



НҮҮРСНИЙ ОВООЛГЫН ҮЗҮҮЛЭЛТ

№ ETT_SP_TC



ISO 45001:2018



ISO 9001:2015



ISO 14001:2015



НҮҮРСНИЙ ОВООЛГЫН ЧАНАРЫН ДУНДАЖ ҮЗҮҮЛЭЛТ

<p>НИЙТ ЧИЙГ TM (ar)</p> <p>5.0% (-1.0; +3.0)</p>	<p>НИЙТ ХҮХЭР S(db)</p> <p>1.0% (-0.3; +0.5)</p>	<p>ДЭГДЭМХИЙ БОДИС VM (daf)</p> <p>34.0% (max)</p>	
<p>ИЛЧЛЭГ (ar)</p> <p>5500 (-500; +500)</p>	<p>ҮНСЛЭГ Ash (db)</p> <p>25.0% (-5.0; +3.0)</p>	<p>БАРЬЦАЛДАХ ЧАНАР</p> <p>≤5.0</p>	<p>НҮҮРСНИЙ ХЭМЖЭЭ</p> <p>64.0 МЯН.ТН</p>

НҮҮРСНИЙ ОВООЛГЫН ШИНЖИЛГЭЭНИЙ ҮР ДҮН

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



CERTIFICATE OF ANALYSIS
25A198-C238-TT

CLIENT: Erdenes Tavantolgoi JSC
ADDRESS: Finance Center, Jigjидjav-8
1st khoroo, Chingeltei District
Ulaanbaatar, Mongolia
ATTN: Erkhembayar. M
PROJECT NO. xxx
LAB. JOB NO. 25A198-C238-TT
NO. SAMPLES: 32
Notes/Comments: xxx

SAMPLES RECEIVED: 19/01/2025 23/03/2025
INSTRUCTIONS RECEIVED: 19/01/2025 23/03/2025
DATE OF REPORT: 20/01/2025 24/03/2025
STATUS OF REPORT: FINAL
ANALYSIS COMPLETE: 20/01/2025 24/03/2025
PREPARATION CODE: CRUSH-01, 02; MILL-01
ANALYSIS CODE: 2.1_THERMAL COAL
TM, MOIS, ASH, VOL, TSUL
APPROVED BY: Laboratory Manager
Quality Manager
CHECKED BY: Chief Chemist

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

LAB NO.	SAMPLE NO.	STANDARD METHOD		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)	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		%					
1	2511519	7.21	15.13	23.13	54.53	0.69	6126	1.87	16.00	24.46	57.67	0.73	6479
2	2511619	9.57	16.41	22.10	51.92	0.54	5663	2.48	17.70	23.83	55.99	0.58	6107
3	2513121	8.77	17.52	23.58	50.13	0.59	5883	2.53	18.71	25.20	53.56	0.63	6285
4	2513221	12.63	16.70	22.59	48.08	0.47	5473	4.53	18.25	24.68	52.53	0.51	5979
5	2515225	10.75	15.49	23.49	50.27	0.65	5626	2.26	16.96	25.72	55.06	0.71	6162
6	2515325	10.02	16.86	22.41	50.71	0.71	5595	1.93	18.38	24.42	55.26	0.78	6098
7	2518027	5.35	24.42	22.13	48.10	0.89	5598	1.15	25.50	23.12	50.23	0.93	5847
8	2518127	4.75	25.00	22.10	48.16	0.86	5719	0.88	26.01	22.99	50.11	0.90	5951
9	2526203	5.69	22.75	22.16	49.39	0.87	5875	0.80	23.93	23.31	51.95	0.92	6180
10	2526303	6.06	21.50	22.19	50.24	0.71	5873	0.92	22.68	23.41	53.00	0.75	6194
11	2532709	3.41	22.52	23.30	50.76	0.85	6134	0.58	23.19	23.99	52.25	0.88	6314
12	2533210	5.12	24.48	23.87	46.53	0.65	5712	0.85	25.58	24.95	48.62	0.68	5969
13	2535112	6.54	17.78	22.94	52.74	0.68	6101	1.40	18.76	24.20	55.64	0.72	6437
14	2535212	6.99	18.20	22.78	52.03	0.62	6060	1.07	19.36	24.23	55.34	0.66	6446
15	2538915	3.96	17.83	23.48	54.72	0.92	6396	1.02	18.38	24.20	56.40	0.95	6592

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

LAB NO.	STANDARD METHOD	SAMPLE NO.	AS RECEIVED BASIS										AIR DRIED BASIS								
			GB/T 211		GB/T 212		GB/T 212		ISO 19579		GB/T 213		GB/T 212		GB/T 212		GB/T 212		ISO 19579		GB/T 213
			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)	Moisture (MOIS)	Ash (ASH)	Volatle Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Gross Calorific Value (GCV)	
16		2539015	6.08	22.30	21.87	49.76	0.63	5577	2.03	23.26	22.81	51.90	0.66	6797							
17		2541717	3.66	16.53	23.07	56.74	0.99	6624	1.14	16.96	23.68	58.23	1.02	6797							
18		2541817	3.29	16.02	23.74	56.95	1.01	6650	0.93	16.41	24.32	58.33	1.03	6812							
19		2547222	5.62	19.56	23.30	51.53	0.76	6061	1.83	20.35	24.23	53.59	0.79	6304							
20		2547322	5.34	18.56	24.14	51.96	0.70	6228	1.31	19.35	25.17	54.17	0.73	6493							
21		2556803	3.85	24.42	22.63	49.11	1.27	5869	0.74	25.21	23.36	50.69	1.12	6028							
22		2556903	6.41	19.19	22.78	51.62	1.07	6032	1.39	20.22	24.00	54.39	0.99	6313							
23		2561907	4.14	20.36	22.84	52.66	0.96	6119	1.10	21.00	23.56	54.33	0.99	6356							
24		2562007	4.70	22.68	22.45	50.17	0.81	5824	1.35	23.48	23.23	51.93	0.83	6313							
25		2564911	3.53	19.64	23.57	53.26	0.75	6391	0.65	20.23	24.27	54.84	0.77	6581							
26		2565011	3.83	21.18	23.67	51.33	0.95	6180	0.70	21.87	24.44	53.00	0.98	6381							
27		2569117	4.01	21.66	23.92	50.41	0.66	6085	0.86	22.37	24.70	52.07	0.68	6285							
28		2569217	3.94	20.64	24.84	50.58	0.81	6208	0.74	21.33	25.67	52.26	0.84	6415							
29		2571519	5.75	24.76	22.41	47.07	0.79	5636	1.44	25.89	23.44	49.23	0.82	5894							
30		2571619	4.03	21.94	23.66	50.38	1.25	6115	0.93	22.64	24.42	52.00	1.29	6313							
31		2575523	5.63	20.88	21.54	51.95	0.60	5981	1.48	21.80	22.49	54.24	0.62	6244							
32		2575623	5.58	19.50	21.93	53.00	0.67	6063	1.43	20.35	22.89	55.33	0.70	6329							

QUALITY ASSURANCE/QUALITY CONTROL DATA

STDALSWS-40/23	ASH	VOL	GCV	TSUL
Certified Value	10.62	20.55	7696	0.620
Standard Deviation	0.056	0.137	24	0.0144
Unit	%	%	kcal/kg	%
Analyzed value	10.65	20.63	7694	0.623

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ANALYSIS CODE: 2.1_THERMAL COAL
TM, MOIS, ASH, VOL, TSUL,
GCV, CKIN

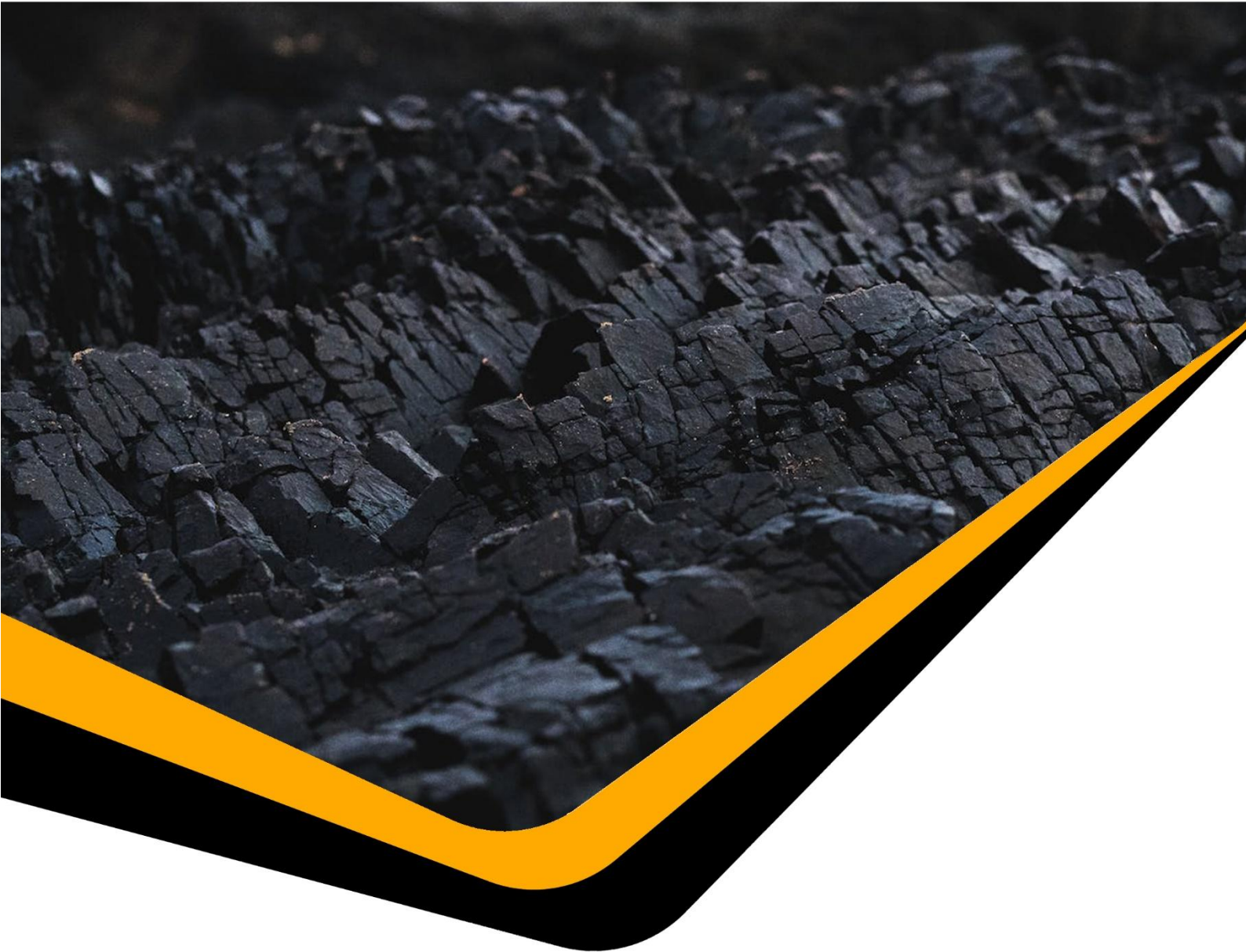
These test results are representative only of the sample received in the laboratory.

LAB NO.	STANDARD METHOD	SAMPLE NO.	DRY BASIS					DRY, ASH-FREE BASIS					GB/T 5447			
			GB/T 212		GB/T 212		ISO 19579		GB/T 213		GB/T 212		ISO 19579		GB/T 213	
			Ash (ASH)	Volatle Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Gross Calorific Value (GCV)	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)
1		2511519	16.31	24.93	58.77	0.75	6603	29.78	70.22	0.89	7889	-	0			
2		2511619	18.15	24.44	57.41	0.60	6262	29.86	70.14	0.73	7651	-	0			
3		2513121	19.20	25.85	54.95	0.65	6448	31.99	68.01	0.80	7981	-	12			
4		2513221	19.12	25.86	55.03	0.54	6263	31.97	68.03	0.66	7744	-	4			
5		2515225	17.35	26.32	56.33	0.73	6304	31.84	68.16	0.88	7628	-	0			
6		2515325	18.74	24.91	56.35	0.79	6218	30.65	69.35	0.98	7652	-	0			
7		2518027	25.80	23.38	50.82	0.94	5915	31.51	68.49	1.27	7971	-	14			
8		2518127	26.24	23.20	50.56	0.91	6004	31.45	68.55	1.23	8140	-	16			
9		2526203	24.12	23.50	52.38	0.92	6230	30.97	69.03	1.22	8210	-	14			
10		2526303	22.89	23.63	53.49	0.76	6252	30.64	69.36	0.99	8107	-	12			
11		2532709	23.32	24.13	52.55	0.88	6350	31.47	68.53	1.15	8282	40	-			
12		2533210	25.80	25.16	49.04	0.69	6020	33.91	66.09	0.93	8113	-	16			
13		2535112	19.03	24.55	56.43	0.73	6528	30.31	69.69	0.90	8062	-	2			
14		2535212	19.56	24.50	55.94	0.67	6515	30.45	69.55	0.84	8100	-	11			
15		2538915	18.57	24.45	56.98	0.96	6660	30.03	69.97	1.17	8178	20	-			

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Page 3 of 4

LAB NO.	STANDARD METHOD	SAMPLE NO.	DRY BASIS					DRY, ASH-FREE BASIS					GB/T 5447			
			GB/T 212		GB/T 212		ISO 19579		GB/T 213		GB/T 212		ISO 19579		GB/T 213	
			Ash (ASH)	Volatle Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Gross Calorific Value (GCV)	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)
16		2539015	23.74	23.28	52.97	0.67	5938	30.53	69.47	0.88	7787	-	0			
17		2541717	17.16	23.95	58.90	1.03	6875	28.91	71.09	1.25	8299	28	-			
18		2541817	16.57	24.55	58.88	1.04	6877	29.42	70.58	1.25	8242	18	-			
19		2547222	20.72	24.68	54.59	0.80	6421	31.14	68.86	1.01	8100	-	10			
20		2547322	19.61	25.50	54.89	0.74	6579	31.72	68.28	0.92	8184	-	16			
21		2556803	25.40	23.53	51.07	1.32	6104	31.54	68.46	1.78	8182	30	-			
22		2556903	20.51	24.34	55.16	1.14	6446	30.61	69.39	1.43	8108	-	16			
23		2561907	21.24	23.83	54.94	1.00	6384	30.25	69.75	1.28	8105	-	13			
24		2562007	23.80	23.55	52.64	0.85	6111	30.91	69.09	1.11	8019	-	10			
25		2564911	20.36	24.43	55.21	0.78	6625	30.68	69.32	0.98	8319	22	-			
26		2565011	22.02	24.61	53.37	0.99	6426	31.56	68.44	1.27	8241	22	-			
27		2569117	22.56	24.92	52.52	0.69	6340	32.18	67.82	0.89	8187	18	-			
28		2569217	21.49	25.86	52.65	0.85	6463	32.94	67.06	1.08	8232	27	-			
29		2571519	26.27	23.78	49.95	0.83	5980	32.26	67.74	1.13	8111	-	13			
30		2571619	22.86	24.65	52.49	1.30	6372	31.95	68.05	1.69	8260	21	-			
31		2575523	22.13	22.82	55.05	0.63	6338	29.31	70.69	0.81	8139	-	15			
32		2575623	20.65	23.22	56.13	0.71	6421	29.26	70.74	0.90	8092	-	14			



ISO 45001:2018



ISO 9001:2015



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Чингэлтэй дүүрэг,
Улаанбаатар хот

