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# НҮҮРСНИЙ ОВООЛГЫН ҮЗҮҮЛЭЛТ

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№ ETT\_SP\_GS



ISO 45001:2018



ISO 9001:2015



ISO 14001:2015



НҮҮРСНИЙ ОВООЛГЫН ЧАНАРЫН ДУНДАЖ ҮЗҮҮЛЭЛТ

НИЙТ ЧИЙГ (ar)

5.0%

-2.0; +3.0

ҮНСЛЭГ (db)

22.0%

-3.0; +3.0

ДЭГДЭМХИЙ (daf)

>28.0-

37.0%

НИЙТ ХҮХЭР  
(db)

1.0%

-0.3; +0.5

БАРЬЦАЛДАХ  
ЧАНАР

>50-65.0

НҮҮРСНИЙ  
ХЭМЖЭЭ

128.0

МЯН.ТН

НҮҮРСНИЙ ОВООЛГЫН ШИНЖИЛГЭЭНИЙ ҮР ДҮН

ALB GROUP LLC

Mongol National Building, 2nd floor

Chinggis Avenue, Khemulal District

Ulaanbaatar, Mongolia

Tel: +976 76167867



CERTIFICATE OF ANALYSIS  
24L225-25J256-TT

CLIENT: Erdenes Tavan Tolgoi JSC

ADDRESS: Finance Center, Jiglidar-8

1st Floor, Chinggis Avenue, Ulaanbaatar, Mongolia

ATTN: Erdenesbayar.M

PROJECT NO. 000

LAB. JOB NO. 24L225-25J256-TT

NO. SAMPLES: 37

Notes/Comments: 000

SAMPLES RECEIVED: 23/12/2024 15/10/2025

INSTRUCTIONS RECEIVED: 23/12/2024 15/10/2025

DATE OF REPORT: 24/12/2024 16/10/2025

STATUS OF REPORT: FINAL

ANALYSIS COMPLETE: 24/12/2024 16/10/2025

PREPARATION CODE: C996C, C996D, C996E

ANALYSIS CODE: 1-E, COOKING COAL

100% MOISTURE, ARI, VOL

APPROVED BY: [Signature]

Checked by: [Signature]

CHECKED BY: Chief Chemist

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

| LAB NO. | SAMPLE NO. | STANDARD METHOD     |            |                       |              |                      |                 |            |                       |              |                      |            |                       |              |                      |            |                       | Crucible Swelling Number (CSN) | Cost Caking Index (CCI) |
|---------|------------|---------------------|------------|-----------------------|--------------|----------------------|-----------------|------------|-----------------------|--------------|----------------------|------------|-----------------------|--------------|----------------------|------------|-----------------------|--------------------------------|-------------------------|
|         |            | Total Moisture (TM) | Ash (A810) | Volatile Matter (VOL) | Fixed Carbon | Total Sulphur (TSUL) | Moisture (MO81) | Ash (A810) | Volatile Matter (VOL) | Fixed Carbon | Total Sulphur (TSUL) | Ash (A810) | Volatile Matter (VOL) | Fixed Carbon | Total Sulphur (TSUL) | Ash (A810) | Volatile Matter (VOL) | Fixed Carbon                   |                         |
| 1       | 2437523    | 3.54                | 23.75      | 23.83                 | 48.88        | 1.48                 | 0.71            | 24.44      | 24.53                 | 50.31        | 1.53                 | 24.62      | 24.71                 | 50.67        | 1.54                 | 32.78      | 67.22                 | 2.04                           | 4.5                     |
| 2       | 259516     | 2.17                | 24.22      | 24.26                 | 49.35        | 1.31                 | 0.50            | 24.63      | 24.68                 | 50.19        | 1.34                 | 24.76      | 24.80                 | 50.44        | 1.34                 | 32.96      | 67.04                 | 1.79                           | 4.0                     |
| 3       | 2510418    | 3.34                | 24.05      | 24.42                 | 48.19        | 1.02                 | 0.67            | 24.72      | 25.09                 | 49.52        | 1.05                 | 24.89      | 25.26                 | 49.85        | 1.05                 | 33.63      | 66.37                 | 1.40                           | 4.0                     |
| 4       | 2520431    | 2.72                | 24.23      | 23.17                 | 49.68        | 0.72                 | 0.50            | 24.78      | 23.70                 | 51.02        | 0.54                 | 24.91      | 23.62                 | 51.78        | 0.74                 | 31.71      | 68.29                 | 0.99                           | 3.0                     |
| 5       | 2523731    | 3.30                | 22.52      | 24.15                 | 50.01        | 0.67                 | 0.67            | 23.14      | 24.81                 | 51.38        | 0.69                 | 23.29      | 24.98                 | 51.73        | 0.67                 | 32.56      | 67.44                 | 0.90                           | 3.0                     |
| 6       | 2522831    | 4.07                | 20.42      | 23.89                 | 51.71        | 0.81                 | 0.72            | 21.13      | 24.63                 | 53.51        | 0.83                 | 21.29      | 24.81                 | 53.90        | 0.84                 | 31.52      | 68.48                 | 1.07                           | 2.0                     |
| 7       | 2527004    | 3.27                | 22.70      | 23.92                 | 50.10        | 0.46                 | 0.60            | 23.33      | 24.54                 | 51.48        | 0.99                 | 23.47      | 24.73                 | 51.80        | 0.99                 | 32.32      | 67.68                 | 1.30                           | 2.5                     |
| 8       | 2527104    | 3.63                | 21.10      | 24.28                 | 50.99        | 0.74                 | 0.67            | 21.74      | 25.03                 | 52.55        | 0.77                 | 21.89      | 25.20                 | 52.91        | 0.77                 | 32.26      | 67.74                 | 0.99                           | 3.5                     |
| 9       | 2527204    | 4.09                | 20.94      | 23.89                 | 51.08        | 0.90                 | 0.70            | 21.68      | 24.74                 | 52.88        | 0.93                 | 21.83      | 24.91                 | 53.26        | 0.94                 | 31.87      | 68.13                 | 1.20                           | 3.5                     |
| 10      | 2542908    | 1.73                | 19.49      | 25.75                 | 53.03        | 0.74                 | 0.59            | 19.72      | 26.05                 | 53.45        | 0.75                 | 19.84      | 26.20                 | 53.76        | 0.75                 | 32.68      | 67.32                 | 0.94                           | 5.0                     |
| 11      | 2543009    | 1.69                | 23.33      | 24.46                 | 50.32        | 1.13                 | 0.63            | 23.78      | 24.72                 | 50.87        | 1.14                 | 23.93      | 24.88                 | 51.19        | 1.14                 | 32.71      | 67.29                 | 1.51                           | 2.5                     |
| 12      | 2543108    | 3.84                | 21.37      | 26.29                 | 48.49        | 0.56                 | 0.75            | 22.06      | 27.14                 | 50.05        | 0.58                 | 22.23      | 27.34                 | 50.43        | 0.59                 | 35.16      | 64.84                 | 0.73                           | 2.0                     |
| 13      | 2543108    | 2.94                | 20.59      | 26.20                 | 50.34        | 0.96                 | 0.69            | 20.77      | 26.81                 | 51.72        | 0.98                 | 20.92      | 27.06                 | 52.08        | 0.99                 | 34.14      | 65.86                 | 1.23                           | 5.0                     |
| 14      | 2573620    | 1.65                | 23.06      | 26.03                 | 47.27        | 1.06                 | 0.59            | 25.33      | 26.31                 | 47.78        | 1.07                 | 25.47      | 26.46                 | 48.06        | 1.08                 | 35.51      | 64.49                 | 1.43                           | 4.5                     |
| 15      | 2573720    | 2.09                | 25.86      | 25.42                 | 46.42        | 1.08                 | 0.59            | 26.26      | 25.81                 | 47.34        | 1.10                 | 26.41      | 25.97                 | 47.62        | 1.10                 | 35.29      | 64.71                 | 1.50                           | 4.0                     |
| 16      | 2575323    | 1.34                | 19.29      | 22.03                 | 57.62        | 0.86                 | 0.49            | 19.43      | 22.31                 | 57.75        | 0.57                 | 19.55      | 22.42                 | 58.04        | 0.57                 | 37.87      | 62.13                 | 1.08                           | 4.0                     |
| 17      | 2583902    | 2.54                | 21.11      | 28.14                 | 50.22        | 0.76                 | 0.55            | 21.54      | 26.67                 | 51.34        | 0.78                 | 21.66      | 26.82                 | 51.52        | 0.78                 | 34.23      | 65.77                 | 1.00                           | 4.5                     |
| 18      | 2584505    | 2.33                | 18.44      | 25.58                 | 53.65        | 0.97                 | 0.61            | 18.77      | 26.03                 | 54.40        | 0.99                 | 18.88      | 26.19                 | 54.93        | 0.99                 | 32.28      | 67.72                 | 1.22                           | 3.5                     |
| 19      | 2592814    | 1.87                | 16.94      | 27.59                 | 53.61        | 0.99                 | 0.83            | 17.12      | 27.88                 | 54.18        | 1.01                 | 17.26      | 28.11                 | 54.63        | 1.01                 | 33.97      | 66.03                 | 1.23                           | 4.0                     |
| 20      | 2592714    | 2.03                | 19.72      | 24.43                 | 51.63        | 0.98                 | 0.74            | 19.98      | 26.77                 | 52.51        | 1.00                 | 20.13      | 26.99                 | 52.90        | 1.01                 | 33.77      | 66.23                 | 1.24                           | 5.0                     |
| 21      | 2594417    | 2.36                | 21.37      | 25.33                 | 50.34        | 1.04                 | 0.77            | 21.81      | 26.03                 | 51.37        | 1.06                 | 21.90      | 26.25                 | 51.77        | 1.07                 | 33.65      | 66.35                 | 1.37                           | 5.5                     |
| 22      | 2595117    | 2.49                | 22.45      | 25.37                 | 48.48        | 1.03                 | 0.84            | 23.89      | 25.83                 | 49.42        | 1.05                 | 24.10      | 26.07                 | 49.83        | 1.06                 | 34.35      | 65.65                 | 1.39                           | 4.5                     |
| 23      | 2527178    | 2.65                | 24.69      | 24.71                 | 47.99        | 1.31                 | 0.65            | 25.04      | 25.23                 | 48.88        | 1.34                 | 25.26      | 25.44                 | 49.30        | 1.35                 | 34.04      | 65.96                 | 1.80                           | 1.0                     |
| 24      | 25271818   | 3.44                | 22.25      | 25.02                 | 49.09        | 1.64                 | 1.05            | 22.85      | 25.69                 | 50.41        | 1.70                 | 22.09      | 25.96                 | 50.95        | 1.72                 | 33.76      | 66.24                 | 2.24                           | 5.0                     |
| 25      | 2527275    | 2.84                | 22.77      | 25.37                 | 48.91        | 1.31                 | 0.82            | 23.27      | 25.92                 | 49.98        | 1.34                 | 23.47      | 26.14                 | 50.40        | 1.35                 | 34.15      | 65.85                 | 1.77                           | 5.0                     |
| 26      | 2527463    | 3.34                | 24.84      | 23.55                 | 48.05        | 0.79                 | 0.81            | 25.54      | 24.72                 | 49.42        | 0.81                 | 25.77      | 24.41                 | 49.82        | 0.82                 | 32.89      | 67.11                 | 1.10                           | 4.0                     |
| 27      | 25241404   | 3.74                | 20.49      | 26.15                 | 49.61        | 1.40                 | 0.91            | 21.09      | 26.92                 | 51.08        | 1.44                 | 21.29      | 27.17                 | 51.35        | 1.46                 | 34.51      | 65.49                 | 1.85                           | 5.5                     |
| 28      | 25241504   | 3.73                | 21.22      | 25.50                 | 49.56        | 1.22                 | 0.84            | 21.85      | 26.25                 | 51.04        | 1.26                 | 22.04      | 26.48                 | 51.48        | 1.27                 | 33.97      | 66.03                 | 1.43                           | 5.5                     |
| 29      | 25243207   | 2.07                | 27.48      | 23.15                 | 47.10        | 1.31                 | 0.60            | 28.10      | 23.50                 | 47.81        | 1.33                 | 28.27      | 23.44                 | 48.09        | 1.33                 | 32.65      | 67.35                 | 1.84                           | 3.5                     |
| 30      | 25246309   | 2.14                | 23.87      | 23.94                 | 50.05        | 1.43                 | 0.64            | 24.23      | 24.30                 | 50.82        | 1.45                 | 24.39      | 24.46                 | 51.15        | 1.46                 | 32.35      | 67.65                 | 1.93                           | 5.0                     |
| 31      | 25246021   | 2.08                | 27.75      | 23.93                 | 46.27        | 1.04                 | 0.83            | 28.10      | 24.23                 | 46.84        | 1.06                 | 28.33      | 24.43                 | 47.24        | 1.07                 | 34.09      | 65.91                 | 1.49                           | 4.0                     |
| 32      | 25243323   | 4.02                | 21.89      | 26.18                 | 47.91        | 0.87                 | 1.03            | 22.58      | 25.99                 | 49.40        | 0.84                 | 22.81      | 27.27                 | 49.91        | 0.85                 | 35.34      | 64.66                 | 1.10                           | 3.5                     |
| 33      | 25278805   | 2.44                | 21.83      | 25.90                 | 51.03        | 1.69                 | 0.72            | 22.26      | 24.96                 | 52.04        | 1.73                 | 22.42      | 25.16                 | 52.42        | 1.74                 | 32.43      | 67.57                 | 2.24                           | 5.0                     |
| 34      | 25279305   | 3.73                | 20.26      | 26.01                 | 50.90        | 1.62                 | 0.89            | 20.86      | 26.78                 | 51.47        | 1.05                 | 21.94      | 27.62                 | 51.94        | 1.06                 | 34.22      | 65.78                 | 1.34                           | 5.5                     |
| 35      | 25287813   | 4.81                | 20.64      | 25.48                 | 49.67        | 1.30                 | 1.15            | 21.47      | 26.23                 | 51.15        | 1.34                 | 21.71      | 26.54                 | 51.75        | 1.35                 | 33.80      | 66.10                 | 1.73                           | 5.0                     |
| 36      | 25288014   | 3.50                | 16.98      | 26.75                 | 52.72        | 0.83                 | 1.21            | 17.39      | 27.40                 | 54.00        | 0.85                 | 17.61      | 27.73                 | 54.66        | 0.86                 | 33.66      | 66.34                 | 1.04                           | 4.5                     |
| 37      | 25289813   | 3.83                | 22.91      | 26.04                 | 47.22        | 1.21                 | 0.76            | 23.44      | 26.87                 | 48.73        | 1.23                 | 23.82      | 27.07                 | 49.10        | 1.26                 | 35.54      | 64.46                 | 1.65                           | 5.0                     |
| 38      | 25289915   | 4.21                | 17.99      | 25.87                 | 51.92        | 0.94                 | 0.81            | 18.63      | 26.79                 | 53.76        | 0.97                 | 18.76      | 27.01                 | 54.20        | 0.98                 | 33.26      | 66.74                 | 1.21                           | 4.5                     |

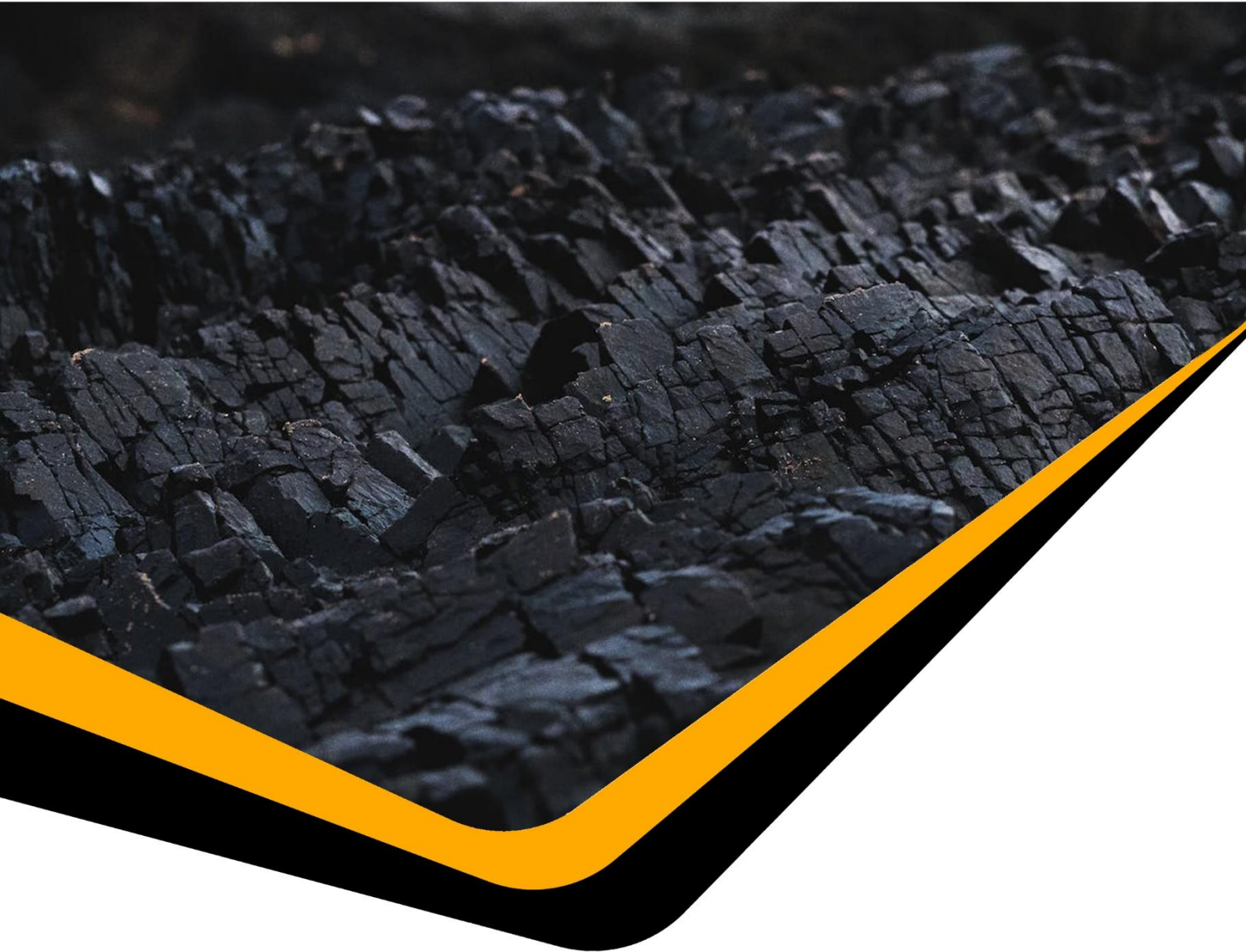
QUALITY ASSURANCE/QUALITY CONTROL DATA

| STANDARD           | ASH   | VOL    | YSUL  |
|--------------------|-------|--------|-------|
| 10.67              | 20.65 | 0.695  |       |
| Certified Value    | 20.65 | 0.695  |       |
| Standard Deviation | 0.068 | 0.0144 |       |
| Unit               | %     | %      |       |
| Analysis value     | 10.80 | 20.54  | 0.625 |

This is the final report and represents an analytical 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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ISO 45001:2018



ISO 9001:2015



ISO 14001:2015



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

