ERDENES TAVANTOLGOI
ETT

НҮҮРСНИЙ ОВООЛГЫН

ҮЗҮҮЛЭЛТ

№ ETT_SP_SSC

ISO 45001:2018

ISO 9001:2015

ISO 14001:2015

НҮҮРСНИЙ ОВООЛГЫН ЧАНАРЫН ДУНДАЖ ҮЗҮҮЛЭЛТ

НИЙТ ЧИЙГ (ar)	ҮНСЛЭГ (db)	ДЭГДЭМХИЙ (daf)
5.0%	**26.0%**	**>28-37.0%**
-2.0; +3.0	-3.0; +3.0	

НИЙТ ХҮХЭР (db)	БАРЬЦАЛДАХ ЧАНАР	НҮҮРСНИЙ ХЭМЖЭЭ
1.0%	**>65.0**	**64.0**
-0.3; +0.5		МЯН.ТН

НҮҮРСНИЙ ОВООЛГЫН ШИНЖИЛГЭЭНИЙ ҮР ДҮН

ALS GROUP LLC
Mongol Nakhimel Building, 2nd floor,
Chinggis Avenue, Khan-Uul District
Ulaanbaatar, Mongolia
Tel +976 70 007997

CERTIFICATE OF ANALYSIS
24G56-26E45-TT

CLIENT: Erdenes Tavan Tolgoi JSC
ADDRESS: Finance Center, Jigjidjav-8, 1st khoroo, Chingeltei District, Ulaanbaatar, Mongolia
ATTN: Munkhtuul.G
PROJECT NO. xxx
LAB. JOB NO. 24G56-25E45-TT
NO. SAMPLES: 32
Notes/Comments: xxx

SAMPLES RECEIVED: 5/07/2024 19/01/2025
INSTRUCTIONS RECEIVED: 5/07/2024 19/01/2025
DATE OF REPORT: 6/07/2024 20/01/2025
STATUS OF REPORT: FINAL
ANALYSIS COMPLETE: 6/07/2024 20/01/2025
PREPARATION CODE: C6PSC, C6PC, C6PG
ANALYSIS CODE: 1.2_COKING COAL
TM, MOIS, ASH, VOL, TSUL, CSN, CKIN
APPROVED BY: 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 212	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	
		AS RECEIVED BASIS					AIR DRIED BASIS					DRY BASIS				DRY, ASH-FREE BASIS					
LAB NO.	SAMPLE NO.	Total Moisture (TM)	Ash (ASH)	Volatile Matter (VOL)	Fixed Carbon	Total Sulphur (TSUL)	Moisture (MOIS)	Ash (ASH)	Volatile Matter (VOL)	Fixed Carbon	Total Sulphur (TSUL)	Ash (ASH)	Volatile Matter (VOL)	Fixed Carbon	Total Sulphur (TSUL)	Volatile Matter (VOL)	Fixed Carbon	Total Sulphur (TSUL)	Crucible Swelling Number (CSN)	Coal Coking Index (CKIN)	
		%																		5:1	3:3
1	ETT-SP-20057-1A	2.20	18.44	27.33	52.03	1.09	1.00	18.66	27.67	52.67	1.10	18.85	27.95	53.20	1.11	34.44	65.56	1.37	6.0	76	-
2	ETT-SP-20057-1B	2.41	22.10	24.81	50.68	0.81	0.87	22.45	25.21	51.48	0.83	22.64	25.43	51.93	0.83	32.87	67.13	1.08	5.5	68	-
3	ETT-SP-20057-1C	2.28	24.23	24.27	49.22	0.85	0.86	24.58	24.62	49.94	0.87	24.80	24.84	50.37	0.87	33.03	66.97	1.16	5.5	69	-
4	ETT_SP_20057-2A	3.58	21.11	24.48	50.84	0.61	0.94	21.69	25.15	52.23	0.63	21.89	25.38	52.73	0.63	32.50	67.50	0.81	5.0	58	-
5	ETT_SP_20057-2B	1.36	25.26	23.70	49.66	0.62	0.56	25.47	23.90	50.08	0.63	25.61	24.04	50.36	0.63	32.31	67.69	0.85	6.0	72	-
6	ETT-SP-20057-2A	3.14	23.28	24.54	49.05	0.93	0.79	23.84	25.13	50.24	0.96	24.03	25.33	50.64	0.96	33.34	66.66	1.27	6.0	76	-
7	ETT-SP-20057-3B	3.19	28.32	23.19	45.30	0.61	0.86	29.00	23.75	46.39	0.63	29.25	23.96	46.79	0.63	33.86	66.14	0.90	5.0	65	-
8	ETT-SP-20057-4A	2.87	22.97	25.11	49.05	0.70	0.68	23.49	25.67	50.16	0.71	23.65	25.85	50.50	0.72	33.86	66.14	0.94	6.5	78	-
9	ETT-SP-20057-4B	2.06	22.47	25.04	50.43	0.61	0.70	22.78	25.38	51.13	0.62	22.94	25.36	51.50	0.62	33.17	66.83	0.81	6.5	77	-
10	ETT-SP-20057-5A	3.08	22.46	25.02	49.44	1.16	0.63	23.03	25.65	50.69	1.19	23.17	25.81	51.01	1.19	33.60	66.40	1.55	6.0	76	-
11	ETT-SP-20057-5B	2.05	28.74	23.40	45.81	0.63	0.67	29.14	23.73	46.46	0.64	29.34	23.89	46.77	0.64	33.81	66.19	0.91	6.0	79	-
12	2436822	4.34	22.55	24.39	48.81	0.82	0.71	23.40	25.23	50.66	0.85	23.57	25.41	51.02	0.85	33.25	66.75	1.12	6.5	81	-
13	2440129	2.94	24.11	24.53	48.43	1.09	0.55	24.70	25.13	49.62	1.12	24.84	25.27	49.90	1.12	33.62	66.38	1.49	6.5	80	-
14	2440731	2.59	23.04	24.24	50.22	0.60	0.59	23.49	24.71	51.21	0.61	23.63	24.86	51.51	0.61	32.55	67.45	0.80	6.5	79	-
15	255711	4.16	25.32	23.69	46.83	0.90	0.53	26.28	24.58	48.61	0.94	26.42	24.72	48.87	0.94	33.59	66.41	1.28	6.0	77	-
16	2510919	2.70	25.58	23.64	48.09	0.66	0.51	26.15	24.17	49.17	0.67	26.29	24.29	49.42	0.68	32.95	67.05	0.92	6.5	77	-
17	2523201	2.61	25.03	23.53	48.84	0.60	0.48	25.57	24.04	49.91	0.61	25.70	24.16	50.15	0.62	32.51	67.49	0.83	6.0	73	-
18	2585204	2.19	22.41	24.55	50.86	0.71	0.57	22.78	24.95	51.70	0.72	22.91	25.10	52.00	0.73	32.55	67.45	0.94	6.5	80	-
19	25113301	2.11	19.97	26.09	51.84	1.27	0.59	20.28	26.49	52.64	1.29	20.40	26.65	52.95	1.29	33.48	66.52	1.63	6.0	76	-
20	25117505	2.59	25.44	23.95	48.02	1.46	0.62	25.95	24.43	48.99	1.49	26.12	24.58	49.30	1.50	33.27	66.73	2.03	6.0	72	-
21	ETT_SP_10197-1A	1.22	21.11	25.80	52.07	0.94	0.50	21.26	25.78	52.45	0.94	21.37	25.91	52.72	0.95	32.95	67.05	1.21	6.5	81	-
22	ETT_SP_10197-1B	2.41	20.31	25.42	51.86	0.95	0.53	20.71	25.91	52.86	0.97	20.82	26.04	53.14	0.97	32.89	67.11	1.23	6.5	82	-
23	ETT_SP_10197-2A	1.61	27.33	23.95	47.16	0.79	0.64	27.59	24.14	47.62	0.80	27.77	24.30	47.93	0.80	33.64	66.36	1.11	5.5	69	-
24	ETT_SP_10197-2B	1.70	25.16	24.62	48.53	1.15	0.73	25.60	24.86	49.01	1.16	25.59	25.04	49.37	1.17	33.65	66.35	1.57	5.5	68	-
25	ETT_SP_10197-3A	1.91	23.48	24.93	49.71	0.60	0.51	23.78	25.29	50.42	0.61	23.90	25.42	50.68	0.61	33.40	66.60	0.80	6.5	83	-
26	ETT_SP_10197-3B	1.77	26.22	23.98	48.03	0.55	0.48	26.57	24.29	48.66	0.55	26.70	24.41	48.89	0.56	33.30	66.70	0.76	6.0	76	-
27	ETT_SP_10197-4A	1.70	26.24	21.80	50.26	0.46	0.45	26.57	22.07	50.90	0.47	26.69	22.18	51.13	0.47	30.25	69.75	0.64	5.5	64	-
28	ETT_SP_10197-4B	1.53	18.30	25.61	54.57	1.15	0.70	18.45	25.82	55.03	1.16	18.58	26.00	55.42	1.17	31.94	68.06	1.44	6.5	83	-
29	ETT-SP-10197-5A	1.63	30.04	23.74	44.60	0.73	0.61	30.34	23.99	45.06	0.74	30.53	24.13	45.33	0.75	34.74	65.26	1.07	5.5	73	-
30	ETT-SP-10197-5B	1.65	21.08	26.34	50.93	0.78	0.61	21.30	26.62	51.47	0.79	21.43	26.78	51.79	0.79	34.09	65.91	1.01	6.5	83	-
31	ETT_SP_10197-6A	1.05	21.34	25.50	52.11	0.51	0.44	21.47	25.65	52.43	0.51	21.57	25.77	52.66	0.51	32.85	67.15	0.66	6.5	81	-
32	ETT_SP_10197-6B	0.93	26.58	24.64	47.85	0.69	0.49	26.70	24.75	48.06	0.69	26.83	24.87	48.30	0.70	33.99	66.01	0.95	6.0	71	-

QUALITY ASSURANCE/QUALITY CONTROL DATA

STDALSWS-60/23	ASH	VOL	TSUL
Certified Value	10.42	20.35	0.620
Standard Deviation	0.656	0.137	0.0144
Unit	%	%	%
Analyzed value	10.68	20.54	0.613

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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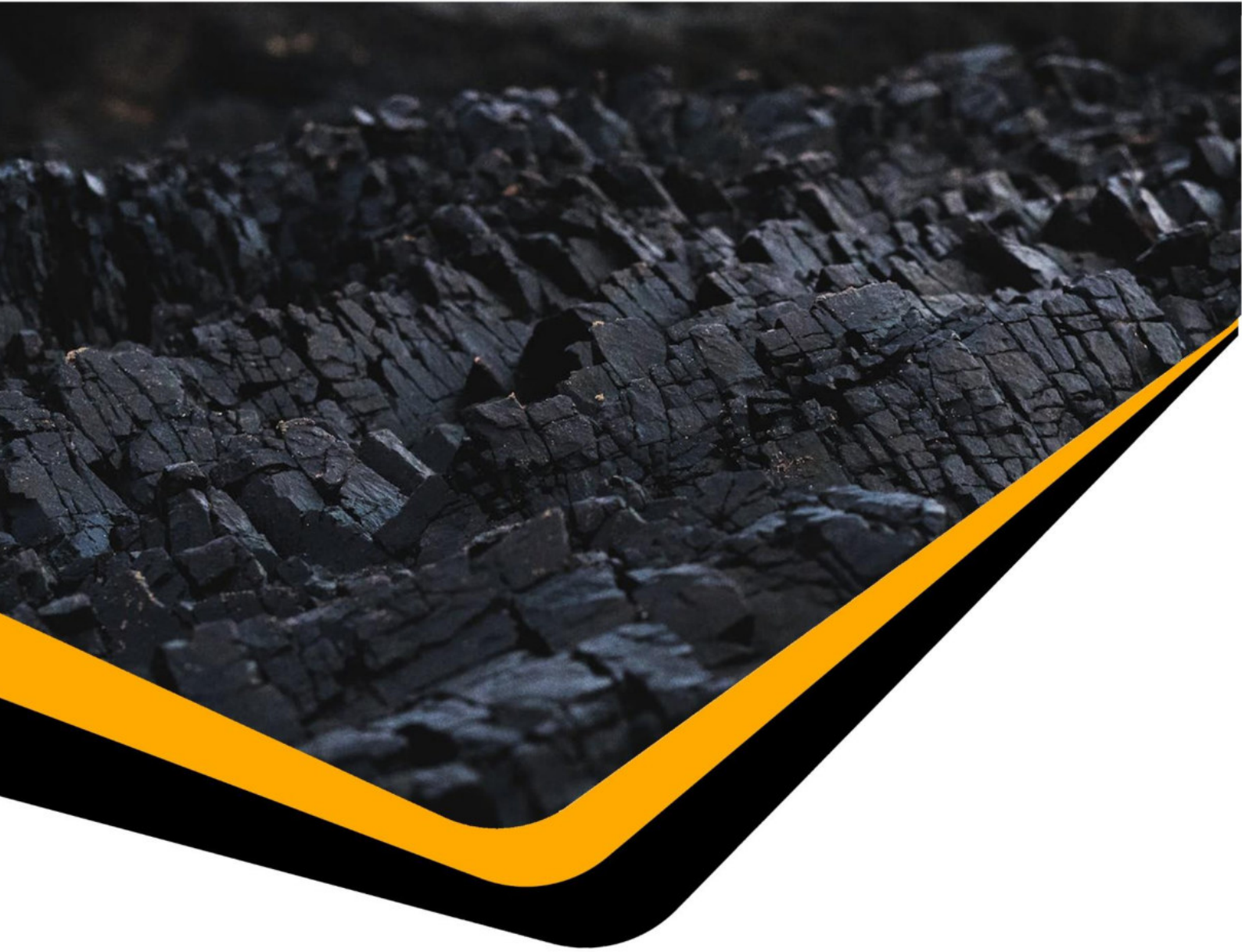

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