
COAL QUALITY SPECIFICATION

Nº ETT_SP_TC



ISO 45001:2018



ISO 9001:2015



ISO 14001:2015



COAL STOCKPILE QUALITY (Weighted average)

Total moisture TM (ar) 6.0% (-3.0; +3.0)	Ash (db) 18.5% (-5.0; +5.0)	Volatile matter VM (daf) 32.0% (-5.0; +5.0)
Total sulphur S (ad) ≤1.5% max	Calorific value CV (ar) 5500 (-800; +500)	Quantity 128.0 Thousand tons

The following is the result of the laboratory tests.

ALS GROUP LLC
 Mongol Nekhmal Building, 2nd khoroo
 Chinggis Avenue, Khan-Uul District
 Ulaanbaatar, Mongolia
 Tel +976 70 007667



CERTIFICATE OF ANALYSIS
 23E18-TT-23H59-TT

CLIENT: Erdenes Tavantolgoi JSC
ADDRESS: Finance Center, Jigjidjav-8
 1st khoroo, Chingeltei District
 Ulaanbaatar, Mongolia
ATTN: Galtzaya.B
PROJECT NO. xxx
LAB. JOB NO. 23E18-TT-23H59-TT
NO. SAMPLES: 67
Notes/Comments: xxx

SAMPLES RECEIVED: 08/08/2023-4/05/2023
INSTRUCTIONS RECEIVED: 08/08/2023-4/05/2023
DATE OF REPORT: 09/08/2023-5/05/2023
STATUS OF REPORT: FINAL
ANALYSIS COMPLETE: 09/08/2023-5/05/2023
PREPARATION CODE: CRUSH-01, 02: MILL-01
ANALYSIS CODE: 2.1. COKING COAL
 2.1. THERMAL COAL
 TM, MOIS, ASH, VOL, TSUL,
 GCV, CSN, CIGN

APPROVED BY: Laboratory Manager
 Quality Manager

CHECKED BY: Chief Chemist

These test results are representative only of the sample received in the laboratory.

LAB NO.	SAMPLE NO.	STANDARD METHOD											
		GB/T 211	GB/T 212	GB/T 212	GB/T 212	ISO 19579	GB/T 213	GB/T 212	GB/T 212	GB/T 212	GB/T 212	ISO 19579	GB/T 213
		AS RECEIVED BASIS						AIR DRIED BASIS					
		Total Moisture (TM)	Ash (ASH)	Volatile Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Gross Calorific Value (GCV)	Moisture (MOIS)	Ash (ASH)	Volatile Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Gross Calorific Value (GCV)
		%						kcal/kg					
1	WSS-23-6-1tr-1A-106	6.69	14.08	25.13	54.11	0.34	6217	2.21	14.76	26.33	56.70	0.36	6515
2	WSS-23-6-1tr-1B-122	3.80	17.33	25.42	53.45	0.39	6339	1.18	17.80	26.11	54.91	0.40	6511
3	WSS-23-6-1tr-1C-123	3.38	16.95	25.63	54.04	0.46	6466	1.05	17.36	26.25	55.34	0.47	6622
4	ETT_SP_30009-1E	2.77	18.75	25.90	52.58	0.91	6324	0.85	19.12	26.42	53.62	0.93	6449
5	ETT_SP_30009-1F	5.25	17.84	24.74	52.17	0.44	6158	1.20	18.60	25.80	54.40	0.46	6421
6	ETT_SP_30009-1G	2.59	17.49	22.10	57.82	0.66	6675	0.96	17.78	22.47	58.79	0.67	6787
7	ETT_SP_30009-1H	4.98	17.34	19.70	57.98	0.69	6418	1.69	17.94	20.38	59.99	0.72	6640
8	WSS-23-6-1tr-2A-136	6.06	17.68	24.62	51.65	0.49	6127	2.15	18.42	25.64	53.79	0.51	6382
9	WSS-23-6-1tr-2B-147	4.79	15.54	26.21	53.46	0.40	6331	1.19	16.13	27.20	55.48	0.42	6570
10	WSS-23-6-1tr-2C-148	4.85	16.96	25.54	52.65	0.39	6148	1.11	17.63	26.54	54.72	0.41	6389
11	WSS-23-6-1tr-2D-154	5.59	16.73	25.19	52.48	0.49	6223	1.33	17.49	26.33	54.85	0.51	6504
12	ETT_SP_30009-2E	4.24	21.63	23.43	50.69	0.42	5922	1.31	22.30	24.15	52.24	0.43	6103
13	ETT_SP_30009-2F	4.38	21.49	24.97	49.16	0.41	5784	1.35	22.17	25.76	50.72	0.43	5968

ALS GROUP LLC
Mongol Niihmal Building, 2nd khoroо
Chinggis Avenue, Khan-Lal District
Ulaanbaatar, Mongolia
Tel +976 70 007667



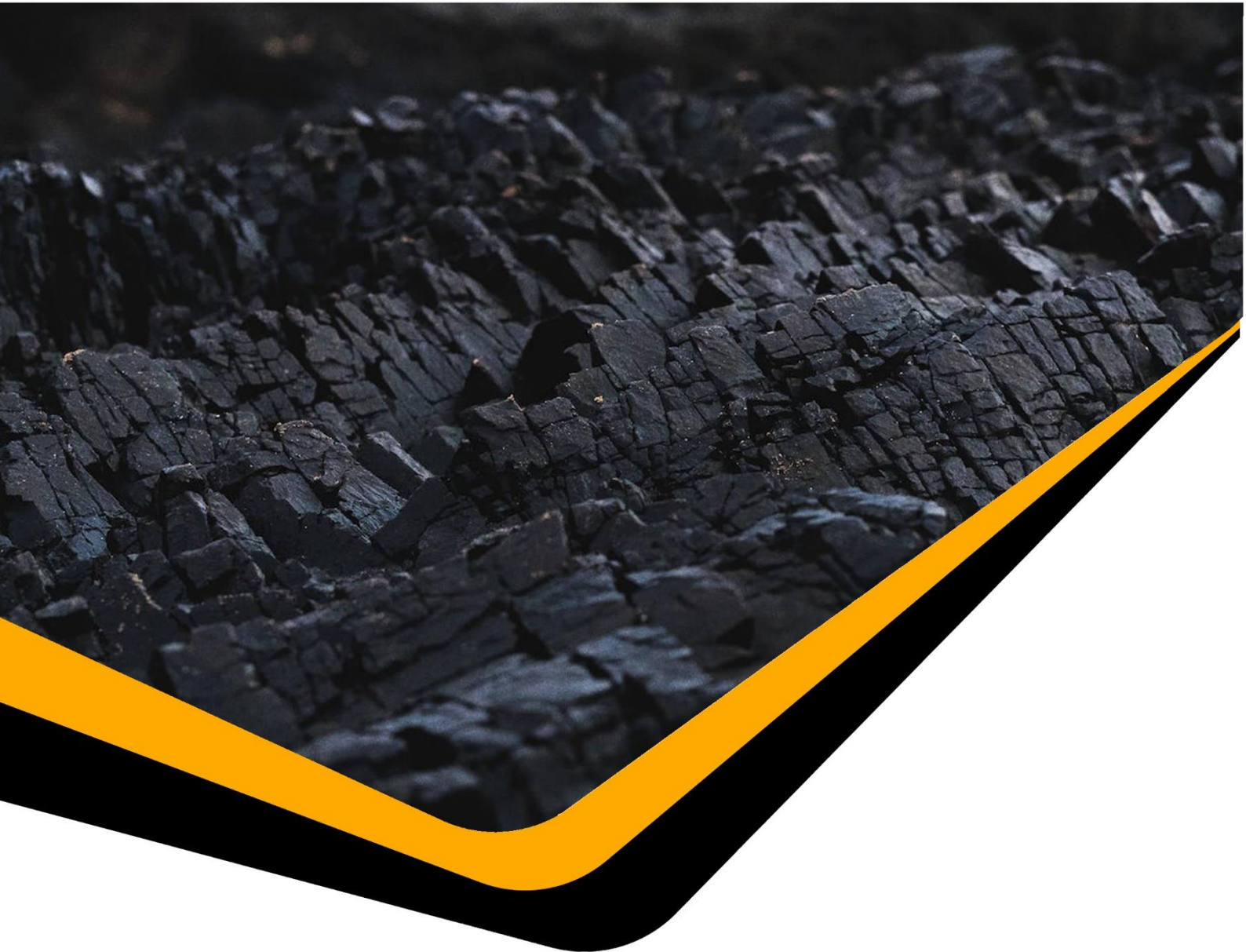
CERTIFICATE OF ANALYSIS
23E18-TT-23H59-TT

CLIENT: Erdenes Tavantolgoi JSC
ADDRESS: Finance Center, Jigjidjav-8
1st khoroо, Chingelbai District
Ulaanbaatar, Mongolia
ATTN: Galtzaya.B
PROJECT NO. xxx
LAB. JOB NO. 23E18-TT-23H59-TT
NO. SAMPLES: 67
Notes/Comments: xxx

SAMPLES RECEIVED: 08/08/2023-4/05/2023
INSTRUCTIONS RECEIVED: 08/08/2023-4/05/2023
DATE OF REPORT: 09/08/2023-5/05/2023
STATUS OF REPORT: FINAL
ANALYSIS COMPLETE: 09/08/2023-5/05/2023
PREPARATION CODE: CRUSH-01, 02; MILL-01
ANALYSIS CODE: 1.1_COOKING COAL
2.1_THERMAL COAL
TM, MOIS, ASH, VOL, TSUL,
GCV, CSN, CKIN

These test results are representative only of the sample received in the laboratory.

LAB NO.	STANDARD METHOD	SAMPLE NO.	GB/T 212				ISO 19579				GB/T 213				Crucible Swelling Number (CSN)	GB/T 5447	
			Ash (ASH)	Volatile Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Gross Calorific Value (GCV)	Volatile Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Gross Calorific Value (GCV)	Coal Caking Index (CKIN)					
												5:1	3:3				
			%				%				kcal/kg						
1	WSS-23-6-1tr-1A-106		15.09	26.93	57.98	0.37	6663	31.71	68.29	0.43	7847						
2	WSS-23-6-1tr-1B-122		18.01	26.42	55.56	0.41	6589	32.23	67.77	0.50	8037						
3	WSS-23-6-1tr-1C-123		17.55	26.53	55.93	0.48	6692	32.17	67.83	0.58	8116						
4	ETT_SP_30009-1E		19.28	26.64	54.08	0.94	6504	33.00	67.00	1.16	8057						
5	ETT_SP_30009-1F		18.83	26.12	55.06	0.46	6499	32.17	67.83	0.57	8007						
6	ETT_SP_30009-1G		17.95	22.69	59.36	0.68	6852	27.65	72.35	0.83	8352						
7	ETT_SP_30009-1H		18.24	20.73	61.02	0.73	6755	25.36	74.64	0.89	8262						
8	WSS-23-6-1tr-2A-136		18.82	26.20	54.98	0.52	6522	32.28	67.72	0.64	8034	2.0	-		11		
9	WSS-23-6-1tr-2B-147		16.32	27.52	56.15	0.42	6649	32.89	67.11	0.51	7946				13		
10	WSS-23-6-1tr-2C-148		17.83	26.84	55.33	0.41	6461	32.66	67.34	0.50	7843				5		
11	WSS-23-6-1tr-2D-154		17.72	26.68	55.59	0.52	6591	32.43	67.57	0.63	8011				14		
12	ETT_SP_30009-2E		22.59	24.47	52.93	0.44	6185	31.61	68.39	0.56	7990						
13	ETT_SP_30009-2F		22.47	26.11	51.42	0.43	6049	33.68	66.32	0.56	7803						



ISO 45001:2018



ISO 9001:2015



ISO 14001:2015



www.ett.mn



75055555
1800-1072



Финанс төв, 1-р хороо,
Чингэлтэй дүүрэг,
Улаанбаатар хот

