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# НҮҮРСНИЙ ОВООЛГЫН ҮЗҮҮЛЭЛТ

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№ ETT\_SP\_TC



ISO 45001:2018



ISO 9001:2015



ISO 14001:2015



НҮҮРСНИЙ ОВООЛГЫН ЧАНАРЫН ДУНДАЖ ҮЗҮҮЛЭЛТ

<p>НИЙТ ЧИЙГ TM (ar)</p> <p><b>≤15.0%</b></p>	<p>НИЙТ ХҮХЭР S (db) ДЭГДЭМХИЙ БОДИС VM (daf)</p> <p><b>1.3%</b> (-0.3; +0.5)</p>	<p><b>&gt;20.0-37.0%</b></p>
<p>ИЛЧЛЭГ (ar)</p> <p><b>5000</b> (-500; +500)</p>	<p>БАРЬЦАЛДАХ ЧАНАР</p> <p><b>≤5.0</b></p>	<p>НҮҮРСНИЙ ХЭМЖЭЭ</p> <p><b>64.0</b> МЯН.ТН</p>

НҮҮРСНИЙ ОВООЛГЫН ШИНЖИЛГЭЭНИЙ ҮР ДҮН

ALS GROUP LLC  
Mongol Nakhmal Building, 2nd khoroo  
Chinggis Avenue, Khan Uul District  
Ulaanbaatar, Mongolia  
Tel +976 70 007467



CERTIFICATE OF ANALYSIS  
24E66-24H11-TT

CLIENT: Erdenes Tavantolgoi JSC  
ADDRESS: Finance Center, Jigjidaav-8  
1st khoroo, Chingelai District  
Ulaanbaatar, Mongolia  
ATTN: Javzandulam.B  
PROJECT NO. xxx  
LAB. JOB NO. 24E66-24H11-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.

LAB NO.	SAMPLE NO.	GB/T 211		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)
		AS RECEIVED BASIS											
		AIR DRIED BASIS											
		%											
		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	6149
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	5957	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	29.54	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	45.51	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	6648
13	ETT_SP_30015-7A	1.88	32.40	20.17	45.55	0.94	6283	1.17	32.64	20.31	46.88	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	0.65	33.51	20.16	45.27	1.03	5285
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	33.57	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	5084	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	6075	0.79	23.86	23.82	51.53	0.80	6736
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	5283	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	0.054	0.137	24	0.0144
Unit	%	%	kcal/kg	%
Analyzed value	10.63	20.55	7680	0.620

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CERTIFICATE OF ANALYSIS  
 24E66-24H11-TT

CLIENT: Erdenes Tavantolgoi JSC

ADDRESS: Finance Center, Jigijidjav-8  
 1st khoroо, Chingelkai District  
 Ulaanbaatar, Mongolia

ATTN: Javzandulam B

PROJECT NO. xxx

LAB. JOB NO. 24E66-24H11-TT

NO. SAMPLES: 28

Notes/Comments: xxx

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 ANALYSIS CODE: 1.3 TM, MO'S, ASH, VOL  
 TSUL, GCV, CSN, CKIN

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

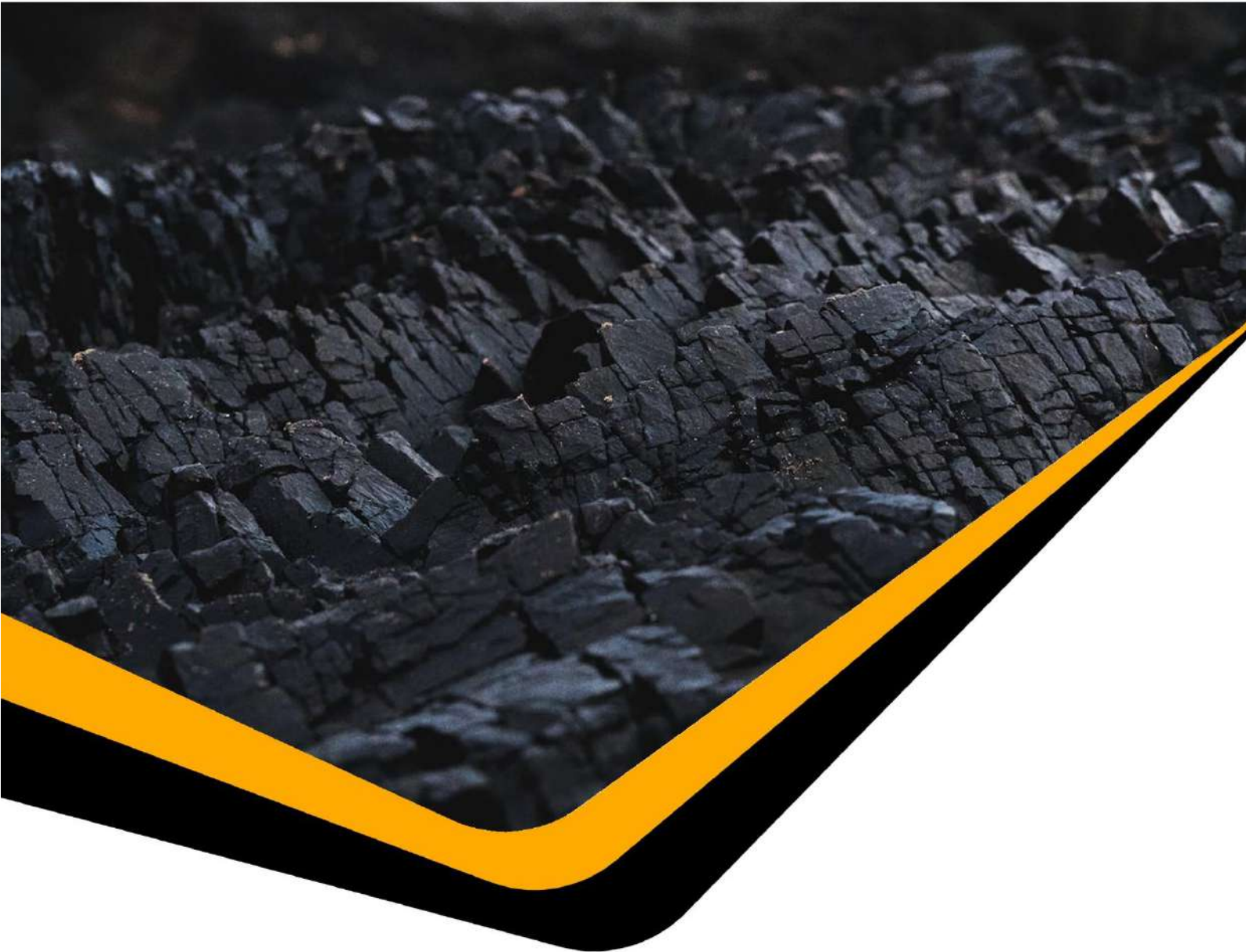
LAB NO.	SAMPLE NO.	STANDARD METHOD											Cooling Index (CKIN)
		GB/T 212					ISO 19579					Crucible Swelling Number (CSN)	
		Ash (ASH)	Volatile Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Gross Calorific Value (GCV)	Volatile Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Gross Calorific Value (GCV)			
		DRY BASIS					DRY, ASH-FREE BASIS						
		%					kcal/kg					5:1	3:3
1	ETT_SP_30015-1A	25.45	22.30	52.25	1.09	6085	29.91	70.09	1.47	3143	1.0	--	11
2	ETT_SP_30015-1B	25.29	21.59	53.12	0.64	6216	28.90	71.10	0.85	3320	1.0	--	11
3	ETT_SP_30015-2A	36.60	19.05	44.95	0.74	5172	24.76	70.24	1.16	3082	0.0	--	0
4	ETT_SP_30015-2B	30.93	19.78	49.29	0.59	5655	28.64	71.36	0.85	3187	0.0	--	1
5	ETT_SP_30015-3A	28.58	22.07	49.34	0.92	5817	30.91	69.09	1.29	3145	1.0	--	5
6	ETT_SP_30015-3B	25.70	22.17	52.13	0.79	6173	29.84	70.16	1.07	3308	1.0	--	9
7	ETT_SP_30015-4A	32.93	19.63	47.47	0.62	5505	29.22	70.78	0.92	3207	--	--	1
8	ETT_SP_30015-4B	30.22	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	3216	--	--	0
10	ETT_SP_30015-5B	35.03	19.01	45.96	0.88	5272	29.26	70.74	1.35	3115	--	--	0
11	ETT_SP_30015-6A	30.66	28.81	48.52	0.74	5676	30.02	69.98	1.06	3185	--	--	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	29.55	46.42	0.96	5487	30.69	69.31	1.43	8192	-	8
14	ETT_SP_30015-7B	36.11	29.03	43.86	0.66	5242	31.35	68.65	1.06	8204	-	9
15	ETT_SP_30015-8A	34.13	29.30	45.57	1.03	5323	30.82	69.18	1.57	8081	-	3
16	ETT_SP_30015-8B	35.38	29.12	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	28.66	71.40	0.97	8288	-	9
21	ETT_SP_30015-T1-3A	36.78	17.07	46.14	0.81	5115	27.01	72.99	1.29	8992	-	0
22	ETT_SP_30015-T1-3B	40.30	16.96	42.74	0.77	4740	28.41	71.59	1.29	7973	-	9
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	31.06	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	29.06	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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Финанс төв, 1-р хороо,  
Чингэлтэй дүүрэг,  
Улаанбаатар хот

