

Certificate N°: 1906120446

Page N°: 1/2

CERTIFICATE OF SAMPLING AND ANALYSIS

Vessel: MV GOLDEN ZHOUSHAN
 Port of Loading: Richards Bay, South Africa
 Sampling Commenced: 18 May 2019
 Sampling Completed: 28 May 2019
 Bill of Lading Date: 28 May 2019
 Quantity (as per SGS Draft Survey): 81200 Metric Tons
 Description of goods: Steam (Non Coking) Coal of South African Origin in Bulk
 Our Reference: BO 461220

THIS IS TO REPORT that in accordance with instructions received from our Principal, IMR Metallurgical Resources AG, to perform sampling and analysis of the above-mentioned shipment, we hereby report the following:

SAMPLING MANUAL SAMPLING - SGS, performed as per ISO 18283 5.3. Sampling occurred from freshly exposed surface while the material was in motion, on a systematic known-mass intervals basis, with fixed-increment mass. Manual Sampling method was agreed to with the SGS Principal, as sampling by more reliable methods that provide probability samples was not possible or was not selected by the SGS Principal. The suitability of this sampling method is defined by the sampling standard.

ANALYSIS Reported results are based on a calculated weighted average of 1 Sub-lot(s) analysis results using weights and qualities on the same moisture basis, and composite analysis results where applicable. Analysis performed in accordance with ISO Standards.

Nominal Topsize 50 mm

We report the following on weighted average:

Proximate Analysis	Unit	As Received Basis	Air Dry Basis	Dry Basis	Dry Ash Free Basis
Total Moisture	%	7.96	-----	-----	-----
Moisture in Analysis Sample	%	-----	3.50	-----	-----
Ash	%	27.31	28.63	29.67	-----
Volatile Matter	%	19.34	20.28	21.02	29.88
Fixed Carbon	%	45.39	47.59	49.31	70.12
Total Sulphur	%	0.89	0.93	0.97	1.38
Gross Calorific Value	kcal/kg	4907	5145	5332	7581
Net Calorific Value	kcal/kg	4725	4981	5182	-----

Ultimate Analysis	Unit	As Received Basis	Air Dry Basis	Dry Basis	Dry Ash Free Basis
Total Carbon	%	51.94	54.46	56.43	80.23
Hydrogen (excludes H in moisture)	%	2.81	2.95	3.05	4.34
Total Nitrogen	%	1.20	1.26	1.31	1.86
Oxygen by diff. (excludes O in moisture)	%	7.88	8.27	8.57	12.19
Total Hydrogen (includes H in moisture)	%	3.70	3.34	-----	-----

SGS Société Générale de Surveillance SA

1, place des Alpes
 P.O. Box 2152
 CH-1211 Geneva 1
 T: (41-22) 739.91.11
 F: (41-22) 739.98.80 (Général)
 F: (41-22) 739.98.22 (Minerals)

This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/en/Terms-and-Conditions.aspx). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein.

This document is to be treated as an original within the meaning of UCP 600. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

The authenticity of this document may be verified at
<https://sgsonline.sgs.com/en/v2/common/certificate/authenticateCertificate.jsp>.



Certificate N°: 1906120446

Page N°: 2/ 2

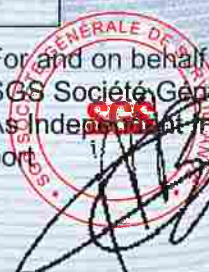
Oxygen (includes O in moisture)	%	14.95	11.38	----	----
---------------------------------	---	-------	-------	------	------

Hardgrove Grindability Index	56
at moisture level:	3.81

Ash Fusion Temperatures		Reducing Atmosphere
Initial Deformation	Deg.c	1330
Spherical (Softening)	Deg.c	1400
Hemispherical	Deg.c	1440
Flow (Fluid)	Deg.c	1480

Signed at Dated by SGS at Load Port
07 June 2019

For and on behalf of
SGS Société Générale de Surveillance SA
As Independent Inspection Agency at load
port



SGS Société Générale de Surveillance SA

1, place des Alpes
P.O. Box 2152
CH-1211 Geneva 1
t: (41-22) 739.91.11
t: (41-22) 739.98.80 (Général)
f: (41-22) 739.98.22 (Minerals)

This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/en/Terms-and-Conditions.aspx). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein.

This document is to be treated as an original within the meaning of UCP 600. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

The authenticity of this document may be verified at
<https://sgsonsite.sgs.com/en/v2/common/certificate/authenticateCertificate.jsp>



Certificate N°: 1906120449

Page N°: 1/1



CERTIFICATE OF ORIGIN

Vessel:	MV GOLDEN ZHOUSHAN
Port of Loading:	Richards Bay, South Africa
Sampling Commenced:	18 May 2019
Sampling Completed:	28 May 2019
Bill of Lading Date:	28 May 2019
Quantity (as per SGS Draft Survey):	81200 Metric Tons
Description of goods:	Steam (Non Coking) Coal of South African Origin in Bulk
Our Reference:	BO 461220

THIS IS TO REPORT that in accordance with instructions received from our Principal, IMR Metallurgical Resources AG, we hereby report that above mentioned cargo is of South Africa origin as declared in the local Chamber of Commerce Certificate of Origin no. 95390, dated 29 May 2019.

Signed at Dated by SGS at Load Port
07 June 2019

For and on behalf of
SGS Société Générale de Surveillance SA
As Independent Inspection Agency at load
port



SGS Société Générale de Surveillance SA

1, place des Alpes
P.O. Box 2152
CH-1211 Geneva 1
t: (41-22) 739.91.11
t: (41-22) 739.98.80 (Général)
t: (41-22) 739.98.22 (Minerals)

This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/en/Terms-and-Conditions.aspx). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein.

This document is to be treated as an original within the meaning of UCP 600. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

The authenticity of this document may be verified at
<https://sgsonsite.sgs.com/en/v2/common/ecertificate/authenticateCertificate.jsp>



DRAFT SURVEY REPORT

Vessel: MV GOLDEN ZHOUSHAN
 Port of Loading: Richards Bay, South Africa
 Sampling Commenced: 18 May 2019
 Sampling Completed: 28 May 2019
 Bill of Lading Date: 28 May 2019
 Quantity (as per SGS Draft Survey): 81200 Metric Tons
 Description of goods: Steam (Non Coking) Coal of South African Origin in Bulk
 Our Reference: BO 461220

THIS IS TO REPORT that in accordance with instructions received from our Principal, IMR Metallurgical Resources AG, to perform draft survey of the above-mentioned shipment, we hereby report the following:

	INITIAL		FINAL	
DEDUCTION				
Ballast	8684	MT	250	MT
Fresh Water	276	MT	201	MT
Fuel Oil	2440	MT	2393	MT
Diesel Oil	194	MT	194	MT
Lube Oil	32	MT	32	MT
Total	11626	M.T	3070	M.T
Corrected Draft Forward	10.7748	M	17.3760	M
Corrected Draft Aft	12.1510	M	17.4246	M
Mean Fore and Aft Draft	11.4629	M	17.4003	M
Midship Port Draft	11.3100	M	17.5000	M
Midship Starboard Draft	11.3000	M	17.5000	M
Mean Midship Draft	11.2825	M	17.4775	M
Mean of Means Draft	11.3727	M	17.4389	M
Draft Corrected for Deformation	11.3276	M	17.4582	M
Displacement	120709.5	MT	193062.1	MT
Trim Correction	-434.5	MT	-1.2	MT
Displacement Corrected for Trim	120275	MT	193060.9	MT
Density	1.023		1.023	
Displacement Corrected for Density	120040	MT	192684	MT
Deductions	11626	MT	3070	MT
Nett Displacement	108414	MT	189614	MT
Total Cargo Loaded			81200	MT



SGS Société Générale de Surveillance SA

1, place des Alpes
 P.O. Box 2152
 CH-1211 Geneva 1
 t: (41-22) 739.91.11
 f: (41-22) 739.98.80 (Général)
 f: (41-22) 739.98.22 (Minerals)

This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/en/Terms-and-Conditions.aspx). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein.
 This document is to be treated as an original within the meaning of UCP 600. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.
 The authenticity of this document may be verified at
<https://sgsonsite.sgs.com/en/v2/common/ecertificate/authenticateCertificate.jsp>



Certificate N°: 1906120447

Page N°: 2 / 2

All drafts, densities, as well as fresh water, ballast, bilge and fuel oil soundings were ascertained in conjunction with the vessel's Officers. All calculations are based upon the vessel's hydrostatic tables and the vessel's calibrated tank sounding tables, as provided to the draft Surveyors. This survey was conducted by using the internationally accepted method of determining vessel's displacement by draft survey. This certificate is not a certificate of seaworthiness and only applies to the cargo loaded at this date, time, and place with the master being responsible for the stability and seaworthiness of his vessel at all times.

Signed at Dated by SGS at Load Port
07 June 2019

For and on behalf of
SGS Société Générale de Surveillance SA
As Independent Inspection Agency at load port



SGS Société Générale de Surveillance SA

1, place des Alpes
P.O. Box 2152
CH-1211 Geneva 1
t: (41-22) 739.91.11
t: (41-22) 739.98.80 (Général)
f: (41-22) 739.98.22 (Minerals)

This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/en/Terms-and-Conditions.aspx). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein.

This document is to be treated as an original within the meaning of UCP 600. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

The authenticity of this document may be verified at
<https://sgs.site.sgs.com/en/v2/common/ecertificate/authenticateCertificate.jsp>



Certificate N°: 1906120448

Page N°: 1/ 1



CERTIFICATE OF WEIGHT

Vessel: MV GOLDEN ZHOUSHAN
Port of Loading: Richards Bay, South Africa
Sampling Commenced: 18 May 2019
Sampling Completed: 28 May 2019
Bill of Lading Date: 28 May 2019
Quantity (as per SGS Draft Survey): 81200 Metric Tons
Description of goods: Steam (Non Coking) Coal of South African Origin in Bulk
Our Reference: BO 461220

THIS IS TO REPORT that in accordance with instructions received from our Principal, IMR Metallurgical Resources AG, to perform weight determination by means of draft survey of the above-mentioned shipment, we hereby report the following:

81 200 Metric Tons

Eighty one thousand two hundred Metric Tons

All drafts, densities, as well as fresh water, ballast, bilge and fuel oil soundings were ascertained in conjunction with the vessel's Officers. All calculations are based upon the vessel's hydrostatic tables and the vessel's calibrated tank sounding tables, as provided to the draft Surveyors.

This survey was conducted by using the internationally accepted method of determining vessel's displacement by draft survey. This certificate is not a certificate of seaworthiness and only applies to the cargo loaded at this date, time, and place with the master being responsible for the stability and seaworthiness of his vessel at all times.

Signed at Dated by SGS at Load Port
07 June 2019

For and on behalf of
SGS Société Générale de Surveillance SA
As Independent Inspection Agency at load port

SGS Société Générale de Surveillance SA

1, place des Alpes
P.O. Box 2152
CH-1211 Geneva 1
t: (41-22) 739.91.11
f: (41-22) 739.98.80 (Général)
f: (41-22) 739.98.22 (Minerals)

This document is issued by the Company subject to its General Conditions of Service (www.sgs.com/en/Terms-and-Conditions.aspx). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues established therein.

This document is to be treated as an original within the meaning of UCP 600. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

The authenticity of this document may be verified at
<https://sgs.site.sgs.com/en/v2/common/verifyCertificate/authenticateCertificate.jsp>