
COAL QUALITY SPECIFICATION

Nº ETT_SP_TC



ISO 45001:2018



ISO 9001:2015



ISO 14001:2015



COAL STOCKPILES QUALITY (weighted average)

<p>TOTAL MOISTURE (ar)</p> <p>6.0%</p> <p>(-3.0; +3.0)</p>	<p>ASH (db)</p> <p>21.5%</p> <p>(-5.0; +5.0)</p>	<p>VOLATILE MATTER (daf)</p> <p>≥34.0%</p>
<p>TOTAL SULPHUR (db)</p> <p>≤1.5</p>	<p>CV (ar)</p> <p>5500</p> <p>(-500; +700)</p>	<p>G-INDEX</p> <p><5</p>
		<p>QUANTITY</p> <p>128.0</p> <p>THOUSAND TONS</p>

THE FOLLOWING IS THE RESULT OF THE LABORATORY TESTS

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



CERTIFICATE OF ANALYSIS
 23E34, 49, 68, 89, 118, 23F146, G102-TT

CLIENT: Erdenes Tavantolgoi JSC
ADDRESS: Finance Center, Jigjidjav-8
 1st khoroо, Chingeltai District,
 Ulaanbaatar, Mongolia
ATTN: Galtzaya.B
PROJECT NO.: xxx
LAB. JOB NO.: 23E34, 49, 68, 89, 118, 23F146, G102-TT
NO. SAMPLES: 26
Notes/Comments: xxx

SAMPLES RECEIVED: 8/05/2023-18/07/2023
INSTRUCTIONS RECEIVED: 8/05/2023-18/07/2023
DATE OF REPORT: 9/05/2023-19/07/2023
STATUS OF REPORT: FINAL
ANALYSIS COMPLETE: 9/05/2023-19/07/2023
PREPARATION CODE: CRUSH-01, 02; MILL-01
ANALYSIS CODE: 1.1_COKING COAL
 2.1_THERMAL COAL
 TM, MOIS, ASH, VOL, TSUL,
 GCV, CSM, CWIN
APPROVED BY: Laboratory Manager

CHECKED BY: Chief Chemist

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

LAB NO.	SAMPLE NO.	AS RECEIVED BASIS					AIR DRIED BASIS						
		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
		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	ESS-22-S9TR-1A-SQ2	6.06	18.88	22.66	52.40	1.94	6005	1.47	19.81	23.77	54.96	2.04	6298
2	ESS-22-S9TR-1B-SQ3	6.12	19.82	21.57	52.49	0.58	5992	1.67	20.76	22.59	54.98	0.61	6277
3	ETT_SP_30005-2A	6.26	21.96	22.52	49.27	0.65	5628	2.91	22.74	23.32	51.03	0.67	5829
4	ETT_SP_30005-2B	5.69	17.31	24.43	52.56	0.86	6099	1.90	18.01	25.42	54.68	0.89	6345
5	ETT_SP_30005-2C	3.75	17.54	24.73	53.97	0.77	6432	1.53	17.95	25.30	55.22	0.79	6581
6	ETT_SP_30005-2D	6.14	17.75	23.89	52.23	0.75	6021	2.34	18.47	24.85	54.34	0.78	6265
7	ETT_SP_30005-2E	5.34	19.31	23.70	51.64	0.57	6051	2.01	19.99	24.53	53.46	0.59	6263
8	ETT_SP_30005-2F	6.04	19.54	23.11	51.31	0.48	5910	2.29	20.32	24.03	53.36	0.50	6146
9	ETT_SP_30005-3A	3.23	26.69	22.33	47.74	1.11	5520	1.84	27.08	22.66	48.43	1.13	5600
10	ETT_SP_30005-3B	2.16	20.78	24.74	52.33	0.72		1.16	20.99	24.99	52.86	0.73	
11	ETT_SP_30005-3C	2.39	21.39	24.56	51.66	0.95		1.23	21.64	24.86	52.27	0.96	
12	ETT_SP_30005-3D	2.48	19.81	24.77	52.95	0.87		1.09	20.09	25.12	53.70	0.88	
13	ETT_SP_30005-3E	2.69	20.09	24.91	52.31	0.79		1.29	20.38	25.27	53.06	0.80	
14	ETT_SP_30005-3F	3.08	22.21	24.62	50.08	1.10		1.31	22.62	25.07	51.00	1.12	
15	ETT_SP_30005-4A	3.08	18.23	24.69	54.00	0.53	6566	1.36	18.55	25.13	54.96	0.54	6682
16	ETT_SP_30005-4B	1.40	20.62	24.67	53.31	0.61	6516	0.84	20.74	24.81	53.61	0.61	6553
17	ETT_SP_30005-4C	1.22	20.69	24.48	53.62	0.89	6540	0.69	20.80	24.61	53.90	0.89	6574

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.
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CERTIFICATE OF ANALYSIS
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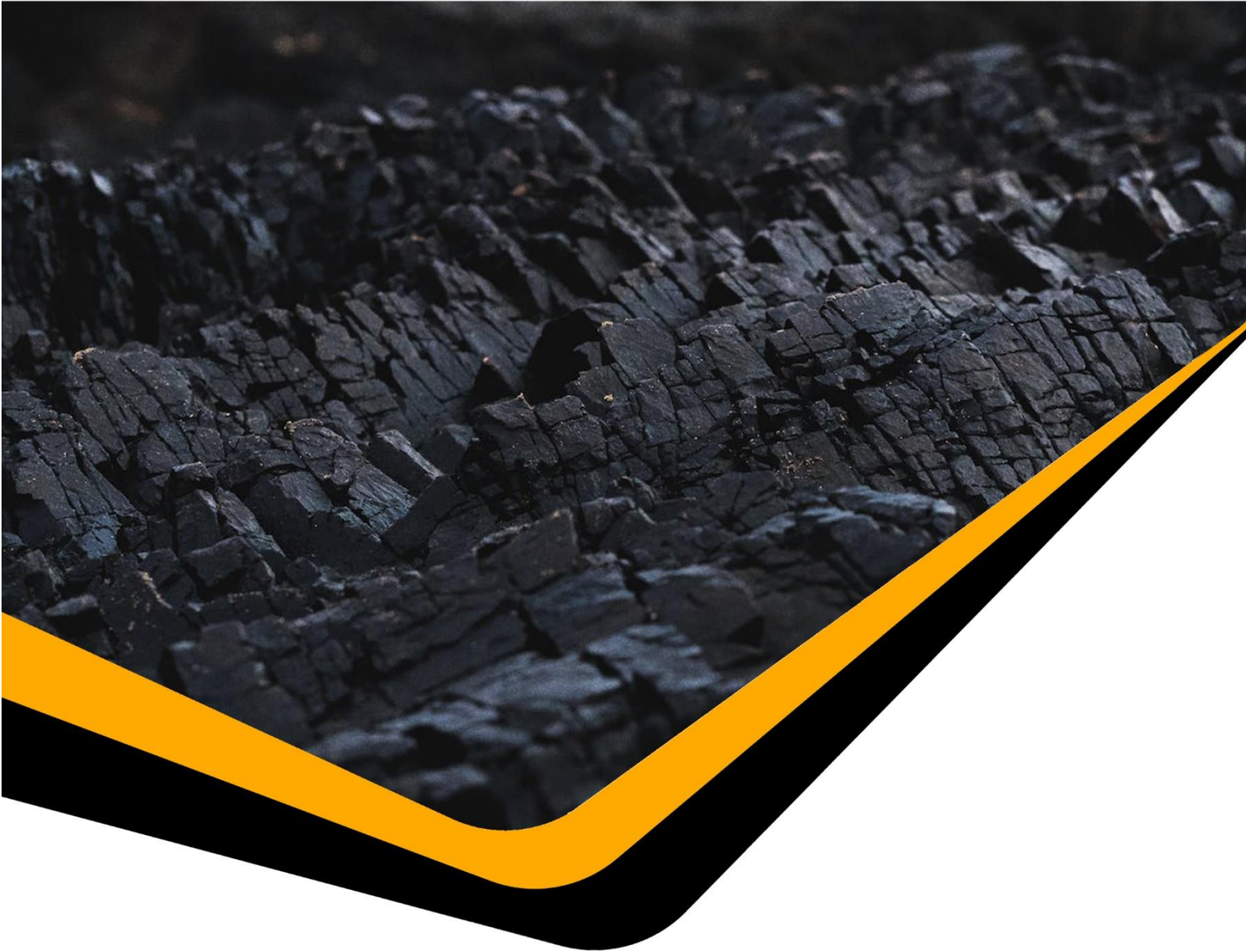
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 TM, MOIS, ASH, VOL, TSUL
 GCV, CSN, CKIN

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)	
			%		%		%		%		kcal/kg		%			%		kcal/kg		kcal/kg	
1	ESS-22-S9TR-1A-502		20.10	24.12	55.78	2.07	6392	30.19	69.81	2.58	8000										
2	ESS-22-S9TR-1B-503		21.11	22.98	55.91	0.62	6383	29.13	70.87	0.78	8092										
3	ETT_SP_30005-2A		23.42	24.02	52.56	0.69	6004	31.37	68.63	0.90	7840										
4	ETT_SP_30005-2B		18.36	25.91	55.74	0.91	6467	31.73	68.27	1.11	7921										
5	ETT_SP_30005-2C		18.22	25.70	56.08	0.80	6683	31.43	68.57	0.98	8173										
6	ETT_SP_30005-2D		18.91	25.45	55.64	0.80	6415	31.38	68.62	0.98	7911										
7	ETT_SP_30005-2E		20.40	25.04	54.56	0.61	6392	31.46	68.54	0.76	8031										
8	ETT_SP_30005-2F		20.80	24.59	54.61	0.52	6290	31.05	68.95	0.65	7942										
9	ETT_SP_30005-3A		27.58	23.08	49.34	1.15	5704	31.87	68.13	1.59	7877										
10	ETT_SP_30005-3B		21.24	25.28	53.48	0.74		32.10	67.90	0.94		1.0									
11	ETT_SP_30005-3C		21.91	25.17	52.92	0.97		32.23	67.77	1.24		1.0									
12	ETT_SP_30005-3D		20.31	25.40	54.30	0.89		31.87	68.13	1.12		1.5									
13	ETT_SP_30005-3E		20.65	25.60	53.75	0.81		32.26	67.74	1.02		1.5									
14	ETT_SP_30005-3F		22.92	25.40	51.68	1.13		32.96	67.04	1.47		1.5									
15	ETT_SP_30005-4A		18.80	25.48	55.72	0.55	6775	31.38	68.62	0.68	8344										
16	ETT_SP_30005-4B		20.92	25.02	54.07	0.62	6609	31.63	68.37	0.78	8357										
17	ETT_SP_30005-4C		20.94	24.78	54.28	0.90	6620	31.34	68.66	1.14	8374										

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