



Certificate No. 00000/COAAAL

Date: October 15, 2018



**SUCOFINDO**

Issuing Office:

Jl. Raya Pasar Minggu Kav. 34, Jakarta 12780, Indonesia

Phone/Facs: +62 21 7983666/7983888

Email: min.pst@sucofindo.co.id

## COAL QUALITY REJECTION LIMITS

VESSEL : MV. AS VICTORIA  
FROM : Taboneo, Indonesia  
TO : JIMAH EAST POWER STATION, PORT DICKSON, NEGERI  
SEMBILAN, MALAYSIA  
SHIPPER : PT. ADARO INDONESIA  
Menara Karya 22<sup>nd</sup> – 23<sup>rd</sup> Floor  
Jl. H.R. Rasuna Said Blok X-5 Kav. 1-2  
Jakarta 12950, Indonesia  
BUYER : TNB FUEL SERVICES SDN BHD,  
LEVEL 11, MENARA GLOMAC, GLOMAC DAMANSARA,  
JALAN DAMANSARA, 60000 KUALA LUMPUR, MALAYSIA  
CARGO : Coal  
DESCRIPTION : Envirocoal In Bulk  
WEIGHT : 49,500 MT  
LOADING DATES : October 8, 2018 up to October 13, 2018

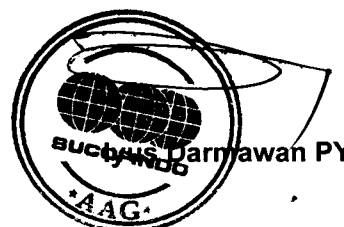
Samples on a lot basis were drawn from mechanical sampling system during vessel loading in accordance with ISO Standard. Samples prepared and analyzed in accordance to ISO Standards, except HGI in ASTM Standard, showed the following average results :

Properties	Value as per Certificate of Sampling Analysis		Rejection Limit
Gross Calorific Value (Gross) (as received basis)	4760	Kcal / kg	Below 4600 kcal/kg
Total Moisture ( as received basis)	29.7	%	Exceeds 32%
Ash Content (as received basis)	2.0	%	Exceeds 4.5%
Sulfur Content (as received basis)	0.13	%	Exceeds 0.25%
Volatile Matter (as received basis)	35.0	%	Below 32.2%
Hardgrove Grindability Index	46		Below 40 index points
Ash Fusion Temperature (reducing atmosphere - IDT)	1190	°C	Below 1100 °C
% of coal size more than 50 mm of total size distribution	4.4	%	Not more than 5%
% of coal size less than 3 mm fines of total size distribution	19.3	%	Not more than 30%
% of coal size less than 2 mm fines of total size distribution	16.5	%	Not more than 27%

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Dept. of Coal Inspection

5701031800712



3056429

ICI-2007A



Certificate No. 13564/COAAAL  
Date: October 15, 2018



Issuing Office:  
Jl. Raya Pasar Minggu Kav. 34, Jakarta 12780, Indonesia  
Phone/Facs: +62 21 7983666/7983888  
Email: min.pst@sucofindo.co.id

## CERTIFICATE OF SAMPLING AND ANALYSIS

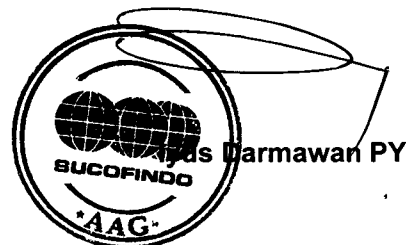
VESSEL : MV. AS VICTORIA  
FROM : Taboneo, Indonesia  
TO : JIMAH EAST POWER STATION, PORT DICKSON, NEGERI  
SEMBILAN, MALAYSIA  
SHIPPER : PT. ADARO INDONESIA  
Menara Karya 22<sup>nd</sup> – 23<sup>rd</sup> Floor  
Jl. H.R. Rasuna Said Blok X-5 Kav. 1-2  
Jakarta 12950, Indonesia  
BUYER : TNB FUEL SERVICES SDN BHD,  
LEVEL 11, MENARA GLOMAC, GLOMAC DAMANSARA,  
JALAN DAMANSARA, 60000 KUALA LUMPUR, MALAYSIA  
CARGO : Coal  
DESCRIPTION : Envirocoal In Bulk  
WEIGHT : 49,500 MT  
LOADING DATES : October 8, 2018 up to October 13, 2018  
SAMPLING : Samples on a lot basis were drawn from the mechanical sampling  
system during vessel loading in accordance with ISO Standard.  
SIZING : Size test carried out in accordance with ISO Standards "Higher rank  
Coal-size analysis "showed that 21.8 % were between 31.5 and 50 mm,  
4.4 % were above 50 mm, and 19.3 % were below 3 mm, and 16.5 %  
were below 2 mm.  
ANALYSIS : Results of the analysis of the samples withdrawn as above and  
analyzed in accordance with ISO Standards except for HGI which was  
analyzed in accordance with ASTM Standards.

Parameters		Unit	Test Result
Total Moisture	( as received basis )	%	29.7
Inherent Moisture	( air dried basis )	%	18.0
Ash	( as received basis )	%	2.0
Volatile Matter	( as received basis )	%	35.0
Fixed Carbon	( as received basis )	%	33.3
Total Sulfur	( as received basis )	%	0.13
Gross Calorific Value (Gross)	( as received basis )	Kcal/kg	4760
Nitrogen	( dry basis )	%	0.98
Grindability ( HGI )		:	46
Ash Fusion Temperature :	Reducing Atmosphere	Oxidizing Atmosphere	
Deformation	1190 °C	1260 °C	
Hemisphere	1210 °C	1280 °C	
Flow	1220 °C	1290 °C	

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Dept. of Coal Inspection

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056617

01-2007A



Certificate No. 13565/COAAAL

Date: October 15, 2018



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Jl. Raya Pasar Minggu Kav. 34, Jakarta 12780, Indonesia  
Phone/Facs: +62 21 7983666/7983888  
Email: min.pst@sucofindo.co.id

## CERTIFICATE OF SAMPLING AND ANALYSIS

VESSEL : MV. AS VICTORIA  
FROM : Taboneo, Indonesia  
TO : JIMAH EAST POWER STATION, PORT DICKSON, NEGERI  
SEMBILAN, MALAYSIA  
SHIPPER : PT. ADARO INDONESIA  
Menara Karya 22<sup>nd</sup> – 23<sup>rd</sup> Floor  
Jl. H.R. Rasuna Said Blok X-5 Kav. 1-2  
Jakarta 12950, Indonesia  
BUYER : TNB FUEL SERVICES SDN BHD,  
LEVEL 11, MENARA GLOMAC, GLOMAC DAMANSARA,  
JALAN DAMANSARA, 60000 KUALA LUMPUR, MALAYSIA  
CARGO : Coal  
DESCRIPTION : Envirocoal In Bulk  
WEIGHT : 49,500 MT  
LOADING DATES : October 8, 2018 up to October 13, 2018

This Certificate is supplementary to our Certificate of Sampling and analysis No. 13564/COAAAL dated October 15, 2018

SAMPLING : Samples on a lot basis were drawn from the mechanical sampling system during vessel loading in accordance with ISO Standard.  
SIZING : Size test carried out in accordance with ISO Standards "Higher rank Coal-size analysis "showed that 21.8 % were between 31.5 and 50 mm, 4.4 % were above 50 mm, and 19.3 % were below 3 mm, and 16.5 % were below 2 mm.  
ANALYSIS : Results of the analysis of the samples withdrawn as above and analyzed in accordance with ISO Standards except for HGI which was analyzed in accordance with ASTM Standards.

### Proximate Analysis :

Inherent Moisture	( air dried basis )	:	18.0	%
Ash	( air dried basis )	:	2.3	%
Volatile Matter	( as received basis )	:	35.0	%
Fixed Carbon	( as received basis )	:	33.3	%
Total Sulfur	( as received basis )	:	0.13	%
Fuel Ratio	( as received basis )	:	0.95	

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ULTIMATE ANALYSIS :

- Carbon	( dry ash free basis )	%	74.2
- Hydrogen	( dry ash free basis )	%	5.12
- Nitrogen	( dry ash free basis )	%	1.00
- Sulfur	( dry ash free basis )	%	0.19
- Oxygen	( dry ash free basis )	%	19.49
- Phosphorus	( as received basis )	%	0.003
- Chlorine	( as received basis )	%	0.01
- Sodium	( as received basis )	%	0.004
- Abrasive Index		mg/kg	7

Ash Analysis : ( Dry Basis )

- SiO <sub>2</sub>	( dry basis )	%	36.64
- Al <sub>2</sub> O <sub>3</sub>	( dry basis )	%	13.70
- Fe <sub>2</sub> O <sub>3</sub>	( dry basis )	%	16.05
- TiO <sub>2</sub>	( dry basis )	%	0.77
- CaO	( dry basis )	%	15.86
- MgO	( dry basis )	%	7.37
- K <sub>2</sub> O	( dry basis )	%	0.96
- Na <sub>2</sub> O	( dry basis )	%	0.45
- P <sub>2</sub> O <sub>5</sub>	( dry basis )	%	0.31
- Mn <sub>3</sub> O <sub>4</sub>	( dry basis )	%	0.24
- SO <sub>3</sub>	( dry basis )	%	7.21
- Undetermined	( dry basis )	%	0.44

Size Distribution :

0 x 50	mm	%	95.6
0 x 3	mm	%	19.3
0 x 2	mm	%	16.5
0 x 0.5	mm	%	6.3





Certificate No. 13567/COAAAL  
Date: October 15, 2018



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## CERTIFICATE OF SAMPLING AND ANALYSIS

VESSEL : MV. AS VICTORIA  
FROM : Taboneo, Indonesia  
TO : JIMAH EAST POWER STATION, PORT DICKSON, NEGERI  
SEMBILAN, MALAYSIA  
SHIPPER : PT. ADARO INDONESIA  
Menara Karya 22<sup>nd</sup> – 23<sup>rd</sup> Floor  
Jl. H.R. Rasuna Said Blok X-5 Kav. 1-2  
Jakarta 12950, Indonesia  
BUYER : TNB FUEL SERVICES SDN BHD,  
LEVEL 11, MENARA GLOMAC, GLOMAC DAMANSARA,  
JALAN DAMANSARA, 60000 KUALA LUMPUR, MALAYSIA  
CARGO : Coal  
DESCRIPTION : Envirocoal In Bulk  
WEIGHT : 49,500 MT  
LOADING DATES : October 8, 2018 up to October 13, 2018

Results of the analysis of the samples withdrawn as above and analyzed in accordance with ASTM Standards except for Boron which was analyzed in accordance with ISO Standards.

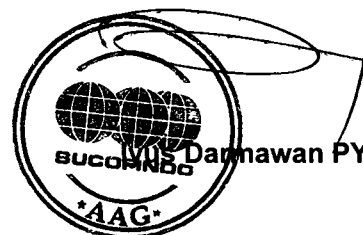
Coal Specifications :	Test Result
Mercury ppm, in coal	0.02
Cadmium ppm, in coal	0.04
Boron ppm, in coal	37

This Certificate is supplementary to our Certificate of Sampling and analysis No. 13564/COAAAL dated October 15, 2018

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Dept. of Coal Inspection



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Certificate No. 13569/COAAAL  
Date: October 15, 2018



Issuing Office:  
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Phone/Facs: +62 21 7983666/7983888  
Email: min.pst@sucofindo.co.id

## CERTIFICATE OF SAMPLING AND ANALYSIS

VESSEL : MV. AS VICTORIA  
FROM : Taboneo, Indonesia  
TO : JIMAH EAST POWER STATION, PORT DICKSON, NEGERI  
SEMBILAN, MALAYSIA  
SHIPPER : PT. ADARO INDONESIA  
Menara Karya 22<sup>nd</sup> – 23<sup>rd</sup> Floor  
Jl. H.R. Rasuna Said Blok X-5 Kav. 1-2  
Jakarta 12950, Indonesia  
BUYER : TNB FUEL SERVICES SDN BHD,  
LEVEL 11, MENARA GLOMAC, GLOMAC DAMANSARA,  
JALAN DAMANSARA, 60000 KUALA LUMPUR, MALAYSIA  
CARGO : Coal  
DESCRIPTION : Envirocoal In Bulk  
WEIGHT : 49,500 MT  
LOADING DATES : October 8, 2018 up to October 13, 2018

Samples on a lot basis were drawn from mechanical sampling system during vessel loading in accordance with ISO Standard. Samples prepared and analyzed in accordance to ISO Standards, except HGI in ASTM Standard, showed the following average results :

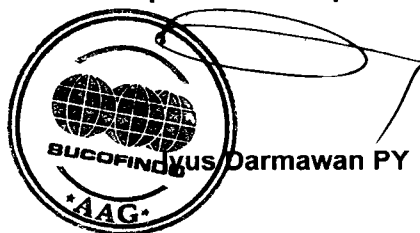
Parameters	Unit	Actual Analysis Result
Total Moisture (AR)	%	29.7
Inherent Moisture (ADB)	%	18.0
Gross Calorific Value (AR)	Kcal/Kg	4760
Gross Calorific Value (ADB)	Kcal/Kg	5552
Ash (AR)	%	2.0
Ash (ADB)	%	2.3
Total Sulphur (AR)	%	0.13
Total Sulphur (ADB)	%	0.15

This Certificate is supplementary to our Certificate of Sampling and analysis No. 13564/COAAAL dated October 15, 2018

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Dept. of Coal Inspection



056620

21-2007A



Certificate No. 13570/COAAAL  
Date: October 15, 2018



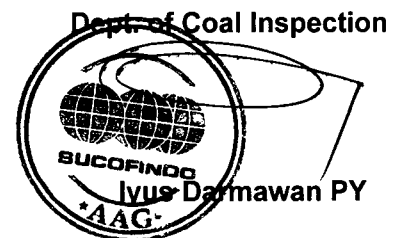
Issuing Office:  
Jl. Raya Pasar Minggu Kav. 34, Jakarta 12780, Indonesia  
Phone/Facs: +62 21 7983666/7983888  
Email: min.pst@sucofindo.co.id

## CERTIFICATE OF WEIGHT

CONSIGNEE	: TNB FUEL SERVICES SDN BHD, LEVEL 11, MENARA GLOMAC, GLOMAC DAMANSARA, JALAN DAMANSARA, 60000 KUALA LUMPUR, MALAYSIA
SHIPPER	: PT. ADARO INDONESIA Menara Karya 22nd – 23rd Floor Jl. H.R. Rasuna Said Blok X- 5 Kav. 1-2 Jakarta 12950, Indonesia
CARGO	: Coal
DESCRIPTION OF GOODS	: Envirocoal In Bulk
QUANTITY / WEIGHT DECLARED	: 49,500 MT
NUMBER AND TYPE OF PACKAGES	: In Bulk
MEANS OF CONVEYANCE	: By Sea going Vessel
REMARK	: The Consignment described above has been loaded into holds of "MV. AS VICTORIA" where by the total weight of cargo carried was determined by draft survey is as follows : Packing : In Bulk Weight : 49,500 MT

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5701031800712



056621

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Certificate No. 13572/COAAAL  
Date: October 15, 2018



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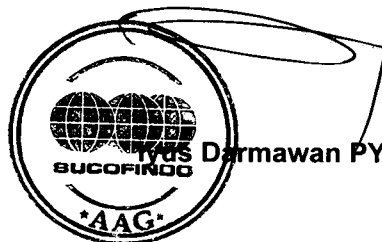
## HOLD CLEANLINESS INSPECTION CERTIFICATE

VESSEL : MV. AS VICTORIA  
FROM : Taboneo, Indonesia  
TO : JIMAH EAST POWER STATION, PORT DICKSON, NEGERI  
SEMBILAN, MALAYSIA  
SHIPPER : PT. ADARO INDONESIA  
Menara Karya 22<sup>nd</sup> – 23<sup>rd</sup> Floor  
Jl. H.R. Rasuna Said Blok X- 5 Kav. 1-2  
Jakarta 12950 , Indonesia  
BUYER : TNB FUEL SERVICES SDN BHD,  
LEVEL 11, MENARA GLOMAC, GLOMAC DAMANSARA,  
JALAN DAMANSARA, 60000 KUALA LUMPUR, MALAYSIA  
CARGO : Coal  
DESCRIPTION OF GOODS : Envirocoal In Bulk  
CARGO HOLDS : No. 1 to No. 5 Holds  
WEIGHT : 49,500 Metric Tons  
INSPECTION : We Inspected the above mentioned cargo holds prior to the vessel  
loading and found cargo spaces *No. 1 to No. 5 Holds* empty,  
clean, dry and free from previous cargo, and suitable in all respect  
to receive the cargo of coal.

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Dept. of Coal Inspection



3056622

01-2007A





Certificate No. 13574/COAAAL  
Date: October 15, 2018



Issuing Office:  
Jl. Raya Pasar Minggu Kav. 34, Jakarta 12780, Indonesia  
Phone/Facs: +62 21 7983666/7983888  
Email: min.pst@sucofindo.co.id

## CERTIFICATE OF ORIGIN

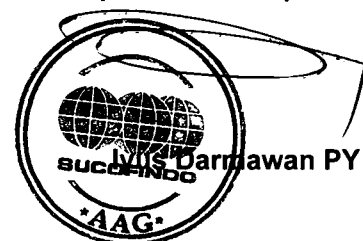
VESSEL : AS VICTORIA  
FROM : Taboneo, Indonesia  
TO : JIMAH EAST POWER STATION, PORT DICKSON, NEGERI  
SEMBILAN, MALAYSIA  
SHIPPER : PT. ADARO INDONESIA  
Menara Karya 22<sup>nd</sup> – 23<sup>rd</sup> Floor  
Jl. H.R. Rasuna Said Blok X- 5 Kav. 1-2  
Jakarta 12950 , Indonesia  
BUYER : TNB FUEL SERVICES SDN BHD,  
LEVEL 11, MENARA GLOMAC, GLOMAC DAMANSARA,  
JALAN DAMANSARA, 60000 KUALA LUMPUR, MALAYSIA  
CARGO : Coal  
DESCRIPTION OF GOODS : Envirocoal In Bulk  
WEIGHT : 49,500 MT

We hereby certify that the coal mined and shipped is of Indonesian Origin.

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Dept. of Coal Inspection



056623

CI-2007A



Certificate No. 13576/COAAAL  
Date: October 15, 2018



Issuing Office:  
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Phone/Facs: +62 21 7983666/7983888  
Email: min.pst@sucofindo.co.id

## CERTIFICATE OF DRAFT SURVEY

VESSEL : MV. AS VICTORIA  
FROM : Taboneo, Indonesia  
TO : JIMAH EAST POWER STATION, PORT DICKSON, NEGERI  
SEMBILAN, MALAYSIA  
SHIPPER : PT. ADARO INDONESIA  
Menara Karya 22<sup>nd</sup> – 23<sup>rd</sup> Floor  
Jl. H.R. Rasuna Said Blok X- 5 Kav. 1-2  
Jakarta 12950 , Indonesia  
BUYER : TNB FUEL SERVICES SDN BHD,  
LEVEL 11, MENARA GLOMAC, GLOMAC DAMANSARA,  
JALAN DAMANSARA, 60000 KUALA LUMPUR, MALAYSIA  
CARGO : Coal  
DESCRIPTION OF GOODS : Envirocoal In Bulk  
WEIGHT : 49,500 MT

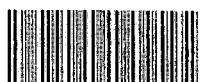
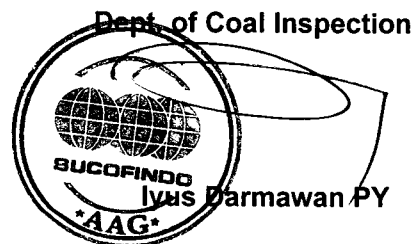
Findings : Ascertainment of weight was done by draught reading of  
ship's prior to and after loading and converted to ship's  
displacement table and sounding table available on board

Net Displacement light (Initial on October 8, 2018) : 11,271.101 M / tons  
Net Displacement loaded (Final on October 13, 2018) : 60,770.757 M / tons  
Quantity of consignment : 49,499.656 M / tons  
Rounded to : **49,500 M / tons**

The Attachment available is an integral part of this certificate.

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## CARGO QUANTITY CALCULATION TABLE

	Initial Survey 08/10/2018	Final Survey 13/10/2018
Forward mean draft, corrected, m	5.240	11.840
After mean draft, corrected, m	6.720	11.875
Midship mean draft, corrected, m	5.803	11.860
Fore and After mean, m	5.98	11.8575
Mean of means, m	5.8915	11.85875
Mean of means corr. For deformation, m	5.829250	11.8414
Corresponding displacement, m.t	28,412.185	62,052.802
Trim correction, m.t	-207.332	2.462
Disp. Corrected for trim, m.t	28,204.853	62,055.264
Water density, Kg/l	1.021	1.021
Water density correction, m.t	-110.068	-242.167
Disp. Corrected for density, m.t.	28,094.785	61,813.097
Total deductibles (oil,water,ballast etc.), m.t.	16,823.684	1,042.340
Net displacement, m.t	11,271.101	60,770.757
By difference, total cargo loaded, m.t		49,499.656
Rounded to,		<b>49,500 Metric Tons</b>

See also attached schedule.

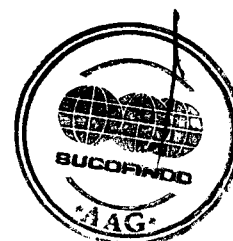
Issued without prejudice.

Vessel : MV. AS VICTORIA, LIBERIA Flag

		Initial Survey 08/10/18 (10:30 Hrs LT)		Final Survey 13/10/18 (11:30 Hrs LT)	
Actual Draft		Port	Starboard	Port	Starboard
Forward, m	:	5.26	5.27	11.84	11.84
After, m	:	6.73	6.73	11.87	11.88
Midships, m	:	5.80	5.82	11.85	11.87
Deductibles					
Ballast Water	m.t.	16,031.574		307.330	
Fresh Water	m.t.	286.000		251.000	
Fuel Oil	m.t.	411.670		390.370	
Diesel Oil	m.t.	94.440		93.640	
Lube Oil	m.t.	-		-	
Others	m.t.	-		-	
		16,823.684		1,042.340	
Lightship	wt	10,896.10	m.t.		
Apparent Constant, .	wt	375.00	m.t.		

### REMARKS :

1. Tank Calibration Soundings and Displacement Table / Hydrostatic Curves provided on board.
2. Original on board working sheet counter signed or acknowledged by Chief Officer / Master.
3. Draft Survey carried out at Taboneo, South Kalimantan, Indonesia as loading port.  
The state of sea : Swell sea condition about 1.5 m during final draught survey.



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