

Certificate No.
March 2, 2021

Banjarmasin
Jl. Jend. A. Yani Km 7,8 No 21A Banjarmasin70654, Indonesia
Phone/Facs: +62 511 3271080/3258111
Email: min.bjm@sucofindo.co.id

REPORT OF ANALYSIS

PRINCIPAL : **PT. SUMBER SURYADAYA PRIMA**
ADDRESS : KOMP. PERINTIS, JL. BAYANGKARA, NO. 38, SUNGAI ULIN, BANJARBARU
UTARA, BANJARBARU, KALIMANTAN SELATAN
SUBJECT : **COAL**
DESCRIPTION OF SAMPLE : THE SAMPLE FOR THE ANALYSIS WAS SUBMITTED BY THE PRINCIPAL
DATED ON FEBRUARY 23, 2021
PACKING : UNSEALED POLYPROPYLENE BAG
NUMBER OF SAMPLE : 1 (ONE) BAG
SAMPLE WEIGHT : 8.41 Kgs
TOP SIZE : + 75 MM
DATE OF ANALYSIS : FEBRUARY 23 – 26, 2021
SAMPLE MARK : **PT – SM – OC / 01**

ANALYSIS RESULTS :

PARAMETER TEST	RESULT				STANDARD METHODS
	AR	ADB	DB	DAFB	
TOTAL MOISTURE, %	34.98	-	-	-	ASTM D3302/D3302M-19
MOISTURE, %	-	17.76	-	-	ASTM D3173/D3137M-17a
ASH CONTENT, %	2.32	2.93	3.56	-	ASTM D3174-12 (2018)
VOLATILE MATTER, %	31.08	39.31	47.80	49.56	ASTM D3175-20
FIXED CARBON, %	31.62	40.00	48.64	50.44	ASTM D3172-13
TOTAL SULPHUR, %	0.17	0.21	0.26	0.26	ASTM D4239-18e1
GROSS CALORIFIC VALUE, Kcal/kg	4219	5336	6488	6728	ASTM D5865-19
HARDGROVE GRINDABILITY INDEX	40				ASTM D409/D409M-16

Note : Calculating by different basis refer to ASTM D3180-15

The attachment available an integral part of this report.

This test result (s) related to the sample (s) submitted only and the report / certificate cannot be reproduced in any way, except in full context and with the prior approval in writing from Sucofindo Laboratory.

This Certificate/report is issued under our General Terms and Conditions, copy of which is available upon request or may be accessed at www.sucofindo.co.id

Dept. Of Commercial 3 Mineral & Coal Testing

57010421000153

Karmaili

BJM201200001956

Certificate No.
March 2, 2021

Banjarmasin
Jl. Jend. A. Yani Km 7,8 No 21A Banjarmasin70654, Indonesia
Phone/Facs: +62 511 3271080/3258111
Email: min.bjm@sucofindo.co.id

ATTACHMENT TO REPORT OF ANALYSIS

PARAMETER TEST	RESULTS			STANDARD METHODS
	ARB	ADB	DB	
<u>ULTIMATE ANALYSIS :</u>				
- CARBON %	44.9	56.8	69.1	ASTM D5373-16
- HYDROGEN *) %	2.96	3.75	4.73	ASTM D5373-16
- NITROGEN %	0.85	1.07	1.30	ASTM D5373-16
- OXYGEN *) %	13.82	17.48	21.22	ASTM D3176-15
<u>ASH ANALYSIS (dry coal ash) :</u>				
- SiO ₂ %	-	-	5.90	ASTM D3682-2013
- Al ₂ O ₃ %	-	-	4.10	ASTM D3682-2013
- Fe ₂ O ₃ %	-	-	42.79	ASTM D3682-2013
- CaO %	-	-	21.80	ASTM D3682-2013
- MgO %	-	-	6.36	ASTM D3682-2013
- Na ₂ O %	-	-	0.14	ASTM D3682-2013
- K ₂ O %	-	-	0.14	ASTM D3682-2013
- MnO ₂ %	-	-	0.95	IK/BJM-A/004
- TiO ₂ %	-	-	0.27	ASTM D3682-2013
- P ₂ O ₅ %	-	-	0.19	ISO 622:2016
- SO ₃ %	-	-	17.30	ASTM D5016-16
<u>ASH FUSION TEMPERATURE:</u>	<u>REDUCING ATMOSPHERE</u>	<u>OXIDIZING ATMOSPHERE</u>		
- INITIAL DEFORMATION °C	1280	1310		ASTM D1857/D1857M-18
- SPHERICAL °C	1290	1380		ASTM D1857/D1857M-18
- HEMISPHERE °C	1300	1420		ASTM D1857/D1857M-18
- FLOW °C	1310	1490		ASTM D1857/D1857M-18

*) Excluding Water Constituent in Coal Samples