



НҮҮРСНИЙ ОВООЛГЫН ҮЗҮҮЛЭЛТ

№ ETT_SP_TC



ISO 45001:2018



ISO 9001:2015



ISO 14001:2015



НҮҮРСНИЙ ОВООЛГЫН ЧАНАРЫН ДУНДАЖ ҮЗҮҮЛЭЛТ

НИЙТ ЧИЙГ
TM (ar)

5.0%

(-1.0; +3.0)

НИЙТ ХҮХЭР S(db)

1.0%

(-0.3; +0.5)

ДЭГДЭМХИЙ
БОДИС VM (daf)

34.0%

(max)

ИЛЧЛЭГ (ar)

5500

(-500; +500)

ҮНСЛЭГ Ash (db)

25.0%

(-5.0; +3.0)

БАРЬЦАЛДАХ
ЧАНАР

≤5.0

НҮҮРСНИЙ
ХЭМЖЭЭ

128.0

МЯН.ТН

НҮҮРСНИЙ ОВООЛГЫН ШИНЖИЛГЭЭНИЙ ҮР ДҮН

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



CERTIFICATE OF ANALYSIS
24L09,L23,L31,L45,L284,L290,25A44,A50,A120,A176,A206,A238-TT

CLIENT: Erdenes Tavantolgoi JSC
ADDRESS: Finance Center, Jigjidjav-8
1st khoroo, Chingeltei District
Ulaanbaatar, Mongolia
ATTN: Munkhtuul.G
PROJECT NO. xxx
LAB. JOB NO. 24L09,L23,L31,L45,L284,L290,25A44,A50,A120,A176,A206,A238-TT
NO. SAMPLES: 18
Notes/Comments: xxx

SAMPLES RECEIVED: 2/12/2024 23/01/2025
INSTRUCTIONS RECEIVED: 2/12/2024 23/01/2025
DATE OF REPORT: 3/12/2024 24/01/2025
STATUS OF REPORT: FINAL
ANALYSIS COMPLETE: 3/12/2024 24/01/2025
PREPARATION CODE: CRUSH-01, 02; MILL-01
ANALYSIS CODE: 2.1.THERMAL COAL
TM, MOIS, ASH, VOL, TSUL,
GCV, 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
		AS RECEIVED BASIS											
LAB NO.	SAMPLE NO.	Total Moisture (TM)	Ash (ASH)	Volatle Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Gross Calorific Value (GCV)	Moisture (MOIS)	Ash (ASH)	Volatle Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Gross Calorific Value (GCV)
		%	%	%	%	%	kcal/kg	%	%	%	%	%	kcal/kg
1	2423702	13.98	20.50	21.53	43.99	0.47	4840	3.75	22.94	24.09	49.22	0.53	5416
2	2423802	14.27	18.08	22.59	45.05	0.44	4921	3.36	20.38	25.47	50.79	0.50	5547
3	2424203	11.04	19.30	23.41	46.24	0.48	5171	2.52	21.15	25.65	50.68	0.53	5666
4	2424303	8.64	21.66	23.66	46.04	0.47	5425	1.91	23.25	25.41	49.43	0.51	5825
5	2424704	9.50	20.68	22.81	47.01	0.58	5364	2.49	22.28	24.57	50.66	0.63	5780
6	2424804	12.71	21.81	21.47	44.01	0.43	4808	3.14	24.20	23.83	48.83	0.48	5335
7	2425106	10.74	28.74	21.01	39.52	0.62	4424	3.11	31.19	22.81	42.89	0.67	4802
8	2425206	10.02	34.53	19.42	36.02	0.55	4034	2.44	37.44	21.06	39.06	0.60	4375
9	2439528	10.59	21.49	22.52	45.40	0.48	5033	4.23	23.02	24.12	48.63	0.51	5391
10	2439829	13.12	12.80	24.42	49.66	0.65	5406	3.85	14.17	27.03	54.96	0.71	5982
11	252506	6.84	18.59	23.96	50.61	0.32	5936	1.76	19.60	25.27	53.37	0.34	6260
12	252906	8.35	20.09	22.88	48.68	0.47	5601	1.93	21.49	24.48	52.10	0.50	5994
13	256812	6.40	17.59	23.83	52.18	0.58	6128	1.56	18.50	25.06	54.88	0.61	6445
14	259917	12.79	16.63	22.73	47.85	0.42	5256	3.33	18.44	25.20	53.04	0.47	5826
15	2511920	13.41	20.95	22.08	43.56	0.57	4819	3.92	23.25	24.49	48.34	0.63	5347

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.
COPY RIGHT PROTECTED DOCUMENT

16	2512020	25.07	24.26	50.66	0.60	5659	32.38	67.62	0.80	7553	-	0
17	2512120	20.92	25.52	53.55	0.76	5803	32.28	67.72	0.96	7339	-	0
18	2514023	19.73	24.20	56.08	0.63	6178	30.14	69.86	0.79	7697	-	0

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



CERTIFICATE OF ANALYSIS
24L09,L23,L31,L45,L284,L290,25A44,A50,A120,A176,A206,A238-TT

CLIENT: Erdenes Tavantolgoi JSC

ADDRESS: Finance Center, Jigijidav-8
1st khoroo, Chingeltei District
Ulaanbaatar, Mongolia

ATTN: Munkhtuul.G

PROJECT NO. xxx

LAB. JOB NO. 24L09,L23,L31,L45,L284,L290,25A44,A50,A120,A176,A206,A238-TT

NO. SAMPLES: 18

Notes/Comments: xxx

SAMPLES RECEIVED: 2/12/2024 23/01/2025
INSTRUCTIONS RECEIVED: 2/12/2024 23/01/2025
DATE OF REPORT: 3/12/2024 24/01/2025
STATUS OF REPORT: FINAL
ANALYSIS COMPLETE: 3/12/2024 24/01/2025
PREPARATION CODE: CRUSH-01, 02; MILL-01
ANALYSIS CODE: 2.1, THERMAL COAL
TM, MOIS, ASH, VOL, TSUL,
GCV, CKIN

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

STANDARD METHOD		GB/T 212		GB/T 212		ISO 19579		GB/T 213		GB/T 212		GB/T 212		ISO 19579		GB/T 213		GB/T 5447					
		DRY BASIS										DRY, ASH-FREE BASIS											
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)		Coal Caking Index (CKIN)			
										kcal/kg													
																				5:1	3:3		
1	2423702	23.84	25.03			51.14	0.55			5627		32.86	67.14	0.72				7388	-	0			
2	2423802	21.09	26.35			52.55	0.51			5740		33.40	66.60	0.65				7275	-	0			
3	2424203	21.70	26.32			51.99	0.54			5812		33.61	66.39	0.69				7423	-	0			
4	2424303	23.70	25.90			50.40	0.52			5938		33.95	66.05	0.68				7783	-	0			
5	2424704	22.85	25.20			51.95	0.45			5927		32.66	67.34	0.84				7683	-	0			
6	2424804	24.98	24.60			50.42	0.50			5508		32.79	67.21	0.66				7342	-	0			
7	2425106	32.19	23.54			44.27	0.69			4956		34.72	65.28	1.02				7309	-	0			
8	2425206	38.38	21.58			40.04	0.61			4484		35.03	64.97	0.99				7277	-	0			
9	2439528	24.04	25.19			50.78	0.54			5629		33.15	66.85	0.71				7410	-	0			
10	2439829	14.73	28.11			57.16	0.74			6222		32.97	67.03	0.87				7297	-	0			
11	252506	19.95	25.72			54.33	0.35			6372		32.13	67.87	0.43				7960	-	1			
12	252906	21.92	24.96			53.12	0.51			6111		31.97	68.03	0.66				7827	-	0			
13	256812	18.79	25.46			55.75	0.62			6547		31.35	68.65	0.77				8062	-	4			
14	259917	19.07	26.07			54.86	0.48			6027		32.21	67.79	0.60				7447	-	0			
15	2511920	24.20	25.49			50.31	0.66			5565		33.63	66.37	0.87				7341	-	0			

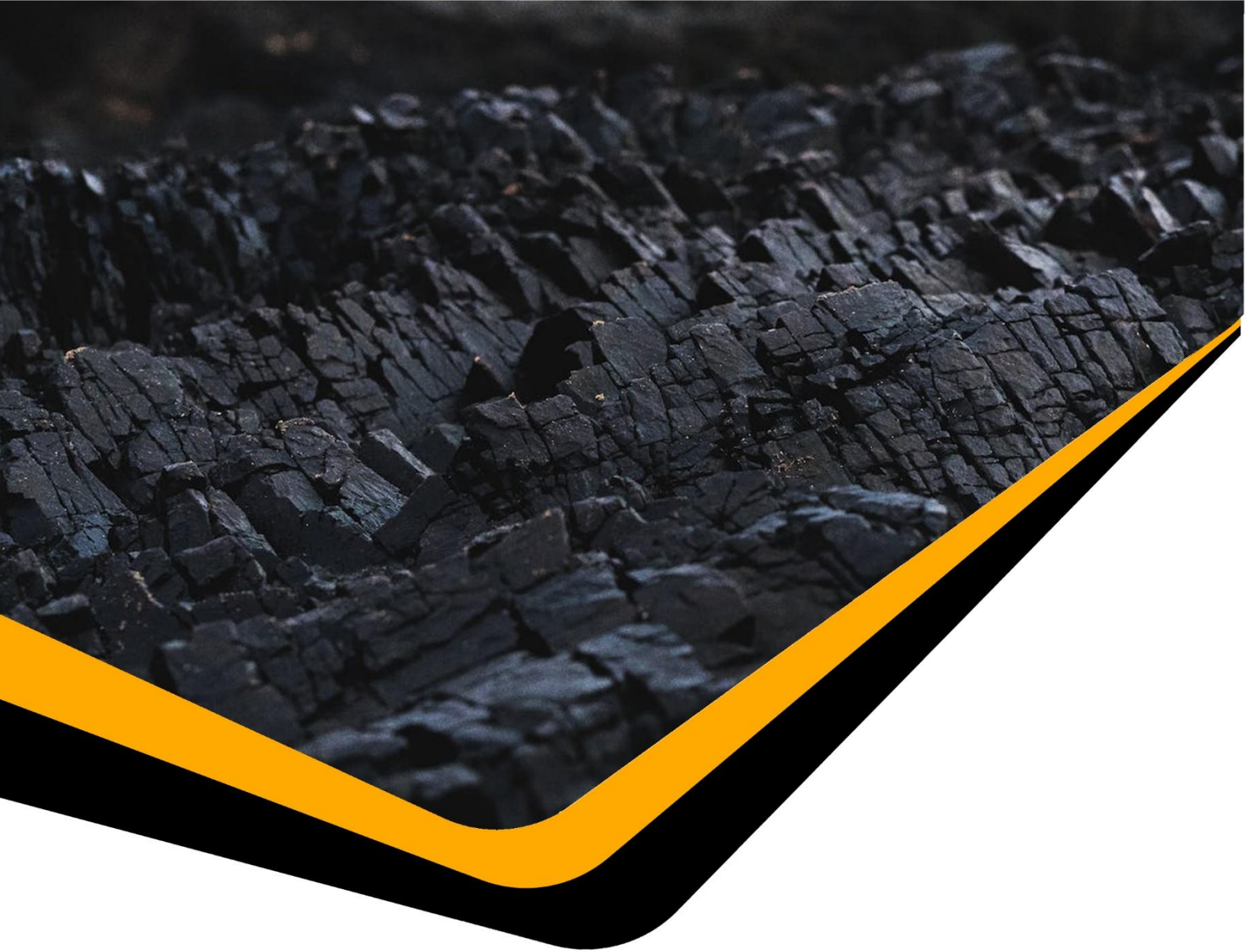
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.
COPY RIGHT PROTECTED DOCUMENT

Page 3 of 4

16	2512020	10.55	22.43	21.70	45.32	0.54	5062	2.89	24.35	23.56	49.20	0.58	5495
17	2512120	12.88	18.23	22.24	46.65	0.66	5055	4.65	19.95	24.34	51.06	0.72	5533
18	2514023	9.68	17.82	21.85	50.65	0.57	5580	2.49	19.24	23.59	54.68	0.62	6024

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	10.70	20.47	7695	0.623



ISO 45001:2018



ISO 9001:2015



ISO 14001:2015



www.ett.mn



75055555
1800-1072



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

