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# НҮҮРСНИЙ ОВООЛГЫН ҮЗҮҮЛЭЛТ

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№ ETT\_SP\_SSC

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ISO 45001:2018

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ISO 9001:2015

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ISO 14001:2015



НҮҮРСНИЙ ОВООЛГЫН ЧАНАРЫН ДУНДАЖ ҮЗҮҮЛЭЛТ

НИЙТ ЧИЙГ (ar)

**3.12%**

(-0.8; +0.8)

ҮНСЛЭГ (db)

**24.5%**

(-5.0; +5.0)

ДЭГДЭМХИЙ (daf)

**33.0%**

(-1.5; +1.5)

НИЙТ ХҮХЭР (db)

**1.1%**

(-0.5; +0.5)

БАРЬЦАЛДАХ  
ЧАНАР

**70.0**

(-5.0; +10.0)

НҮҮРСНИЙ  
ХЭМЖЭЭ

**256.0**

МЯН.ТН

НҮҮРСНИЙ ОВООЛГЫН ШИНЖИЛГЭЭНИЙ ҮР ДҮН

ALS GROUP LLC  
Mongol National Building, 2nd floor  
Chinggis Avenue, Khan-Uul District  
Ulaanbaatar, Mongolia  
Tel: +976 70 907663



CERTIFICATE OF ANALYSIS  
23172, 1169, J52, J243, K43, L78, 24A44, A89, A153, A173, A197, A225-TT

CLIENT: Erdenes Tavan Tolgoi JSC  
ADDRESS: Finance Center, Jijigjidan-8  
1st Khoroо, Chingelhal District  
Ulaanbaatar, Mongolia  
ATTN: Munkhtuu.G  
PROJECT NO. xxx  
LAB. JOB NO. 23172, 1169, J52, J243, K43, L78, 24A44, A89, A153, A173, A197, A225-TT  
NO. SAMPLES: 25  
Notes/Comments: xxx

SAMPLES RECEIVED: 09/Sep/23 27/Jan/24  
INSTRUCTIONS RECEIVED: 09/Sep/23 27/Jan/24  
DATE OF REPORT: 10/Sep/23 28/Jan/24  
STATUS OF REPORT: FINAL  
ANALYSIS COMPLETE: 10/Sep/23 28/Jan/24  
PREPARATION CODE: CRUSH-01, 02; MILL 01  
ANALYSIS CODE: L-COKING COAL, CBN  
TM, ASH, MOIS, VOL,  
TSUL, COKN

APPROVED BY: Laboratory Manager

Quality Manager: *[Signature]*  
CHECKED BY: Chief Chemist

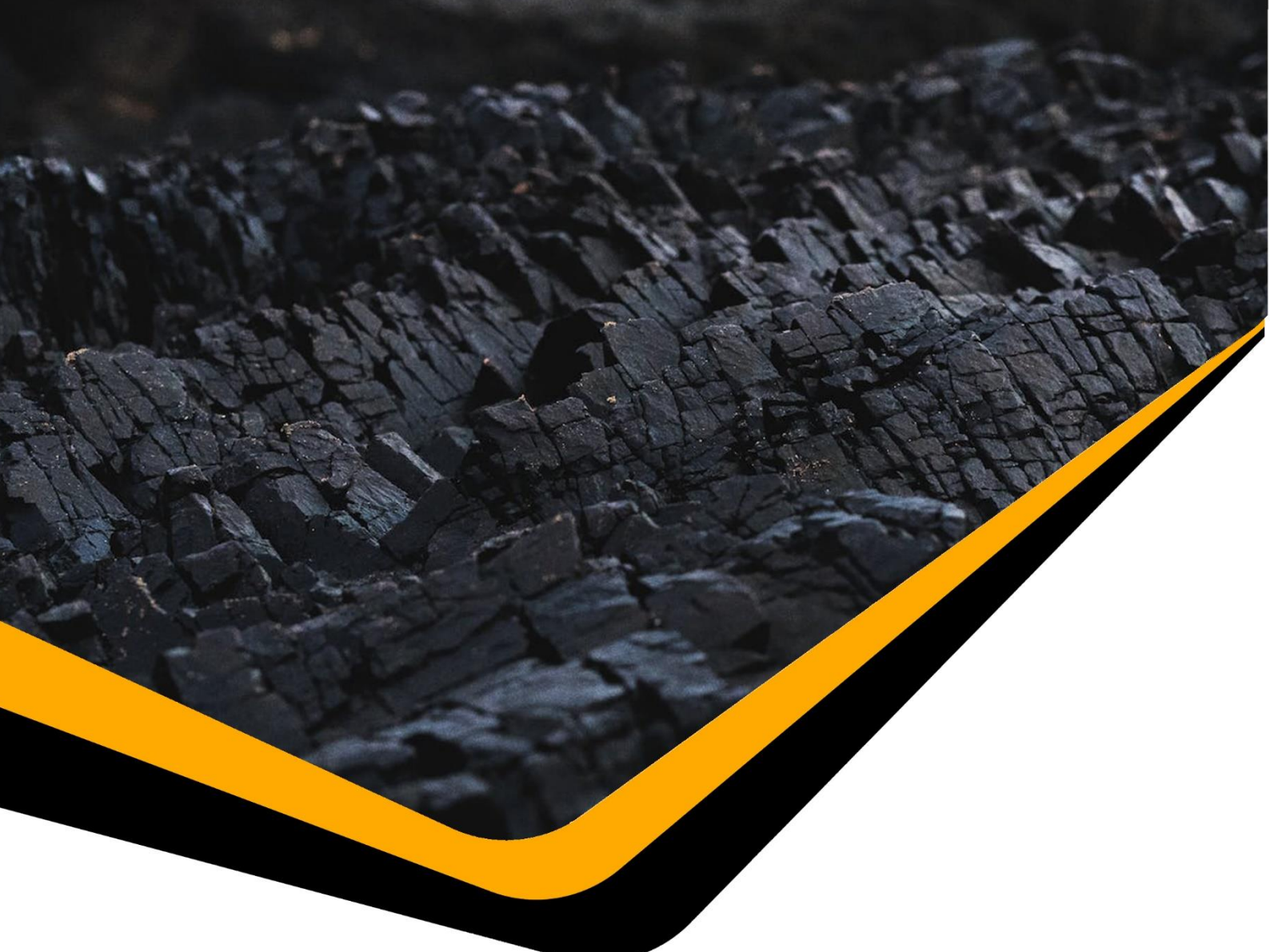
These test results are representative only of the sample received in the laboratory.

LAB NO.	SAMPLE NO.	AS RECEIVED BASIS										AIR DRIED BASIS										Cresible Swelling Number (CSN)	Coal Caking Index (CCI)	
		Total Moisture (TM)	Ash (ASH)	Volatiles Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Moisture (MOIS)	Ash (ASH)	Volatiles Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	Ash (ASH)	Volatiles Matter (VOL)	Fixed Carbon (FC)	Total Sulphur (TSUL)	5:1	3:3							
1	ETT_SP_10069-1A	0.80	24.33	20.65	54.22	0.73	0.45	24.42	20.72	54.40	0.73	24.53	20.82	54.65	0.73	27.58	72.42	0.97	6.0	71				
2	ETT_SP_10069-1B	0.21	26.48	19.86	52.95	1.29	0.49	26.54	19.96	53.07	1.29	26.67	20.00	53.33	1.30	27.27	72.73	1.77	4.0	52				
3	ETT_SP_10069-1C	4.65	12.79	28.04	54.52	0.52	0.85	13.30	29.16	56.69	0.54	13.42	29.41	57.18	0.55	33.96	66.04	0.63	6.0	70				
4	ETT_SP_10069-1D	2.44	23.69	20.89	52.98	0.73	0.66	24.13	21.27	53.95	0.74	24.28	21.41	54.30	0.74	28.28	71.72	0.98	5.5	66				
5	ETT_SP_10069-1E	3.71	24.81	21.74	49.73	0.65	0.68	25.59	22.43	51.30	0.67	25.76	22.58	51.45	0.67	30.42	69.58	0.90	5.5	69				
6	ETT_SP_10069-2A	1.80	30.82	20.72	46.67	0.65	0.71	31.16	20.95	47.19	0.66	31.38	21.10	47.52	0.66	30.74	69.26	0.96	6.6	66				
7	ETT_SP_10069-2B	1.54	26.07	22.38	50.01	0.70	0.62	26.32	22.58	50.48	0.71	26.48	22.73	50.79	0.71	30.91	69.09	0.97	7.6	66				
8	ETT_SP_10069-2C	2.11	37.55	19.05	41.29	0.57	0.73	38.08	19.32	41.87	0.58	38.36	19.46	42.18	0.58	31.57	68.43	0.94	6.0	43				
9	ETT_SP_10069-2D	2.67	32.30	20.18	44.85	0.62	0.79	32.92	20.57	45.72	0.63	33.19	20.73	46.08	0.64	31.03	68.97	0.95	6.2	43				
10	ETT_SP_10069-2E	1.32	22.93	21.30	54.45	0.47	0.43	23.13	21.49	54.94	0.48	23.23	21.58	55.18	0.48	28.12	71.88	0.63	5.5	66				
11	ETT_SP_10069-3A	1.86	21.10	22.78	54.26	0.56	0.43	21.41	23.11	55.05	0.57	21.50	23.21	55.29	0.57	29.57	70.43	0.73	6.5	81				
12	ETT_SP_10069-3B	2.22	22.24	20.74	54.80	0.64	0.44	22.64	21.12	55.80	0.66	22.74	21.21	56.04	0.66	27.46	72.54	0.85	6.0	74				
13	ETT_SP_10069-3C	2.31	15.52	24.34	57.60	0.60	0.42	15.82	24.83	58.73	0.61	15.89	24.94	59.17	0.61	29.65	70.35	0.73	6.5	81				
14	ETT_SP_10069-3D	2.75	19.48	22.58	54.99	0.57	0.60	20.12	23.08	56.21	0.58	20.24	23.22	56.54	0.58	29.11	70.89	0.73	6.5	78				
15	ETT_SP_10069-3E	2.76	18.20	23.22	55.82	0.63	0.58	18.61	23.74	57.08	0.65	18.72	23.88	57.41	0.65	29.37	70.63	0.80	6.5	80				
16	ETT_SP_10169-4A	1.89	24.68	21.61	52.42	0.56	0.44	24.84	21.93	53.19	0.57	24.95	22.03	53.43	0.57	29.19	70.81	0.76	6.0	72				
17	ETT_SP_10069-4B	2.67	28.78	20.88	47.66	0.56	0.55	29.41	21.34	48.71	0.57	29.57	21.46	48.97	0.57	30.46	69.54	0.81	5.5	66				
18	ETT_SP_10069-4C	2.91	20.53	23.14	53.42	0.69	0.56	21.02	23.70	54.72	0.70	21.14	23.84	55.02	0.71	30.23	69.77	0.90	6.5	77				
19	ETT_SP_10069-4D	2.96	23.28	21.65	52.12	0.82	0.52	23.86	22.19	53.43	0.84	23.98	22.31	53.71	0.84	29.35	70.65	1.11	6.0	75				
20	ETT_SP_10069-4E	3.36	16.92	23.85	55.87	0.90	0.50	17.42	24.56	57.53	0.93	17.50	24.68	57.82	0.94	29.92	70.08	1.13	6.5	87				
21	ETT_SP_10069-5A	3.73	22.94	21.90	51.42	0.74	0.71	23.66	22.59	53.04	0.77	23.83	22.75	53.42	0.77	29.87	70.13	1.02	6.5	78				
22	ETT_SP_10069-5B	4.14	19.30	22.67	53.89	0.77	0.59	20.01	23.51	55.89	0.80	20.13	23.65	56.22	0.80	29.61	70.39	1.00	6.5	80				
23	ETT_SP_10069-5C	4.07	24.23	21.33	50.37	0.70	0.62	25.10	22.10	52.16	0.72	25.26	22.24	52.51	0.73	29.75	70.25	0.97	6.0	74				
24	ETT_SP_10069-5D	4.08	21.87	22.63	51.42	0.69	0.62	22.66	23.45	53.27	0.71	22.80	23.59	53.61	0.71	30.56	69.44	0.92	6.5	82				
25	ETT_SP_10069-5E	3.15	18.25	23.65	54.94	0.73	0.60	18.77	24.32	56.50	0.75	18.85	24.42	56.73	0.75	30.09	69.91	0.92	6.5	86				

QUALITY ASSURANCE/QUALITY CONTROL DATA

STANDARD	ASH	VOL	TSUL
ISO 15725	0.010	0.100	0.100
Certified Value	0.039	0.204	0.2135
Standard Deviation	%	%	%
Unit	%	%	%
Analyzed value	10.67	20.33	0.608

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



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ISO 14001:2015



[www.ett.mn](http://www.ett.mn)



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Чингэлтэй дүүрэг,  
Улаанбаатар хот

