
COAL QUALITY SPECIFICATION

Nº ETT_SP_TC



ISO 45001:2018



ISO 9001:2015



ISO 14001:2015



COAL STOCKPILES QUALITY (weighted average)

Total moisture
TM (ar)

≤15.0%

Total sulphur S
(db)

1.3%

(-0.3; +0.5)

Volatile matter
VM (daf)

>20.0-37.0%

Calorific value
CV (ar)

5000

(-500; +500)

G Index

≤5.0

QUANTITY

64.0

Thousand tons

THE FOLLOWING IS THE RESULT OF THE LABORATORY TESTS

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



CERTIFICATE OF ANALYSIS
24E66-24H111-TT

CLIENT: Erdenes Tavantolgoi JSC
ADDRESS: Finance Center, Jigjidjav-8
1st khoroo, Chingeltei District
Ulaanbaatar, Mongolia
ATTN: Javzandulam.B
PROJECT NO. xxx
LAB. JOB NO. 24E66-24H111-TT
NO. SAMPLES: 28
Notes/Comments: xxx

SAMPLES RECEIVED: 9/05/2024 14/08/2024
INSTRUCTIONS RECEIVED: 9/05/2024 14/08/2024
DATE OF REPORT: 10/05/2024 15/08/2024
STATUS OF REPORT: FINAL
ANALYSIS COMPLETE: 10/05/2024 15/08/2024
PREPARATION CODE: CRUSH-01, 02; MILL-01
ANALYSIS CODE: 1.3 TM, MOIS, ASH, VOL,
TSUL, GCV, CSN, CKIN

APPROVED BY: Laboratory Manager
Quality Manager

CHECKED BY: Chief Chemist

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

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
LAB NO.	SAMPLE NO.	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	%	%	%	%	%	kcal/kg
1	ETT_SP_30015-1A	2.24	24.88	21.80	51.08	1.07	5949	0.59	25.30	22.17	51.94	1.09	6050
2	ETT_SP_30015-1B	2.80	24.58	20.99	51.63	0.62	6042	0.76	25.10	21.43	52.71	0.63	6169
3	ETT_SP_30015-2A	1.74	35.38	18.72	44.17	0.73	5082	0.41	35.86	18.97	44.77	0.74	5151
4	ETT_SP_30015-2B	1.73	30.39	19.44	48.44	0.58	5557	0.44	30.79	19.69	49.07	0.58	5630
5	ETT_SP_30015-3A	2.00	28.01	21.63	48.36	0.90	5701	0.63	28.40	21.93	49.03	0.92	5780
6	ETT_SP_30015-3B	2.11	25.16	21.71	51.03	0.78	6043	0.65	25.53	22.03	51.79	0.79	6133
7	ETT_SP_30015-4A	2.33	32.16	19.14	46.37	0.60	5376	0.55	32.75	19.49	47.21	0.61	5475
8	ETT_SP_30015-4B	2.50	29.56	20.91	47.03	0.57	5435	0.59	30.14	21.32	47.95	0.58	5541
9	ETT_SP_30015-5A	2.67	30.16	19.24	47.92	0.66	5518	0.76	30.76	19.62	48.86	0.67	5626
10	ETT_SP_30015-5B	2.72	34.08	18.49	44.71	0.85	5129	0.76	34.77	18.86	45.61	0.87	5232
11	ETT_SP_30015-6A	2.13	30.01	20.37	47.49	0.72	5555	0.76	30.43	20.66	48.15	0.73	5632

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12	ETT_SP_30015-6B	2.02	25.11	22.27	50.60	0.79	5970	0.74	25.44	22.56	51.26	0.80	6048
13	ETT_SP_30015-7A	1.88	32.40	20.17	45.55	0.94	5383	1.17	32.64	20.31	45.88	0.95	5423
14	ETT_SP_30015-7B	2.02	35.38	19.63	42.98	0.66	5136	1.04	35.73	19.82	43.41	0.67	5188
15	ETT_SP_30015-8A	1.38	33.66	20.02	44.94	1.02	5249	0.66	33.91	20.16	45.27	1.03	5288
16	ETT_SP_30015-8B	1.34	34.91	19.85	43.90	0.86	5173	0.67	35.14	19.98	44.20	0.86	5207
17	ETT_SP_30015-TEL-1A	2.81	25.02	21.60	50.57	0.66	5971	0.33	25.66	22.15	51.86	0.67	6124
18	ETT_SP_30015-TEL-1B	2.30	30.05	20.60	47.05	0.75	5562	0.41	30.63	21.00	47.96	0.77	5670
19	ETT_SP_30015-TEL-2A	1.91	33.53	18.81	45.75	0.71	5346	0.64	33.97	19.05	46.34	0.72	5415
20	ETT_SP_30015-TEL-2B	1.96	30.61	19.28	48.15	0.65	5588	0.74	30.99	19.52	48.75	0.66	5658
21	ETT_SP_30015-T1-3A	2.17	35.99	16.70	45.14	0.80	5004	0.84	36.48	16.93	45.76	0.81	5072
22	ETT_SP_30015-T1-3B	2.06	39.47	16.61	41.86	0.75	4662	0.85	39.96	16.82	42.37	0.76	4719
23	ETT_SP_30015-T1-4A	4.15	23.06	23.01	49.78	0.78	6025	0.79	23.86	23.82	51.53	0.80	6236
24	ETT_SP_30015-T1-4B	3.87	27.31	21.34	47.48	0.64	5659	0.82	28.17	22.01	48.99	0.66	5839
25	ETT_SP_30015-T1-5A	2.88	30.23	19.62	47.27	0.49	5543	1.16	30.77	19.97	48.11	0.50	5641
26	ETT_SP_30015-T1-5B	2.53	34.51	18.31	44.64	0.97	5181	1.00	35.05	18.60	45.34	0.98	5262
27	ETT_SP_30015-T1-6A	2.17	32.90	19.54	45.39	0.84	5383	0.86	33.34	19.80	45.99	0.85	5455
28	ETT_SP_30015-T1-6B	2.30	33.31	19.65	44.74	0.76	5253	0.85	33.81	19.94	45.40	0.78	5331

QUALITY ASSURANCE/QUALITY CONTROL DATA

STDALSWS-40/23	ASH	VOL	GCV	TSUL
Certified Value	10.67	20.55	7696	0.620
Standard Deviation	0.056	0.137	24	0.0144
Unit	%	%	kcal/kg	%
Analyzed value	10.65	20.56	7680	0.620

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STANDARD METHOD		GB/T 212	GB/T 212	GB/T 212	ISO 19579	GB/T 213	GB/T 212	GB/T 212	ISO 19579	GB/T 213	GB/T 5448	GB/T 5447	
LAB NO.	SAMPLE NO.	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)	Crucible Swelling Number (CSN)	Coal Caking Index (CKIN)	
												5:1	3:3
		%	%	%	%	kcal/kg	%	%	%	kcal/kg			
1	ETT_SP_30015-1A	25.45	22.30	52.25	1.09	6085	29.91	70.09	1.47	8163	1.0	-	11
2	ETT_SP_30015-1B	25.29	21.59	53.12	0.64	6216	28.90	71.10	0.85	8320	1.0	-	11
3	ETT_SP_30015-2A	36.00	19.05	44.95	0.74	5172	29.76	70.24	1.16	8082	0.0	-	0
4	ETT_SP_30015-2B	30.93	19.78	49.29	0.59	5655	28.64	71.36	0.85	8187	0.0	-	1
5	ETT_SP_30015-3A	28.58	22.07	49.34	0.92	5817	30.91	69.09	1.29	8145	1.0	-	5
6	ETT_SP_30015-3B	25.70	22.17	52.13	0.79	6173	29.84	70.16	1.07	8308	1.0	-	9
7	ETT_SP_30015-4A	32.93	19.60	47.47	0.62	5505	29.22	70.78	0.92	8207	-	-	1
8	ETT_SP_30015-4B	30.32	21.45	48.23	0.59	5574	30.78	69.22	0.84	7999	-	-	1
9	ETT_SP_30015-5A	30.99	19.77	49.24	0.68	5669	28.65	71.35	0.98	8216	-	-	0
10	ETT_SP_30015-5B	35.03	19.01	45.96	0.88	5272	29.26	70.74	1.35	8115	-	-	0
11	ETT_SP_30015-6A	30.66	20.81	48.52	0.74	5676	30.02	69.98	1.06	8185	-	-	8

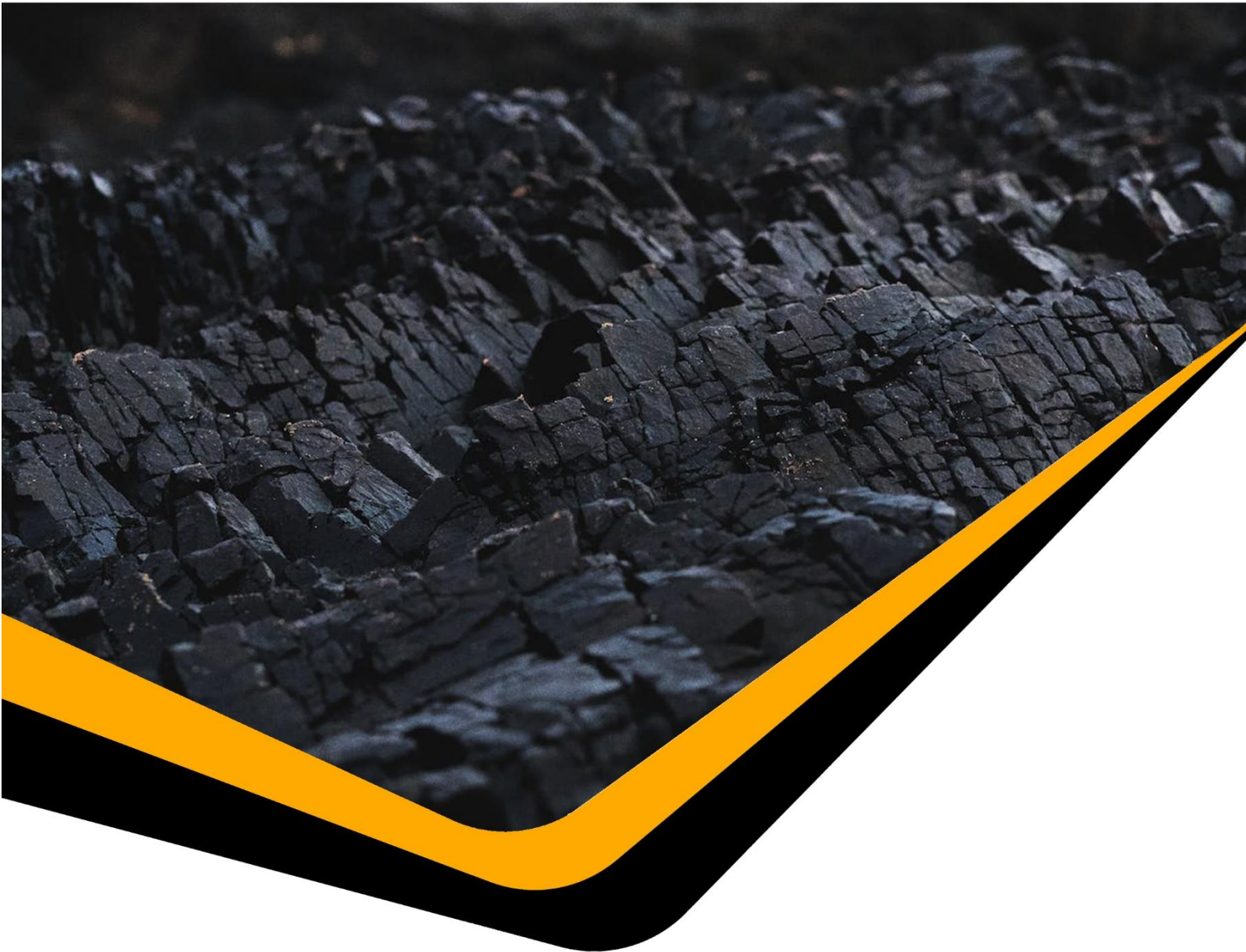
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12	ETT_SP_30015-6B	25.63	22.73	51.64	0.81	6093	30.56	69.44	1.09	8192	-	11
13	ETT_SP_30015-7A	33.03	20.55	46.42	0.96	5487	30.69	69.31	1.43	8192	-	8
14	ETT_SP_30015-7B	36.11	20.03	43.86	0.68	5242	31.35	68.65	1.06	8204	-	9
15	ETT_SP_30015-8A	34.13	20.30	45.57	1.03	5323	30.82	69.18	1.57	8081	-	3
16	ETT_SP_30015-8B	35.38	20.12	44.50	0.87	5243	31.14	68.86	1.34	8113	-	8
17	ETT_SP_30015-TEL-1A	25.75	22.22	52.03	0.67	6144	29.93	70.07	0.91	8274	-	7
18	ETT_SP_30015-TEL-1B	30.76	21.09	48.16	0.77	5694	30.45	69.55	1.11	8223	-	10
19	ETT_SP_30015-TEL-2A	34.19	19.17	46.64	0.72	5450	29.13	70.87	1.10	8281	-	1
20	ETT_SP_30015-TEL-2B	31.22	19.67	49.11	0.67	5700	28.60	71.40	0.97	8288	-	0
21	ETT_SP_30015-T1-3A	36.78	17.07	46.14	0.81	5115	27.01	72.99	1.29	8092	-	0
22	ETT_SP_30015-T1-3B	40.30	16.96	42.74	0.77	4760	28.41	71.59	1.29	7973	-	0
23	ETT_SP_30015-T1-4A	24.05	24.01	51.94	0.81	6286	31.62	68.38	1.07	8277	-	13
24	ETT_SP_30015-T1-4B	28.41	22.20	49.40	0.66	5887	31.00	69.00	0.92	8223	-	13
25	ETT_SP_30015-T1-5A	31.13	20.20	48.67	0.50	5707	29.33	70.67	0.73	8286	-	3
26	ETT_SP_30015-T1-5B	35.41	18.79	45.80	0.99	5315	29.09	70.91	1.54	8228	-	0
27	ETT_SP_30015-T1-6A	33.63	19.97	46.39	0.86	5502	30.09	69.91	1.30	8291	-	4
28	ETT_SP_30015-T1-6B	34.10	20.11	45.80	0.78	5377	30.51	69.49	1.19	8159	-	2

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ISO 45001:2018



ISO 9001:2015



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Чингэлтэй дүүрэг,
Улаанбаатар хот

