V563, V564, V565, V566, V567, V568, V569, V570, V571, V572, V573, V574, V575, V576, V577, V578, V579, V580, V581, V582, V583, V584, V585, V586, V587, V588, V589, V590, V591, V592, V593, V594, V595, V596, V597, V598, V599, V600, V601, V602, V603, V604, V605, V606, V607, V608, V609, V610, V611, V612, V613, V614, V615, V616, V617, V618, V619, V620, V621, V622, V623, V624, V625, V626, V627, V628, V629, V630, V631, V632, V633, V634, V635, V636, V637, V638, V639, V640, V641, V642, V643, V644, V645, V646, V647, V648, V649, V650, V651, V652, V653, V654, V655, V656, V657, V658, V659, V660, V661, V662, V663, V664, V665, V666, V667, V668, V669, V670, V671, V672, V673, V674, V675, V676, V677, V678, V679, V680, V681, V682, V683, V684, V685, V686, V687, V688, V689, V690, V691, V692, V693, V694, V695, V696, V697, V698, V699, V700, V701, V702, V703, V704, V705, V706, V707, V708, V709, V710, V711, V712, V713, V714, V715, V716, V717, V718, V719, V720, V721, V722, V723, V724, V725, V726, V727, V728, V729, V730, V731, V732, V733, V734, V735, V736, V737, V738, V739, V740, V741, V742, V743, V744, V745, V746, V747, V748, V749, V750, V751, V752, V753, V754, V755, V756, V757, V758, V759, V760, V761, V762, V763, V764, V765, V766, V767, V768, V769, V770, V771, V772, V773, V774, V775, V776, V777, V778, V779, V780, V781, V782, V783, V784, V785, V786, V787, V788, V789, V790, V791, V792, V793, V794, V795, V796, V797, V798, V799, V800, V801, V802

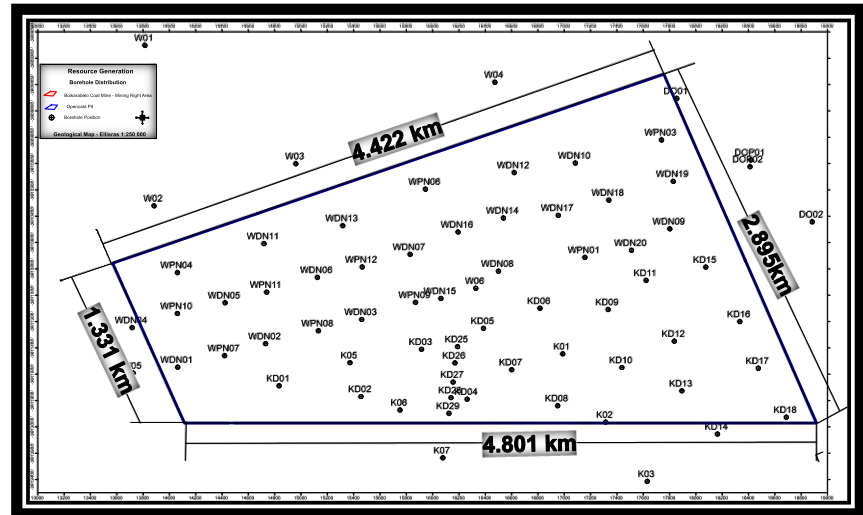
Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Plan and South-west North-east Section
		 <p>The top diagram is a plan view of a geological area, likely a mine site, showing a blue polygonal boundary. The plan view includes various labeled points (e.g., W01, W02, W03, W04, W05, W06, W07, W08, W09, W10, W11, W12, W13, W14, W15, W16, W17, W18, W19, W20, W21, W22, W23, W24, W25, W26, W27, W28, W29, W30, W31, W32, W33, W34, W35, W36, W37, W38, W39, W40, W41, W42, W43, W44, W45, W46, W47, W48, W49, W50, W51, W52, W53, W54, W55, W56, W57, W58, W59, W60, W61, W62, W63, W64, W65, W66, W67, W68, W69, W70, W71, W72, W73, W74, W75, W76, W77, W78, W79, W80, W81, W82, W83, W84, W85, W86, W87, W88, W89, W90, W91, W92, W93, W94, W95, W96, W97, W98, W99, W100) and a grid system. The bottom diagram is a cross-section showing the vertical profile of the area, with a blue line representing the ground surface and a red line representing the base of the area. The cross-section includes various labeled points (e.g., W01, W02, W03, W04, W05, W06, W07, W08, W09, W10, W11, W12, W13, W14, W15, W16, W17, W18, W19, W20, W21, W22, W23, W24, W25, W26, W27, W28, W29, W30, W31, W32, W33, W34, W35, W36, W37, W38, W39, W40, W41, W42, W43, W44, W45, W46, W47, W48, W49, W50, W51, W52, W53, W54, W55, W56, W57, W58, W59, W60, W61, W62, W63, W64, W65, W66, W67, W68, W69, W70, W71, W72, W73, W74, W75, W76, W77, W78, W79, W80, W81, W82, W83, W84, W85, W86, W87, W88, W89, W90, W91, W92, W93, W94, W95, W96, W97, W98, W99, W100) and a grid system.</p>

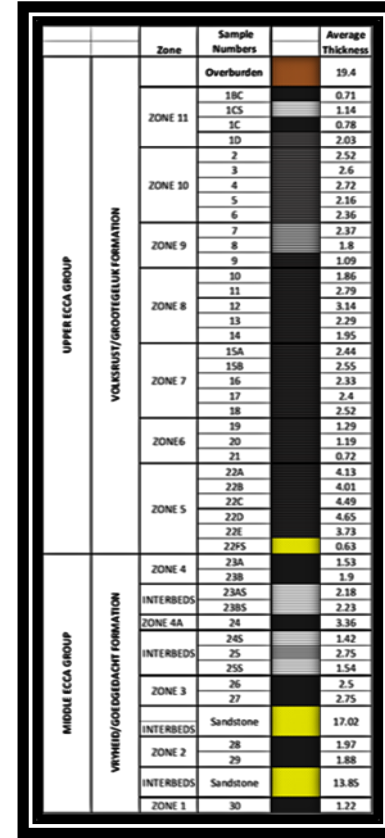
Criteria	JORC Code explanation	Commentary
<i>Balanced reporting</i>	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> All exploration results within the Boikarabelo Coal Mine have been reported on and no intersections were excluded.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A geotechnical (pit slope stability) investigation was carried out in November 2016, entitled: <ul style="list-style-type: none"> Technical Report – Geotechnical Investigation and High Wall Design for the Box-cut Area at Boikarabelo Coal Mine 6 November 2016, Geomech Consulting.
<i>Further work</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Infill drilling to investigate the planned position of the box-cut for mine planning purposes is in progress. The borehole information gleaned from this programme will be used for geological modelling and Coal Resources estimations, as well as to determine if suitable construction material for road building, and laydown areas exists in the box-cut area.

Section 3: Estimation and reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All the exploration data and analytical results were imported into the Geobank database and subjected to independent validation routines. Lithological descriptions were verified and checked against the downhole geophysical log. The coal seam correlations were validated within the Geobank database software. The coal seam intersections start and end depths were checked for no overlaps or negative seam thicknesses. Sections were drawn in the software and comparisons between boreholes were made. Coal sample positions were verified against the coal seams and correlated with the geophysical log. The coal samples were compared with the raw coal analyses. The raw and washability data received from the laboratory was validated

Criteria	JORC Code explanation	Commentary
		<p>by various routines including ash/cv correlations.</p> <p>› Anomalies were identified, queried and corrected before being incorporating into the final quality database.</p>
<i>Site visits</i>	<p>› Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</p> <p>› If no site visits have been undertaken indicate why this is the case.</p>	<p>› The site was, frequently visited by the Competent Person, who is familiar with the project area and its geology.</p> <p>› The Competent Person reviewed the geological logging, the sampling and laboratory and analyses and was satisfied with the data collection procedures and protocols.</p>
<i>Geological interpretation</i>	<p>› Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</p> <p>› Nature of the data used and of any assumptions made.</p> <p>› The effect, if any, of alternative interpretations on Mineral Resource estimation.</p> <p>› The use of geology in guiding and controlling Mineral Resource estimation.</p> <p>› The factors affecting continuity both of grade and geology.</p>	<p>› The confidence in the geological interpretation is high.</p> <p>› The boreholes confirmed the nature, continuity of the seams and the quality.</p> <p>› The boreholes were logged in detail, and all coal intersections and interburden were sampled and analysed. The data generated was independently validated.</p> <p>› Mineral Resource estimation was done by geological interpretation and modelling.</p> <p>› The continuity of the geology and the coal sample intersection is affected by the basement rocks.</p>
<i>Dimensions</i>	<p>› 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.</p>	<p>› The Coal Resources extend beyond the boundary of the defined Open Pit Boundary.</p> <p>› The dimension of the Open Pit was determined by the Mineral Right boundary, environmental factors and data point distribution.</p>

Criteria	JORC Code explanation	Commentary
		<p>› The planned extent of the Open Pit is given below:</p>  <p>› The first coal intersection, when all the coal zones are present, is on average 19.4 m below surface.</p> <p>› The Coal Resource extends to a depth of 140 m.</p> <p>› A typical cross section is shown below:</p>

Criteria	JORC Code explanation	Commentary
		 <p>The diagram illustrates a geological model with two main groups: the Upper Ecca Group and the Middle Ecca Group. The Upper Ecca Group includes the Volkerust/Grootegeluk Formation, which is divided into zones 11 through 1. The Middle Ecca Group includes the Vhember/Goegevaart Formation, which is divided into zones 4 through 1. Each zone is further subdivided into sample numbers, and the average thickness for each zone is provided. The diagram uses a color-coded system to represent different geological units, with yellow highlighting specific zones and sample numbers.</p>
Estimation and modelling techniques	<ul style="list-style-type: none"> › 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 	<ul style="list-style-type: none"> › The geological model (structural and quality models) was created in Geovia Minex™ software. › Coal Resources estimation was performed using Geovia Minex™ Software. › Sections were drawn across the Coal Resource area to ensure that all correlations were consistent. The sections were correlated and verified using the geophysical log and lithological log.

Criteria	JORC Code explanation	Commentary
	<p>appropriate account of such data.</p> <ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> › The sections were drawn utilising Geobank and Minex software and compared. › Structural models were created for all the coal sample plies. The thickness, roof and floor depths and elevations of all the coal sample plies were modelled. The topography, as well as a limit of weathering, was modelled. › The limit of weathering was used as a limiting horizon and no Coal Resources were estimated above the limit of weathering. › The modelled topography was generated from a detailed surveyed digital terrain model (DTM). › The DTM was used to verify the borehole collar elevation. › The stratigraphic sequence was verified in Geobank as well as Minex. › The modelling was done on a 50mX50m grid. › Coal extrapolation was limited to 500m from the last borehole and terminated against known areas of no coal development.
<i>Moisture</i>	<ul style="list-style-type: none"> › Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> › Tonnages were estimated using the <i>in situ</i> density estimation method using the air dried moisture and relative density as determined in the laboratories.
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> › The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> › A cut-off of > 65% ash was applied on the coal zones to establish the overall Coal Resources. › No cut off values were applied but the individual coal and inter-burden/bed ply thickness and qualities were used in the mine design. › This was done to optimize the design of practical mining horizons. The optimized design was based on dual export/domestic business model: <ul style="list-style-type: none"> • an export quality product with an average of 14% ash and an average 25.73 MJ/kg calorific value determined on an Air Dried (AD) basis, and • a domestic power station product with an average 19.5 MJ/kg calorific value and an average 31.43 % ash determined on an AD basis.

Criteria	JORC Code explanation	Commentary
<i>Mining factors or assumptions</i>	<p>› 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.</p>	<p>› Consideration was given to a number of mining methods, including open pit and underground. The optimal mine design has been based on an open pit terrace mine. In addition, consideration was given to the following:</p> <ul style="list-style-type: none"> • a minimum coal ply thickness of 0.5m was applied to the Coal Resource estimate, • the extent of the Mining Right, • geological constraints, and • environmental constraints.
<i>Metallurgical factors or assumptions</i>	<p>› 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.</p>	<p>› Various metallurgical studies were carried out to establish the beneficiation characteristics of the coal plies and their combined reaction in the coal beneficiation process.</p>
<i>Environmental factors or assumptions</i>	<p>› 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.</p>	<p>› There are no limiting environmental factors other than Regulations relating to mining adjacent to wetlands and the 1:100 year floodline.</p> <p>› These areas fall outside the Open Pit area and therefore have been excluded from the Coal Resources estimate.</p> <p>› The relevant regulatory permissions for waste and process residue disposal have been obtained.</p>
<i>Bulk density</i>	<p>› 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.</p>	<p>› The density used in the tonnage calculations is the relative density as determined from borehole core samples in the laboratory. The relative density was determined according to ISO 5072:1997. The density was determined by weighing a sample suspended in water, then allowing the sample to drain and the surface water removed and then reweighing the</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> sample in air. › Relative densities were determined for all borehole cores submitted to the laboratories. › No bulk densities were determined.
<i>Classification</i>	<ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> › Coal Resources classification has been done according to the JORC 2012 Code. › 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. › The estimations have been classified into Measured and Indicated Coal Resources. › The estimation results appropriately reflect the confidence in tonnage estimation, reliability of coal intersection data and quality data. › The result appropriately reflect the CP's view of the Coal Resources.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> › The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> › Various independent third party audits and reviews have been conducted on the Coal Resources estimate and no material issues with either the methodology applied and the Coal Resources estimate were identified.
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> › 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 	<ul style="list-style-type: none"> › The Competent Person applied the principles of the JORC Code 2012 in estimating the Coal Resources at Boikarabelo Coal Mine. › The Coal Resources were estimated using geostatistical analyses and variograms of the raw ash content of the coal zones. The variograms indicate that there is little change in the raw ash variability within the Coal Resources. › There is a high level of confidence in the coal zone continuity as is depicted in the south-west north-east sections shown above (along strike).

Criteria	JORC Code explanation	Commentary
	estimate should be compared with production data, where available.	

Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	<ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> › Measured & Indicated Coal Resources were considered for conversion to Probable Coal Reserves. All Measured and Indicated Coal Resources were converted after applying appropriate modifying factors. › The Coal Resources were defined and compiled by the Competent Person. › The Coal Resources above have been reported separately from other Coal Resources in Resgen's tenure for the purpose of this Coal Resources and Coal Reserves Statement. › The Coal Resources are reported inclusive of the Coal Reserves.
<i>Site visits</i>	<ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> › The Competent Persons have visited the site. › The site visit confirmed the existing infrastructure and services, which were taken into consideration as part of the modifying factors used to convert the Coal Resources to Coal Reserves.
<i>Study status</i>	<ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> › The studies carried out to date, including the optimised mine design, equate to a Feasibility Study. These studies confirm that the mine plan is technically achievable and economically viable.

Criteria	JORC Code explanation	Commentary
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> › The basis of the cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> › The quality parameters applied, based on a dual export/domestic business model, are: <ul style="list-style-type: none"> • an export quality product with an average of 14% ash and an average 25.73 MJ/kg calorific value determined on an AD basis, and • a domestic power station product with an average 19.5 MJ/kg calorific value and an average 31.43 % ash determined on an AD basis.
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> › The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). › The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. › The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling. › The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). › The mining dilution factors used. › The mining recovery factors used. › Any minimum mining widths used. › The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. 	<ul style="list-style-type: none"> › The optimised mine design exercise indicated that an open pit terrace truck and shovel mine was the preferred option. The mining methods are appropriate and have been well proven over time and are comparable with the practices and parameters at Grooteegeluk. › The main principals of this mining design are: <ul style="list-style-type: none"> • the establishment of a box-cut, • pre-stripping of the overburden, and • once steady-state mining operations have been established, roll-over backfill of the overburden will be carried out. › The key mining Modifying Factors, based on the results of the various studies conducted by Resgen are: <ul style="list-style-type: none"> • a cut-off of > 65% ash content, • a yield cut-off of 24%, • a minimum coal ply thickness of 0.5m, • a mining recovery factor of 95%, • a mining dilution factor of 5%, • a contamination factor of 0.1m of both the roof and floor of the mining horizons,

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> › The infrastructure requirements of the selected mining methods. 	<ul style="list-style-type: none"> • an overall pit slope angle of 45⁰, • a minimum bench width of 60m, • all seams will be mined together, and no stop-start operation or separate stockpiles will be required, and • the inclusion of two 75kt blending stockpiles. <ul style="list-style-type: none"> › The factors are considered to be appropriate for the level of geological confidence and the type of mining considered. › No Inferred Coal Resources are included in the mine plan. › All relevant infrastructure required to execute the life-of-mine plan has been considered. The infrastructure to facilitate the open pit terrace mining will include berms, service stations, workshops and fuel stations. › The access and pre strip requirements were addressed and haul roads catered for in the waste stripping requirements. › The coal handling and process plant design caters for an appropriate amount of gangue material to be rejected (i.e. low yield) by the primary cyclone.
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> › 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 	<ul style="list-style-type: none"> › The coal handling and processing plant has been based on a dense medium separation process to produce two different quality products. The design also incorporates a fines beneficiation circuit. The coarse material will be beneficiated through a primary and secondary dense medium cyclone. The fines circuit comprises of a fine- and ultra-fine reflux classifier. › Density separation is a well-known and widely used method to upgrade ROM coal to saleable clean coal products. › The discarded material will be placed in the mining void in accordance

Criteria	JORC Code explanation	Commentary
	<p>elements.</p> <ul style="list-style-type: none"> › 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? 	<p>with the mine design.</p> <ul style="list-style-type: none"> › The plant design with regards to sizing and yield envelope is based on slim core information (wash data) which was tested against results obtained from large diameter core. The tests were conducted by accredited laboratories. The slim core data is representative of the deposit. The correlation between large diameter core samples and the slim cores is deemed sufficient to base the plant design and operating criteria on. No bulk samples other than the large diameter core samples have been taken. The large diameter core samples were deemed sufficient for the mine design process. › The Coal Reserves estimation is based on ROM tonnes and the amount of saleable product with typical qualities for the product is reported.
<i>Environmental</i>	<ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> › Ledjadja has an approved environmental management plan, water-use license and waste management license, which are required to operate a mine in South Africa. › The proposed discard and waste dumps have been designed to the standards required by the National Waste Management Act and form part of the above-mentioned approvals. The designs include insulation layers at the base and water recovery. Water recovered will be treated before reuse.
<i>Infrastructure</i>	<ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> › Lephalale is the main source for skilled labour and accommodation for the project. Travel time from Lephalale to the mine by bus is expected to be 1 hour 30 minutes maximum. › Sufficient commercial, industrial and mining support services are located in Lephalale, including fuel, telecommunications and security. › Expert studies confirm sufficient water is available through identified water sources. A water use license is in place for sourcing water from these water sources, as well as the approval of the required water storage facilities.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> › A power supply agreement has been signed with the National Power Supplier (Eskom). An 80MW power supply substation has already been erected and equipped. Final connection to the national grid and commissioning is still outstanding. The construction power is being supplied to the mine through two 22kV rural lines which have already been installed and commissioned. › To ensure road access to the mine and the farms in the immediate surrounding area Ledjadja will assist the relevant Authorities to upgrade the regional road network. . › Transnet Freight Rail (TFR) will be used for the transportation by rail of both the export and domestic coal products. A railway link between Ledjadja and the TFR main line is to be constructed and will be operated by TFR. A rapid load-out facility and railway siding will be constructed on the mine. › All infrastructure required for mining and coal production, including the coal handling and processing plant, all mine buildings, heavy machinery equipment support infrastructure, fuel supply, power supply, water supply, sanitation services, information and communication services and security will be constructed as part of the project.
Costs	<ul style="list-style-type: none"> › 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 	<ul style="list-style-type: none"> › Capital Costs for the project include: <ul style="list-style-type: none"> • the capital cost for the construction of the rail siding, • Ledjadja's capital contribution towards the upgrades to the regional road network, • the capital cost for the construction of the coal handling and processing plant, • the capital costs for the establishment of the On Mine Infrastructure,

Criteria	JORC Code explanation	Commentary
	<p>charges, penalties for failure to meet specification, etc.</p> <p>› The allowances made for royalties payable, both Government and private.</p>	<ul style="list-style-type: none"> the capital costs for Overburden and Discard dumps, and the capital cost for electricity, equipment & vehicles, staff & ancillaries based on actual costs incurred on the project to date. <p>› Mining costs are based on a Contractor Mining price quotation.</p> <p>› Processing costs are based on a lump-sum turnkey pricing structure and quotation.</p> <p>› Distribution costs for the export Coal product are based on indicative rates for rail and port charges received from Trans Freight Rail (TFR).</p> <p>› Marketing costs are based on a contract for Supply Chain Management and Marketing services with Noble Resources International Pte Ltd.</p> <p>› The USD/ZAR exchange rate assumed is based on actual historical average exchange rates.</p> <p>› Allowances have been made for taxes and royalties payable based on South African legislative requirements.</p> <p>› Operational costs for staff, electricity, water, engineering, safety and environmental management, security, vehicles, specialist services, information and communication services and consumables are based on estimate quantities and benchmark rates.</p>
<i>Revenue factors</i>	<p>› 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.</p> <p>› The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</p>	<p>› A price forecast for Ledjadja's export coal was prepared by an independent third party. The economic evaluation for the project has, however, been based on a long term price forecast by Resgen's Management.</p> <p>› The pricing assumed for the domestic coal sales has been based on a conservative assumption of the typical margin on costs typically paid on cost-plus supply agreements within South Africa.</p>
<i>Market assessment</i>	<p>› The demand, supply and stock situation for the particular</p>	<p>› An independent market analysis predicts a gradual depletion of the</p>

Criteria	JORC Code explanation	Commentary
	<p>commodity, consumption trends and factors likely to affect supply and demand into the future.</p> <ul style="list-style-type: none"> › 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. 	<p>current oversupply of export thermal coal over the next 6 years which will lead to a slow increase in thermal seaborne coal prices from the low US\$50/tonne to mid US\$60/tonne. Thereafter, a further increase in prices, to nearly \$90/tonne for exports out of Richards Bay is expected, as new projects will need to be developed to meet demand.</p> <ul style="list-style-type: none"> › An independent market analysis by a third party predicts a decline in domestic supply due to declining Coal Reserves and mine closures. An independent assessment of Ledjadja's project against comparable probable projects, indicates that based on indicative costs, Ledjadja would be in the top half of the cost curve of competing projects when at maximum production.
<i>Economic</i>	<ul style="list-style-type: none"> › 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. 	<ul style="list-style-type: none"> › An economic analysis (financial valuation) was conducted to determine the net present value (NPV) of the project. The economic analysis confirms the economic viability of the project. › Key inputs and assumptions to the economic analyses include: <ul style="list-style-type: none"> • the financial model has been based on a ROM production of 304 million tonnes, for a 21 year period at an average annual ROM production rate of 14.5 million tonnes, • based on the above, a total of 132 million tonnes coal product will be produced at an estimated 6.3 million tonnes average annual coal production rate, • a discount rate of 10% has been applied, and • an estimated annual inflation rate, based on an actual historical average rate, has been applied. › The financial model has been based on inputs from a combination of offer price and estimates provided by potential suppliers based on designs and study work at Feasibility Study level. Owner's cost inputs were based on actual costs experienced on the project thus far and factored estimates from previous projects. An independent market

Criteria	JORC Code explanation	Commentary
		<p>analysis was conducted on the domestic and export product which produced consensus pricing for the export product and a prediction of supply and demand in both markets. The inputs to the financial model meet the requirements of the JORC Code 2012 .</p> <ul style="list-style-type: none"> › The financial model was analysed to test the sensitivity of the NPV on different cost and revenue input variables. The sensitivity analyses indicates that the project is extremely sensitive to price, the ZAR/US\$ exchange rate and coal quality. › An independent evaluation of the financial model carried out a Monte Carlo simulation, with sensitivities based on economic parameters as well as production volumes and product quality. This evaluation has indicated that the Project is financially sound.
<i>Social</i>	<ul style="list-style-type: none"> › The status of agreements with key stakeholders and matters leading to social licence to operate. 	<ul style="list-style-type: none"> › Ledjadja has a social and labour plan, which has been approved by the Department of Mineral Resources.
<i>Other</i>	<ul style="list-style-type: none"> › 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 	<ul style="list-style-type: none"> › An approved Mining Right, together with all of the legal permits and licences required to operate a mine in South Africa, has been received. › Floods in excess of the magnitude of a 1 in 100 year of the Limpopo River and other smaller streams that are crossed by means of railway bridges towards Lephalale have been considered.

Criteria	JORC Code explanation	Commentary
	of the reserve is contingent.	
<i>Classification</i>	<ul style="list-style-type: none"> › 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). 	<ul style="list-style-type: none"> › At this stage Resgen has converted its Coal Resources to Probable Coal Reserves. No Proved Coal Reserves have been declared based on the level of confidence associated with the potential domestic off-take prices. › All Measured Coal Resources have been converted into Probable Coal Reserves. › The classification of the Coal Reserves appropriately reflects the view of the Competent Person.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> › The results of any audits or reviews of Ore Reserve estimates. 	<ul style="list-style-type: none"> › No independent third party review and audit of the Coal Reserves has been conducted.
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> › 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 	<ul style="list-style-type: none"> › The Coal Reserves are based on global estimates and appropriate Modifying Factors. The Competent Person is of the opinion that the approach and procedure used to quantify the relative accuracy of the Coal Reserve is appropriate, to a high level of confidence.

Criteria	JORC Code explanation	Commentary
	<p>study stage.</p> <ul style="list-style-type: none"> › 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. 	

Appendix 2 Borehole Coordinates and Collar elevation

BOREID	EASTING	NORTHING	COLLAR ELEVATION	FINAL DEPTH	AZIMUTH	DIP	TYPE	COORDSYS
DO01	17854.79	-2609505.27	838.46	160	0	-90	PDH	LO27_WGS84
DO02	18883.5	-2610442.86	838.16	150	0	-90	PDH	LO27_WGS84
DO03	20126.64	-2610170.13	840.5	156	0	-90	PDH	LO27_WGS84
DO04	21815.37	-2609997.69	841.06	162	0	-90	PDH	LO27_WGS84
DO05	20139.97	-2609353.93	838.89	162	0	-90	PDH	LO27_WGS84
DO06	21502.57	-2608954.88	839.04	162	0	-90	PDH	LO27_WGS84
K01	16987.89	-2611445.52	838.79	138	0	-90	PDH	LO27_WGS84
K02	17313.82	-2611964.34	845.1	132	0	-90	PDH	LO27_WGS84
K03	17630.51	-2612413.89	845.82	108	0	-90	PDH	LO27_WGS84
K04	17879.6	-2612780.97	847.6	90	0	-90	PDH	LO27_WGS84
K05	15371.7	-2611512.76	840.33	130	0	-90	PDH	LO27_WGS84
K06	15751.75	-2611872.22	842.83	108	0	-90	PDH	LO27_WGS84
K07	16077.12	-2612235.04	845.25	108	0	-90	PDH	LO27_WGS84
K08	16392.4	-2612614.84	848.16	168	0	-90	PDH	LO27_WGS84
K09	16694.63	-2612975.23	850.41	168	0	-90	PDH	LO27_WGS84
K10	18127.68	-2613149.45	850.36	90	0	-90	PDH	LO27_WGS84
K12	17239.24	-2613350.24	854.93	108	0	-90	PDH	LO27_WGS84
KALK07	17937.83	-2612828.78	847.79	145	0	-90	PDH	LO27_WGS84
KD01	14833.11	-2611688.19	842.32	131.2	0	-90	DDH	LO27_WGS84
KD02	15454.9	-2611769.61	842.49	125.27	0	-90	DDH	LO27_WGS84
KD03	15915.42	-2611410.71	838.78	124.81	0	-90	DDH	LO27_WGS84
KD04	16261.47	-2611789.98	842.25	138.02	0	-90	DDH	LO27_WGS84
KD05	16386.34	-2611251.64	838.3	146.65	0	-90	DDH	LO27_WGS84
KD06	16814.88	-2611099.52	838.75	149.32	0	-90	DDH	LO27_WGS84
KD07	16600.23	-2611566.39	839.7	137.6	0	-90	DDH	LO27_WGS84
KD08	16949.81	-2611839.47	842.54	130.55	0	-90	DDH	LO27_WGS84
KD09	17332.62	-2611108.91	838.96	150	0	-90	PDH	LO27_WGS84
KD10	17437.64	-2611549.42	840.92	116.46	0	-90	DDH	LO27_WGS84
KD11	17621.41	-2610887.36	839.8	152.53	0	-90	DDH	LO27_WGS84
KD12	17835.69	-2611349.34	840.04	141.91	0	-90	DDH	LO27_WGS84
KD13	17892.96	-2611726.73	842.59	122.67	0	-90	DDH	LO27_WGS84
KD14	18163.72	-2612054.74	844.71	119.85	0	-90	DDH	LO27_WGS84
KD15	18074.96	-2610786.83	840.01	146.63	0	-90	DDH	LO27_WGS84
KD16	18333.5	-2611200.49	840.07	139.78	0	-90	DDH	LO27_WGS84
KD17	18474.01	-2611554.92	842.54	121.08	0	-90	DDH	LO27_WGS84
KD18	18686.29	-2611927.12	844.89	151.76	0	-90	PDH	LO27_WGS84

KD19	19022.11	-2612231.94	846.44	108	0	-90	PDH	LO27_WGS84
KD20	17695.31	-2613466.73	852.9	70	0	-90	PDH	LO27_WGS84
KD22A	16250	-2611723	841	128.7	0	-90	LCDDH	LO27_WGS84
KD22B	16251	-2611720	841	128.7	0	-90	LCDDH	LO27_WGS84
KD25	16189	-2611391	840	134.62	0	-90	DDH	LO27_WGS84
KD26	16169.22	-2611514.56	839.68	128.3	0	-90	DDH	LO27_WGS84
KD27	16155.06	-2611660.11	840.92	124.18	0	-90	DDH	LO27_WGS84
KD28	16139.28	-2611778.06	842.13	122.45	0	-90	DDH	LO27_WGS84
KD29	16123.43	-2611897.63	843.11	113	0	-90	DDH	LO27_WGS84
W01	13813.52	-2609102.38	826.41	383.91	0	-90	PDH	LO27_WGS84
W02	13882.96	-2610321.52	831.03	148	0	-90	PDH	LO27_WGS84
W03	14960.11	-2610001.44	831.83	168	0	-90	PDH	LO27_WGS84
W04	16472.47	-2609382.33	839.84	180	0	-90	PDH	LO27_WGS84
W05	13723.99	-2611591.54	843.8	144	0	-90	PDH	LO27_WGS84
W06	16327.63	-2610947.57	838.23	162	0	-90	PDH	LO27_WGS84
WDN01	14062.97	-2611546.93	841.83	141.74	0	-90	DDH	LO27_WGS84
WDN02	14730.72	-2611368.37	839.52	152.63	0	-90	DDH	LO27_WGS84
WDN03	15460.85	-2611184.17	837.87	176.92	0	-90	DDH	LO27_WGS84
WDN04	13716.51	-2611246.25	839.72	152.59	0	-90	DDH	LO27_WGS84
WDN05	14423.03	-2611057.8	836.78	162	0	-90	DDH	LO27_WGS84
WDN06	15124	-2610864.69	836.19	144.68	0	-90	DDH	LO27_WGS84
WDN07	15828.07	-2610689.85	837.57	161.92	0	-90	DDH	LO27_WGS84
WDN08	16500.12	-2610817.58	838.5	146.3	0	-90	DDH	LO27_WGS84
WDN09	17801.74	-2610496.17	840.09	164.92	0	-90	DDH	LO27_WGS84
WDN10	17084.11	-2609996.06	838.59	149.44	0	-90	DDH	LO27_WGS84
WDN11	14717.83	-2610607.96	833.44	141.23	0	-90	DDH	LO27_WGS84
WDN12	16619.25	-2610068.81	838.82	155.92	0	-90	DDH	LO27_WGS84
WDN13	15316.6	-2610471.88	834.94	215.85	0	-90	DDH	LO27_WGS84
WDN14	16537.59	-2610413.69	838.47	167.92	0	-90	DDH	LO27_WGS84
WDN15	16062.24	-2611024.66	837.74	144.23	0	-90	DDH	LO27_WGS84
WDN16	16192.61	-2610520.25	838.05	155.9	0	-90	DDH	LO27_WGS84
WDN17	16953.93	-2610393.56	838.66	161.58	0	-90	DDH	LO27_WGS84
WDN18	17338.32	-2610278.14	838.69	155.64	0	-90	DDH	LO27_WGS84
WDN19	17827.97	-2610135.43	838.94	158.6	0	-90	DDH	LO27_WGS84
WDN20	17510.33	-2610658.72	839.05	160.12	0	-90	DDH	LO27_WGS84
WDN21A	15447	-2611122	840	146.74	0	-90	LCDDH	LO27_WGS84
WDN21B	15442	-2611125	840	147.2	0	-90	LCDDH	LO27_WGS84
WDN22A	16195	-2610461	840	162.37	0	-90	LCDDH	LO27_WGS84
WDN22B	16191	-2610457	840	145.1	0	-90	LCDDH	LO27_WGS84
WPN01	17156.4	-2610713.42	839	168	0	-90	PDH	LO27_WGS84
WPN03	17738.61	-2609820.86	838.5	168	0	-90	PDH	LO27_WGS84
WPN04	14060.98	-2610828.39	834.7	168	0	-90	PDH	LO27_WGS84
WPN06	15945.17	-2610194.46	837.5	142	0	-90	PDH	LO27_WGS84
WPN07	14419.35	-2611459.18	840.3	150	0	-90	PDH	LO27_WGS84
WPN08	15131.87	-2611270.07	838.46	150	0	-90	PDH	LO27_WGS84

WPN09	15869.59	-2611054.56	837.42	168	0	-90	PDH	LO27_WGS84
WPN10	14060.52	-2611139.42	837.65	168	0	-90	PDH	LO27_WGS84
WPN11	14738.74	-2610977.14	836.01	168	0	-90	PDH	LO27_WGS84
WPN12	15464.31	-2610785.76	836.44	162	0	-90	PDH	LO27_WGS84