



CERTIFICATE OF COAL QUALITY

N° ETT_SP_20005



ISO 45001:2018



ISO 9001:2015



ISO 14001:2015



AVERAGE QUALITY OF COAL STOCKPILE

TOTAL MOISTURE (ar) 3.86% (-0.6; +0.4)	ASH (db) 19.8% (-4.6; +7.9)	VOLATILE (daf) 32.99% (-1.4; +1.5)
TOTAL SULFUR (db) 0.91% (-0.3; +0.4)	G INDEX 5:1 58.0 (-11; +11)	CAPACITY OF STOCKPILE 109.75 THOUSAND TONNES

The coal has been in storage for 730 days

CERTIFICATE OF ANALYSES

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 Tel +976 71 007667



CERTIFICATE OF ANALYSIS
 231272-TT

CLIENT: Erdenes Tavan Tolgoi JSC
 ADDRESS: Finance Center, Jigjidev 8
 1st floor, Chinggisel District
 Ulaanbaatar, Mongolia
 ATTN: Galtzaya.B
 PROJECT NO. xxx
 LAB. JOB NO. 231272-TT
 NO. SAMPLES: 16
 Notes/Comments: xxx

SAMPLES RECEIVED: 30/Sep/23
 INSTRUCTIONS RECEIVED: 30/Sep/23
 DATE OF REPORT: 01/Oct/23
 STATUS OF REPORT: FINAL
 ANALYSIS COMPLETE: 01/Oct/23
 PREPARATION CODE: CRUSH-01, 02; MILL-01
 ANALYSIS CODE: 1_COKING COAL_CSN
 TM, ASH, MOIS, VOL,
 TSUL, CWIN

APPROVED BY: Laboratory Manager
 CHECKED BY: Chief Analyst

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

LAB NO.	SAMPLE NO.	STANDARD METHOD																		Crucible Swelling Number (CSN)	Coal Caking Index (CWIN)			
		AS RECEIVED BASIS						AIR DRIED BASIS						DRY BASIS							DRY, ASH-FREE BASIS			5:1
		GB/T 211	GB/T 212	GB/T 212	ISO 19579	GB/T 212	GB/T 212	GB/T 212	ISO 19579	GB/T 212	GB/T 212	GB/T 212	ISO 19579	GB/T 212	GB/T 212	GB/T 212	ISO 19579	GB/T 212	GB/T 212	ISO 19579	GB/T 5448	GB/T 5447		
		Total Moisture (TM)	Ash (ASH)	Volatiles Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Moisture (MOIS)	Ash (ASH)	Volatiles Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Ash (ASH)	Volatiles Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Volatiles Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Volatiles Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)			
		%																						
1	ETT_SP_20005_RS-1-1	3.44	25.92	22.65	47.99	1.09	0.98	26.58	23.22	49.21	1.11	26.84	23.46	49.70	1.13	32.06	67.94	1.54	4.0	5.0	5.0	5.0	-	
2	ETT_SP_20005_RS-1-2	3.93	26.59	22.66	46.82	1.25	1.00	27.40	23.35	48.25	1.29	27.68	23.59	48.73	1.30	32.62	67.38	1.80	4.0	5.0	5.0	5.0	-	
3	ETT_SP_20005_RS-1-3	3.84	15.79	25.42	54.95	0.87	1.04	16.25	26.16	56.55	0.90	16.42	26.43	57.14	0.91	31.63	68.37	1.08	5.0	6.0	6.0	6.0	-	
4	ETT_SP_20005_RS-1-4	3.65	14.98	26.19	55.18	0.61	1.06	13.38	26.90	56.66	0.62	15.54	27.19	57.27	0.63	32.19	67.81	0.75	5.5	6.0	6.0	6.0	-	
5	ETT_SP_20005_RS-1-5	3.39	20.55	26.26	49.80	1.12	0.96	21.06	26.92	51.06	1.15	21.27	27.18	51.55	1.16	34.52	65.48	1.47	5.0	5.9	5.9	5.9	-	
6	ETT_SP_20005_RS-2-1	4.11	23.90	23.94	48.05	0.82	1.14	24.64	24.68	49.54	0.84	24.92	24.97	50.11	0.85	33.26	66.74	1.13	4.5	4.7	4.7	4.7	-	
7	ETT_SP_20005_RS-2-2	4.09	17.52	26.14	52.25	0.80	1.16	18.06	26.94	53.84	0.82	18.27	27.26	54.48	0.83	33.25	66.65	1.02	4.5	5.6	5.6	5.6	-	
8	ETT_SP_20005_RS-2-3	4.21	17.23	25.50	53.07	0.77	1.14	17.78	26.31	54.77	0.79	17.98	26.62	55.40	0.80	32.45	67.55	0.98	4.5	5.3	5.3	5.3	-	
9	ETT_SP_20005_RS-2-4	4.07	18.15	25.98	51.79	0.90	1.04	18.72	26.80	53.43	0.93	18.92	27.09	53.99	0.94	33.41	66.59	1.16	5.0	6.0	6.0	6.0	-	
10	ETT_SP_20005_RS-3-1	3.58	19.78	25.02	51.43	0.94	1.11	20.28	25.66	52.95	0.97	20.51	25.95	53.54	0.98	32.64	67.36	1.23	5.0	5.7	5.7	5.7	-	
11	ETT_SP_20005_RS-3-2	3.26	21.74	25.18	49.82	0.91	1.02	22.25	25.76	50.98	0.93	22.48	26.03	51.50	0.94	33.57	66.43	1.22	5.0	5.5	5.5	5.5	-	
12	ETT_SP_20005_RS-3-3	4.01	18.88	24.71	52.39	0.75	1.22	19.43	25.43	53.92	0.77	19.67	25.75	54.58	0.78	32.05	67.95	0.97	5.0	5.3	5.3	5.3	-	
13	ETT_SP_20005_RS-3-4	4.25	14.53	27.29	53.92	0.67	1.27	14.99	28.14	55.60	0.69	15.18	28.50	56.32	0.70	33.60	66.40	0.82	5.5	6.1	6.1	6.1	-	
14	ETT_SP_20005_RS-4-1	4.04	18.01	26.59	51.36	0.85	1.08	18.57	27.41	52.94	0.88	18.77	27.71	53.52	0.89	34.11	65.89	1.09	5.5	6.6	6.6	6.6	-	
15	ETT_SP_20005_RS-4-2	3.77	14.60	27.16	54.66	0.73	1.27	14.98	27.87	55.87	0.75	15.18	28.23	56.59	0.76	33.28	66.72	0.89	5.5	6.0	6.0	6.0	-	
16	ETT_SP_20005_RS-4-3	3.96	16.78	25.99	53.27	1.00	1.13	17.27	26.76	54.83	1.03	17.47	27.06	55.46	1.04	32.79	67.21	1.26	5.5	6.3	6.3	6.3	-	

QUALITY ASSURANCE/QUALITY CONTROL DATA

STDAWS-30/21	ASH	VOL	TSUL
Certified Value	10.70	20.35	0.606
Standard Deviation	0.059	0.204	0.0136
Unit	%	%	%
Analyzed value	10.69	20.36	0.606

