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# НҮҮРСНИЙ ОВООЛГЫН ҮЗҮҮЛЭЛТ

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№ ETT\_SP\_TC

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ISO 45001:2018



ISO 9001:2015



ISO 14001:2015



НҮҮРСНИЙ ОВООЛГЫН ЧАНАРЫН ДУНДАЖ ҮЗҮҮЛЭЛТ

|   |   |   |
|---|---|---|
| <p><b>НИЙТ ЧИЙГ (ar)</b></p> <p><b>6.0%</b></p> <p>(-3.0; +3.0)</p> | <p><b>ҮНСЛЭГ (db)</b></p> <p><b>20.5%</b></p> <p>(-5.0; +5.0)</p> | <p><b>ДЭГДЭМХИЙ (daf)</b></p> <p><b>34.0%</b></p> <p>(Max)</p>  |
| <p><b>НИЙТ ХҮХЭР (ad)</b></p> <p><b>≤1.5%</b></p> <p>(Max)</p>      | <p><b>ИЛЧЛЭГ (ar)</b></p> <p><b>5500</b></p> <p>(-700; +700)</p>  | <p><b>НҮҮРСНИЙ ХЭМЖЭЭ</b></p> <p><b>320.0</b></p> <p>МЯН.ТН</p> |

НҮҮРСНИЙ ОВООЛГЫН ШИНЖИЛГЭЭНИЙ ҮР ДҮН

ALS GROUP LLC  
Mongol National Building, 2nd khoroo  
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CERTIFICATE OF ANALYSIS  
23E18-TT-23H59-TT

**CLIENT:** Erdenes Tavantolgoi JSC  
**ADDRESS:** Finance Center, Jigjidjav-8  
1st khoroo, Chingelal District  
Ulaanbaatar, Mongolia  
**ATTN:** Galtzaya.B  
**PROJECT NO.** xxx  
**LAB. JOB NO.** 23E18-TT-23H59-TT  
**NO. SAMPLES:** 67  
**Notes/Comments:** xxx

**SAMPLES RECEIVED:** 08/08/2023-4/05/2023  
**INSTRUCTIONS RECEIVED:** 08/08/2023-4/05/2023  
**DATE OF REPORT:** 09/08/2023-5/05/2023  
**STATUS OF REPORT:** FINAL  
**ANALYSIS COMPLETE:** 09/08/2023-5/05/2023  
**PREPARATION CODE:** CRUSH-01, 02; MILL-01  
**ANALYSIS CODE:** 1.1\_COOKING COAL  
2.1\_THERMAL COAL  
TM, MOIS, ASH, VOL, TSUL,  
GCV, CSN, CKIN

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

| LAB NO. | STANDARD METHOD     | SAMPLE NO. | GB/T 212  |                        | GB/T 212          | ISO 19579            | GB/T 213                    | GB/T 212               | GB/T 212          | ISO 19579            | GB/T 213                    | GB/T 5448 | GB/T 5447                      |                          |
|---------|---------------------|------------|-----------|------------------------|-------------------|----------------------|-----------------------------|------------------------|-------------------|----------------------|-----------------------------|-----------|--------------------------------|--------------------------|
|         |                     |            | Ash (ASH) | Volatiles Matter (VOL) | Fixed Carbon (FC) | Total Sulphur (TSUL) | Gross Calorific Value (GCV) | Volatiles Matter (VOL) | Fixed Carbon (FC) | Total Sulphur (TSUL) | Gross Calorific Value (GCV) |           | Crucible Swelling Number (CSN) | Coal Caking Index (CKIN) |
|         |                     |            | DRY BASIS |                        |                   |                      | DRY, ASH-FREE BASIS         |                        |                   |                      |                             |           |                                |                          |
|         |                     |            | %         |                        |                   |                      | kcal/kg                     |                        |                   |                      |                             |           |                                |                          |
| 1       | WSS-23-6-1tr-1A-106 |            | 15.09     | 26.93                  | 57.98             | 0.37                 | 6663                        | 31.71                  | 68.29             | 0.43                 | 7847                        | -         | 0                              |                          |
| 2       | WSS-23-6-1tr-1B-122 |            | 18.01     | 26.42                  | 55.56             | 0.41                 | 6589                        | 32.23                  | 67.77             | 0.50                 | 8037                        | -         | 11                             |                          |
| 3       | WSS-23-6-1tr-1C-123 |            | 17.55     | 26.53                  | 55.93             | 0.48                 | 6692                        | 32.17                  | 67.83             | 0.58                 | 8116                        | -         | 15                             |                          |
| 4       | ETT_SP_30009-1E     |            | 19.28     | 26.64                  | 54.08             | 0.94                 | 6504                        | 33.00                  | 67.00             | 1.16                 | 8057                        | -         | 15                             |                          |
| 5       | ETT_SP_30009-1F     |            | 18.83     | 26.12                  | 55.06             | 0.46                 | 6499                        | 32.17                  | 67.83             | 0.57                 | 8007                        | -         |                                |                          |
| 6       | ETT_SP_30009-1G     |            | 17.95     | 22.69                  | 59.36             | 0.68                 | 6852                        | 27.65                  | 72.35             | 0.83                 | 8352                        | -         |                                |                          |
| 7       | ETT_SP_30009-1H     |            | 18.24     | 20.73                  | 61.02             | 0.73                 | 6755                        | 25.36                  | 74.64             | 0.89                 | 8252                        | -         |                                |                          |
| 8       | WSS-23-6-1tr-2A-136 |            | 18.82     | 26.20                  | 54.98             | 0.52                 | 6522                        | 32.28                  | 67.72             | 0.64                 | 8034                        | 2.0       | -                              | 11                       |
| 9       | WSS-23-6-1tr-2B-147 |            | 16.32     | 27.52                  | 56.15             | 0.42                 | 6649                        | 32.89                  | 67.11             | 0.51                 | 7946                        | -         | -                              | 13                       |
| 10      | WSS-23-6-1tr-2C-148 |            | 17.83     | 26.84                  | 55.33             | 0.41                 | 6661                        | 32.66                  | 67.34             | 0.50                 | 7863                        | -         | -                              | 5                        |
| 11      | WSS-23-6-1tr-2D-154 |            | 17.72     | 26.68                  | 55.59             | 0.52                 | 6591                        | 32.43                  | 67.57             | 0.63                 | 8011                        | -         | -                              | 14                       |
| 12      | ETT_SP_30009-2E     |            | 22.59     | 24.47                  | 52.93             | 0.44                 | 6185                        | 31.61                  | 68.39             | 0.56                 | 7990                        | -         | -                              |                          |
| 13      | ETT_SP_30009-2F     |            | 22.47     | 26.11                  | 51.42             | 0.43                 | 6049                        | 33.68                  | 66.32             | 0.56                 | 7803                        | -         | -                              |                          |

| 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                    |
|-----------------|---------------------|---------------------|-----------|-----------------------|-------------------|----------------------|-----------------------------|-----------------|-----------|-----------------------|-------------------|----------------------|-----------------------------|
| LAB NO.         | SAMPLE NO.          | AS RECEIVED BASIS   |           |                       |                   |                      |                             | AIR DRIED BASIS |           |                       |                   |                      |                             |
|                 |                     | 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) |
|                 |                     | %                   |           |                       |                   |                      |                             | kcal/kg         |           |                       |                   |                      |                             |
| 14              | ETT_SP_30009-2G     | 3.77                | 22.55     | 19.42                 | 54.26             | 0.60                 | 6013                        | 1.39            | 23.11     | 19.90                 | 55.60             | 0.61                 | 6162                        |
| 15              | ETT_SP_30009-2H     | 2.39                | 17.03     | 20.05                 | 60.53             | 0.70                 | 6770                        | 1.15            | 17.24     | 20.31                 | 61.30             | 0.71                 | 6856                        |
| 16              | WSS-23-6-1TR-3A-169 | 4.16                | 22.56     | 25.32                 | 47.97             | 0.93                 | 5814                        | 0.94            | 23.31     | 26.17                 | 49.58             | 0.96                 | 6010                        |
| 17              | WSS-23-6-1TR-3B-170 | 3.26                | 18.68     | 26.13                 | 51.93             | 0.63                 | 6449                        | 0.68            | 19.17     | 26.83                 | 53.32             | 0.64                 | 6620                        |
| 18              | WSS-23-6-1tr-3C-184 | 3.27                | 24.96     | 23.30                 | 48.47             | 0.49                 | 5758                        | 0.80            | 25.60     | 23.89                 | 49.70             | 0.50                 | 5905                        |
| 19              | WSS-23-6-1tr-3D-188 | 3.49                | 19.59     | 25.24                 | 51.68             | 0.68                 | 6295                        | 0.91            | 20.11     | 25.92                 | 53.06             | 0.70                 | 6463                        |
| 20              | ETT_SP_30009-3E     | 2.70                | 19.52     | 26.33                 | 51.45             | 0.47                 | 6085                        | 0.98            | 19.86     | 26.79                 | 52.36             | 0.48                 | 6193                        |
| 21              | ETT_SP_30009-3F     | 2.68                | 23.15     | 25.43                 | 48.74             | 0.58                 | 5724                        | 0.97            | 23.56     | 25.87                 | 49.59             | 0.59                 | 5824                        |
| 22              | ETT_SP_30009-3G     | 1.92                | 22.68     | 21.83                 | 53.57             | 0.58                 | 6331                        | 0.91            | 22.91     | 22.06                 | 54.12             | 0.59                 | 6397                        |
| 23              | ETT_SP_30009-3H     | 1.85                | 20.40     | 23.13                 | 54.63             | 0.67                 | 6399                        | 1.10            | 20.55     | 23.31                 | 55.04             | 0.68                 | 6447                        |
| 24              | WSS-23-6-1tr-4A-218 | 6.40                | 14.48     | 24.92                 | 54.21             | 0.35                 | 6280                        | 2.04            | 15.15     | 26.08                 | 56.73             | 0.37                 | 6572                        |
| 25              | WSS-23-6-1tr-4B-229 | 5.50                | 19.02     | 23.59                 | 51.89             | 1.18                 |                             | 0.88            | 19.95     | 24.74                 | 54.43             | 1.24                 |                             |
| 26              | WSS-23-6-1tr-4C-223 | 3.24                | 21.48     | 24.68                 | 50.61             | 0.40                 | 6016                        | 0.82            | 22.01     | 25.30                 | 51.87             | 0.41                 | 6166                        |
| 27              | WSS-23-6-1TR-4D-271 | 4.37                | 20.03     | 23.23                 | 52.37             | 0.66                 | 6132                        | 1.09            | 20.72     | 24.02                 | 54.17             | 0.68                 | 6342                        |
| 28              | ETT_SP_30009-4E     | 2.90                | 18.11     | 25.38                 | 53.61             | 0.58                 | 6434                        | 0.80            | 18.50     | 25.93                 | 54.77             | 0.59                 | 6573                        |
| 29              | ETT_SP_30009-4F     | 3.00                | 18.25     | 24.47                 | 54.28             | 0.37                 | 6412                        | 0.82            | 18.66     | 25.02                 | 55.50             | 0.38                 | 6556                        |
| 30              | ETT_SP_30009-4G     | 1.44                | 29.74     | 23.45                 | 45.36             | 0.61                 | 5501                        | 0.79            | 29.94     | 23.61                 | 45.66             | 0.62                 | 5537                        |
| 31              | WSS-23-6-1TR-5A-329 | 2.26                | 14.54     | 27.27                 | 55.93             | 0.71                 | 6988                        | 0.73            | 14.77     | 27.69                 | 56.81             | 0.72                 | 7098                        |
| 32              | WSS-23-6-1TR-5B-330 | 5.72                | 21.94     | 22.94                 | 49.40             | 0.84                 | 5676                        | 1.56            | 22.91     | 23.95                 | 51.58             | 0.87                 | 5927                        |
| 33              | WSS-23-6-1TR-5C-335 | 9.27                | 27.71     | 21.57                 | 41.45             | 0.69                 | 4631                        | 2.86            | 29.67     | 23.09                 | 44.38             | 0.74                 | 4958                        |
| 34              | ETT_SP_30009-5D     | 2.59                | 18.03     | 24.58                 | 54.80             | 0.50                 | 6504                        | 0.89            | 18.34     | 25.01                 | 55.75             | 0.50                 | 6618                        |
| 35              | ETT_SP_30009-5E     | 1.91                | 21.58     | 24.92                 | 51.59             | 0.50                 | 6157                        | 0.97            | 21.78     | 25.16                 | 52.09             | 0.50                 | 6216                        |
| 36              | ETT_SP_30009-5F     | 5.51                | 24.78     | 22.74                 | 46.97             | 0.72                 | 5558                        | 0.92            | 25.99     | 23.85                 | 49.25             | 0.75                 | 5828                        |
| 37              | ETT_SP_30009-5G     | 3.82                | 25.75     | 21.52                 | 48.91             | 0.92                 | 5764                        | 0.81            | 26.56     | 22.19                 | 50.44             | 0.95                 | 5945                        |
| 38              | ETT_SP_30009-5H     | 3.67                | 21.03     | 22.30                 | 53.00             | 0.56                 | 6180                        | 0.89            | 21.64     | 22.94                 | 54.53             | 0.58                 | 6358                        |
| 39              | ETT_SP_30009-6A     | 1.36                | 27.03     | 22.77                 | 48.84             | 0.67                 | 5787                        | 0.66            | 27.22     | 22.93                 | 49.18             | 0.68                 | 5828                        |
| 40              | ETT_SP_30009-6B     | 2.26                | 21.99     | 25.30                 | 50.46             | 0.77                 | 6025                        | 0.81            | 22.32     | 25.67                 | 51.20             | 0.78                 | 6115                        |
| 41              | ETT_SP_30009-6C     | 1.17                | 25.98     | 24.69                 | 48.16             | 1.23                 | 5743                        | 0.87            | 26.06     | 24.77                 | 48.31             | 1.24                 | 5760                        |
| 42              | ETT_SP_30009-6D     | 1.37                | 22.69     | 25.75                 | 50.19             | 0.74                 | 6060                        | 0.86            | 22.81     | 25.88                 | 50.45             | 0.75                 | 6091                        |
| 43              | ETT_SP_30009-6E     | 1.43                | 25.62     | 24.01                 | 48.94             | 1.28                 | 5862                        | 0.62            | 25.83     | 24.21                 | 49.35             | 1.29                 | 5911                        |
| 44              | ETT_SP_30009-6F     | 1.30                | 20.97     | 24.87                 | 52.87             | 0.53                 | 6289                        | 0.92            | 21.05     | 24.97                 | 53.07             | 0.53                 | 6313                        |
| 45              | ETT_SP_30009-6G     | 1.80                | 19.11     | 24.29                 | 54.81             | 1.10                 | 6538                        | 0.65            | 19.33     | 24.57                 | 55.45             | 1.11                 | 6615                        |
| 46              | ETT_SP_30009-6H     | 2.05                | 15.31     | 23.51                 | 59.13             | 0.86                 | 6936                        | 0.61            | 15.54     | 23.86                 | 60.00             | 0.87                 | 7038                        |
| 47              | ETT_SP_30010-1A     | 3.38                | 19.59     | 24.11                 | 52.92             | 0.43                 | 6288                        | 0.90            | 20.10     | 24.73                 | 54.27             | 0.44                 | 6449                        |
| 48              | ETT_SP_30010-1B     | 3.16                | 19.43     | 24.26                 | 53.15             | 0.58                 | 6361                        | 0.76            | 19.91     | 24.86                 | 54.46             | 0.60                 | 6519                        |
| 49              | ETT_SP_30010-1C     | 4.02                | 12.90     | 27.53                 | 55.55             | 0.63                 | 6945                        | 0.85            | 13.32     | 28.44                 | 57.39             | 0.65                 | 7174                        |
| 50              | ETT_SP_30010-2A     | 5.03                | 17.64     | 23.04                 | 54.29             | 0.59                 | 6371                        | 1.12            | 18.36     | 23.99                 | 56.52             | 0.61                 | 6634                        |
| 51              | ETT_SP_30010-2B     | 3.60                | 23.95     | 22.15                 | 50.30             | 0.60                 | 6078                        | 0.81            | 24.64     | 22.79                 | 51.75             | 0.62                 | 6253                        |
| 52              | ETT_SP_30010-2C     | 4.01                | 14.34     | 25.98                 | 55.67             | 0.45                 | 6791                        | 1.31            | 14.74     | 26.71                 | 57.24             | 0.46                 | 6982                        |
| 53              | ETT_SP_30010-3A     | 5.14                | 17.86     | 22.84                 | 54.16             | 0.50                 | 6304                        | 1.18            | 18.60     | 23.79                 | 56.43             | 0.52                 | 6567                        |
| 54              | ETT_SP_30010-3B     | 5.67                | 13.13     | 21.23                 | 59.98             | 0.78                 | 6799                        | 1.18            | 13.75     | 22.23                 | 62.83             | 0.81                 | 7122                        |
| 55              | ETT_SP_30010-3C     | 2.84                | 21.75     | 24.01                 | 51.40             | 0.69                 | 6304                        | 0.60            | 22.25     | 24.57                 | 52.59             | 0.71                 | 6450                        |
| 56              | ETT_SP_30010-4A     | 5.09                | 20.17     | 19.46                 | 55.29             | 0.48                 | 6069                        | 1.41            | 20.95     | 20.21                 | 57.43             | 0.50                 | 6305                        |
| 57              | ETT_SP_30010-4B     | 3.13                | 26.21     | 21.27                 | 49.40             | 0.70                 | 5755                        | 1.01            | 26.78     | 21.73                 | 50.48             | 0.72                 | 5881                        |

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.  
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Page 2 of 6

| 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                    |
|-----------------|-------------------|---------------------|-----------|-----------------------|-------------------|----------------------|-----------------------------|-----------------|-----------|-----------------------|-------------------|----------------------|-----------------------------|
| LAB NO.         | SAMPLE NO.        | AS RECEIVED BASIS   |           |                       |                   |                      |                             | AIR DRIED BASIS |           |                       |                   |                      |                             |
|                 |                   | 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) |
|                 |                   | %                   |           |                       |                   |                      |                             | kcal/kg         |           |                       |                   |                      |                             |
| 58              | ETT_SP_30010-4C   | 3.89                | 18.84     | 24.50                 | 52.77             | 0.86                 | 6394                        | 0.79            | 19.45     | 25.29                 | 54.47             | 0.88                 | 6600                        |
| 59              | ETT_SP_30010-5A   | 3.44                | 25.32     | 20.80                 | 50.44             | 0.68                 | 5808                        | 1.15            | 25.92     | 21.30                 | 51.63             | 0.69                 | 5946                        |
| 60              | ETT_SP_30010-5B   | 2.78                | 23.74     | 22.44                 | 51.05             | 0.74                 | 6121                        | 0.90            | 24.19     | 22.87                 | 52.03             | 0.75                 | 6239                        |
| 61              | ETT_SP_30010-T-5C | 4.06                | 24.72     | 22.94                 | 48.28             | 0.84                 | 5829                        | 1.00            | 25.51     | 23.67                 | 49.82             | 0.86                 | 6015                        |
| 62              | ETT_SP_30009-T-6A | 2.67                | 26.41     | 22.55                 | 48.36             | 1.47                 | 5820                        | 0.61            | 26.97     | 23.03                 | 49.39             | 1.50                 | 5944                        |
| 63              | ETT_SP_30009-T-6B | 3.39                | 24.75     | 22.86                 | 49.00             | 1.30                 | 5868                        | 0.67            | 25.45     | 23.50                 | 50.38             | 1.34                 | 6033                        |
| 64              | ETT_SP_30009-T-6C | 2.05                | 22.69     | 23.55                 | 51.72             | 0.88                 | 6257                        | 0.63            | 23.01     | 23.89                 | 52.47             | 0.89                 | 6347                        |
| 65              | ETT_SP_30009-T-7A | 2.25                | 18.36     | 23.00                 | 56.39             | 0.69                 | 6651                        | 0.91            | 18.61     | 23.31                 | 57.16             | 0.70                 | 6742                        |
| 66              | ETT_SP_30009-T-7B | 2.01                | 21.72     | 23.05                 | 53.23             | 0.69                 | 6335                        | 0.91            | 21.96     | 23.30                 | 53.82             | 0.69                 | 6406                        |
| 67              | ETT_SP_30009-T-7C | 1.81                | 19.78     | 21.99                 | 56.42             | 0.79                 | 6583                        | 0.90            | 19.97     | 22.19                 | 56.94             | 0.80                 | 6644                        |

QUALITY ASSURANCE/QUALITY CONTROL DATA

|                    |       |       |         |       |
|--------------------|-------|-------|---------|-------|
| STDALSWS-23/20     | ASH   | VOL   | GCV     | TSUL  |
| Certified Value    | 10.35 | 18.16 | 7673    | 0.616 |
| Standard Deviation | 0.03  | 0.16  | 11      | 0.017 |
| Unit               | %     | %     | kcal/kg | %     |
| Analyzed value     | 10.86 | 18.24 | 7660    | 0.621 |

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.  
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Page 3 of 6

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**CERTIFICATE OF ANALYSIS**  
**23E18-TT-23H59-TT**

**CLIENT:** Erdenes Tavantolgoi JSC  
**ADDRESS:** Finance Center, Jigjidjav-8  
1st khoroo, Chingeltei District  
Ulaanbaatar, Mongolia  
**ATTN:** Galtzaya.B  
**PROJECT NO.** xxx  
**LAB. JOB NO.** 23E18-TT-23H59-TT  
**NO. SAMPLES:** 67  
**Notes/Comments:** xxx

**SAMPLES RECEIVED:** 08/08/2023-4/05/2023  
**INSTRUCTIONS RECEIVED:** 08/08/2023-4/05/2023  
**DATE OF REPORT:** 09/08/2023-5/05/2023  
**STATUS OF REPORT:** FINAL  
**ANALYSIS COMPLETE:** 09/08/2023-5/05/2023  
**PREPARATION CODE:** CRUSH-01, 02; MILL-01  
**ANALYSIS CODE:** 1.1\_COKING COAL  
2.1\_THERMAL COAL  
TM, MOIS, ASH, VOL, TSUL,  
GCV, CSN, CKIN

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

| LAB NO. | STANDARD METHOD     | SAMPLE NO. | GB/T 212  |                       |                   |                      | ISO 19579                   |                       |                   |                      | Crucible Swelling Number (CSN) | GB/T 5447                   |     |     |
|---------|---------------------|------------|-----------|-----------------------|-------------------|----------------------|-----------------------------|-----------------------|-------------------|----------------------|--------------------------------|-----------------------------|-----|-----|
|         |                     |            | 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) | 5:1 | 3:3 |
|         |                     |            |           |                       |                   |                      |                             |                       |                   |                      |                                |                             |     |     |
| 1       | WSS-23-6-1tr-1A-106 | 15.09      | 26.93     | 57.98                 | 0.37              | 6663                 | 31.71                       | 68.29                 | 0.43              | 7847                 | -                              | 0                           |     |     |
| 2       | WSS-23-6-1tr-1B-122 | 18.01      | 26.42     | 55.56                 | 0.41              | 6589                 | 32.23                       | 67.77                 | 0.50              | 8037                 | -                              | 11                          |     |     |
| 3       | WSS-23-6-1tr-1C-123 | 17.55      | 26.53     | 55.93                 | 0.48              | 6692                 | 32.17                       | 67.83                 | 0.58              | 8116                 | -                              | 15                          |     |     |
| 4       | ETT_SP_30009-1E     | 19.28      | 26.64     | 54.08                 | 0.94              | 6504                 | 33.00                       | 67.00                 | 1.16              | 8057                 | -                              | 15                          |     |     |
| 5       | ETT_SP_30009-1F     | 18.83      | 26.12     | 55.06                 | 0.46              | 6499                 | 32.17                       | 67.83                 | 0.57              | 8007                 | -                              | -                           |     |     |
| 6       | ETT_SP_30009-1G     | 17.95      | 22.69     | 59.36                 | 0.68              | 6852                 | 27.65                       | 72.35                 | 0.83              | 8352                 | -                              | -                           |     |     |
| 7       | ETT_SP_30009-1H     | 18.24      | 20.73     | 61.02                 | 0.73              | 6755                 | 25.36                       | 74.64                 | 0.89              | 8262                 | -                              | -                           |     |     |
| 8       | WSS-23-6-1tr-2A-136 | 18.82      | 26.20     | 54.98                 | 0.52              | 6522                 | 32.28                       | 67.72                 | 0.64              | 8034                 | 2.0                            | -                           |     |     |
| 9       | WSS-23-6-1tr-2C-147 | 16.32      | 27.52     | 56.15                 | 0.42              | 6649                 | 32.89                       | 67.11                 | 0.51              | 7946                 | -                              | 11                          |     |     |
| 10      | WSS-23-6-1tr-2C-148 | 17.83      | 26.84     | 55.33                 | 0.41              | 6461                 | 32.66                       | 67.34                 | 0.50              | 7863                 | -                              | 5                           |     |     |
| 11      | WSS-23-6-1tr-2D-154 | 17.72      | 26.68     | 55.59                 | 0.52              | 6591                 | 32.43                       | 67.57                 | 0.63              | 8011                 | -                              | 14                          |     |     |
| 12      | ETT_SP_30009-2E     | 22.59      | 24.47     | 52.93                 | 0.44              | 6185                 | 31.61                       | 68.39                 | 0.56              | 7990                 | -                              | -                           |     |     |
| 13      | ETT_SP_30009-2F     | 22.47      | 26.11     | 51.42                 | 0.43              | 6049                 | 33.68                       | 66.32                 | 0.56              | 7803                 | -                              | -                           |     |     |

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| LAB NO. | STANDARD METHOD     | SAMPLE NO. | GB/T 212  |                       |                   |                      | ISO 19579                   |                       |                   |                      | Crucible Swelling Number (CSN) | GB/T 5447                   |     |     |
|---------|---------------------|------------|-----------|-----------------------|-------------------|----------------------|-----------------------------|-----------------------|-------------------|----------------------|--------------------------------|-----------------------------|-----|-----|
|         |                     |            | 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) | 5:1 | 3:3 |
|         |                     |            |           |                       |                   |                      |                             |                       |                   |                      |                                |                             |     |     |
| 14      | ETT_SP_30009-2G     | 23.44      | 20.18     | 56.39                 | 0.62              | 6248                 | 26.35                       | 73.65                 | 0.81              | 8161                 | -                              | -                           |     |     |
| 15      | ETT_SP_30009-2H     | 17.44      | 20.54     | 62.01                 | 0.72              | 6936                 | 24.89                       | 75.11                 | 0.87              | 8401                 | -                              | -                           |     |     |
| 16      | WSS-23-6-1TR-3A-169 | 23.54      | 26.42     | 50.05                 | 0.97              | 6067                 | 34.55                       | 65.45                 | 1.27              | 7934                 | 1.0                            | 16                          |     |     |
| 17      | WSS-23-6-1TR-3B-170 | 19.31      | 27.01     | 53.68                 | 0.65              | 6666                 | 33.47                       | 66.53                 | 0.80              | 8261                 | 4.5                            | 64                          |     |     |
| 18      | WSS-23-6-1tr-3C-184 | 25.81      | 24.08     | 50.11                 | 0.51              | 5953                 | 32.46                       | 67.54                 | 0.68              | 8023                 | -                              | 16                          |     |     |
| 19      | WSS-23-6-1tr-3D-188 | 20.30      | 26.15     | 53.55                 | 0.70              | 6522                 | 32.81                       | 67.19                 | 0.88              | 8183                 | -                              | 17                          |     |     |
| 20      | ETT_SP_30009-3E     | 20.06      | 27.06     | 52.88                 | 0.49              | 6254                 | 33.85                       | 66.15                 | 0.61              | 7824                 | -                              | -                           |     |     |
| 21      | ETT_SP_30009-3F     | 23.79      | 26.13     | 50.08                 | 0.59              | 5881                 | 34.28                       | 65.72                 | 0.78              | 7717                 | -                              | -                           |     |     |
| 22      | ETT_SP_30009-3G     | 23.12      | 22.26     | 54.62                 | 0.59              | 6455                 | 28.96                       | 71.04                 | 0.77              | 8397                 | -                              | -                           |     |     |
| 23      | ETT_SP_30009-3H     | 20.78      | 23.57     | 55.65                 | 0.68              | 6519                 | 29.75                       | 70.25                 | 0.86              | 8229                 | -                              | -                           |     |     |
| 24      | WSS-23-6-1tr-4A-218 | 15.47      | 26.62     | 57.91                 | 0.38              | 6709                 | 31.49                       | 68.51                 | 0.45              | 7936                 | -                              | 0                           |     |     |
| 25      | WSS-23-6-1tr-4B-229 | 20.13      | 24.96     | 54.91                 | 1.25              | 6217                 | 31.25                       | 68.75                 | 1.57              | 8036                 | 0                              | 0                           |     |     |
| 26      | WSS-23-6-1tr-4C-223 | 22.19      | 25.51     | 52.30                 | 0.41              | 6217                 | 32.78                       | 67.22                 | 0.53              | 7991                 | -                              | 16                          |     |     |
| 27      | WSS-23-6-1TR-4D-271 | 20.94      | 24.29     | 54.77                 | 0.69              | 6413                 | 30.73                       | 69.27                 | 0.87              | 8111                 | -                              | 6                           |     |     |
| 28      | ETT_SP_30009-4E     | 18.65      | 26.14     | 55.21                 | 0.60              | 6626                 | 32.13                       | 67.87                 | 0.74              | 8145                 | -                              | -                           |     |     |
| 29      | ETT_SP_30009-4F     | 18.81      | 25.23     | 55.96                 | 0.38              | 6611                 | 31.08                       | 68.92                 | 0.47              | 8143                 | -                              | -                           |     |     |
| 30      | ETT_SP_30009-4G     | 30.18      | 23.80     | 46.02                 | 0.62              | 5581                 | 34.09                       | 65.91                 | 0.89              | 7994                 | -                              | -                           |     |     |
| 31      | WSS-23-6-1TR-5A-329 | 14.88      | 27.90     | 57.22                 | 0.72              | 7150                 | 32.77                       | 67.23                 | 0.85              | 8400                 | 7.0                            | -                           |     |     |
| 32      | WSS-23-6-1TR-5B-330 | 23.27      | 24.33     | 52.40                 | 0.89              | 6021                 | 31.71                       | 68.29                 | 1.16              | 7847                 | -                              | 0                           |     |     |
| 33      | WSS-23-6-1TR-5C-335 | 30.54      | 23.77     | 45.69                 | 0.76              | 5104                 | 34.22                       | 65.78                 | 1.10              | 7348                 | -                              | 0                           |     |     |
| 34      | ETT_SP_30009-5D     | 18.51      | 25.24     | 56.26                 | 0.51              | 6677                 | 30.97                       | 69.03                 | 0.62              | 8194                 | -                              | 14                          |     |     |
| 35      | ETT_SP_30009-5E     | 22.00      | 25.41     | 52.60                 | 0.51              | 6276                 | 32.57                       | 67.43                 | 0.65              | 8046                 | -                              | -                           |     |     |
| 36      | ETT_SP_30009-5F     | 26.23      | 24.07     | 49.71                 | 0.76              | 5882                 | 32.62                       | 67.38                 | 1.03              | 7973                 | -                              | -                           |     |     |
| 37      | ETT_SP_30009-5G     | 26.78      | 22.37     | 50.85                 | 0.96              | 5993                 | 30.55                       | 69.45                 | 1.31              | 8185                 | -                              | -                           |     |     |
| 38      | ETT_SP_30009-5H     | 21.83      | 23.15     | 55.02                 | 0.58              | 6416                 | 29.61                       | 70.39                 | 0.74              | 8207                 | -                              | -                           |     |     |
| 39      | ETT_SP_30009-6A     | 27.40      | 23.08     | 49.51                 | 0.68              | 5867                 | 31.80                       | 68.20                 | 0.94              | 8081                 | -                              | -                           |     |     |
| 40      | ETT_SP_30009-6B     | 22.50      | 25.88     | 51.62                 | 0.79              | 6164                 | 33.39                       | 66.61                 | 1.01              | 7954                 | -                              | -                           |     |     |
| 41      | ETT_SP_30009-6C     | 26.29      | 24.98     | 48.73                 | 2.25              | 5811                 | 33.89                       | 66.11                 | 3.06              | 7883                 | -                              | -                           |     |     |
| 42      | ETT_SP_30009-6D     | 23.00      | 26.11     | 50.89                 | 0.75              | 6144                 | 33.91                       | 66.09                 | 0.98              | 7979                 | -                              | -                           |     |     |
| 43      | ETT_SP_30009-6E     | 25.99      | 24.36     | 49.65                 | 1.30              | 5948                 | 32.91                       | 67.09                 | 1.75              | 8036                 | -                              | -                           |     |     |
| 44      | ETT_SP_30009-6F     | 21.24      | 25.20     | 53.56                 | 0.54              | 6371                 | 31.99                       | 68.01                 | 0.68              | 8090                 | -                              | -                           |     |     |
| 45      | ETT_SP_30009-6G     | 19.46      | 24.73     | 55.81                 | 1.12              | 6658                 | 30.71                       | 69.29                 | 1.39              | 8266                 | -                              | -                           |     |     |
| 46      | ETT_SP_30009-6H     | 15.63      | 24.00     | 60.37                 | 0.88              | 7081                 | 28.45                       | 71.55                 | 1.04              | 8393                 | -                              | -                           |     |     |
| 47      | ETT_SP_30010-1A     | 20.28      | 24.95     | 54.77                 | 0.44              | 6507                 | 31.30                       | 68.70                 | 0.55              | 8163                 | -                              | -                           |     |     |
| 48      | ETT_SP_30010-1B     | 20.07      | 25.05     | 54.88                 | 0.60              | 6569                 | 31.34                       | 68.66                 | 0.75              | 8218                 | -                              | -                           |     |     |
| 49      | ETT_SP_30010-1C     | 13.44      | 28.68     | 57.88                 | 0.66              | 7236                 | 33.13                       | 66.87                 | 0.76              | 8359                 | -                              | -                           |     |     |
| 50      | ETT_SP_30010-2A     | 18.57      | 24.26     | 57.16                 | 0.62              | 6709                 | 29.80                       | 70.20                 | 0.76              | 8239                 | -                              | -                           |     |     |
| 51      | ETT_SP_30010-2B     | 24.84      | 22.98     | 52.18                 | 0.63              | 6304                 | 30.58                       | 69.42                 | 0.83              | 8388                 | -                              | -                           |     |     |
| 52      | ETT_SP_30010-2C     | 14.93      | 27.07     | 58.00                 | 0.46              | 7075                 | 31.82                       | 68.18                 | 0.55              | 8317                 | 19                             | -                           |     |     |
| 53      | ETT_SP_30010-3A     | 18.83      | 24.07     | 57.10                 | 0.53              | 6645                 | 29.66                       | 70.34                 | 0.65              | 8187                 | -                              | -                           |     |     |
| 54      | ETT_SP_30010-3B     | 13.91      | 22.50     | 63.58                 | 0.82              | 7208                 | 26.14                       | 73.86                 | 0.96              | 8373                 | -                              | -                           |     |     |
| 55      | ETT_SP_30010-3C     | 22.38      | 24.72     | 52.90                 | 0.71              | 6488                 | 31.84                       | 68.16                 | 0.92              | 8359                 | -                              | -                           |     |     |
| 56      | ETT_SP_30010-4A     | 21.25      | 20.50     | 58.25                 | 0.50              | 6395                 | 26.03                       | 73.97                 | 0.64              | 8120                 | 40                             | -                           |     |     |
| 57      | ETT_SP_30010-4B     | 27.06      | 21.95     | 50.99                 | 0.72              | 5941                 | 30.10                       | 69.90                 | 0.99              | 8145                 | -                              | -                           |     |     |

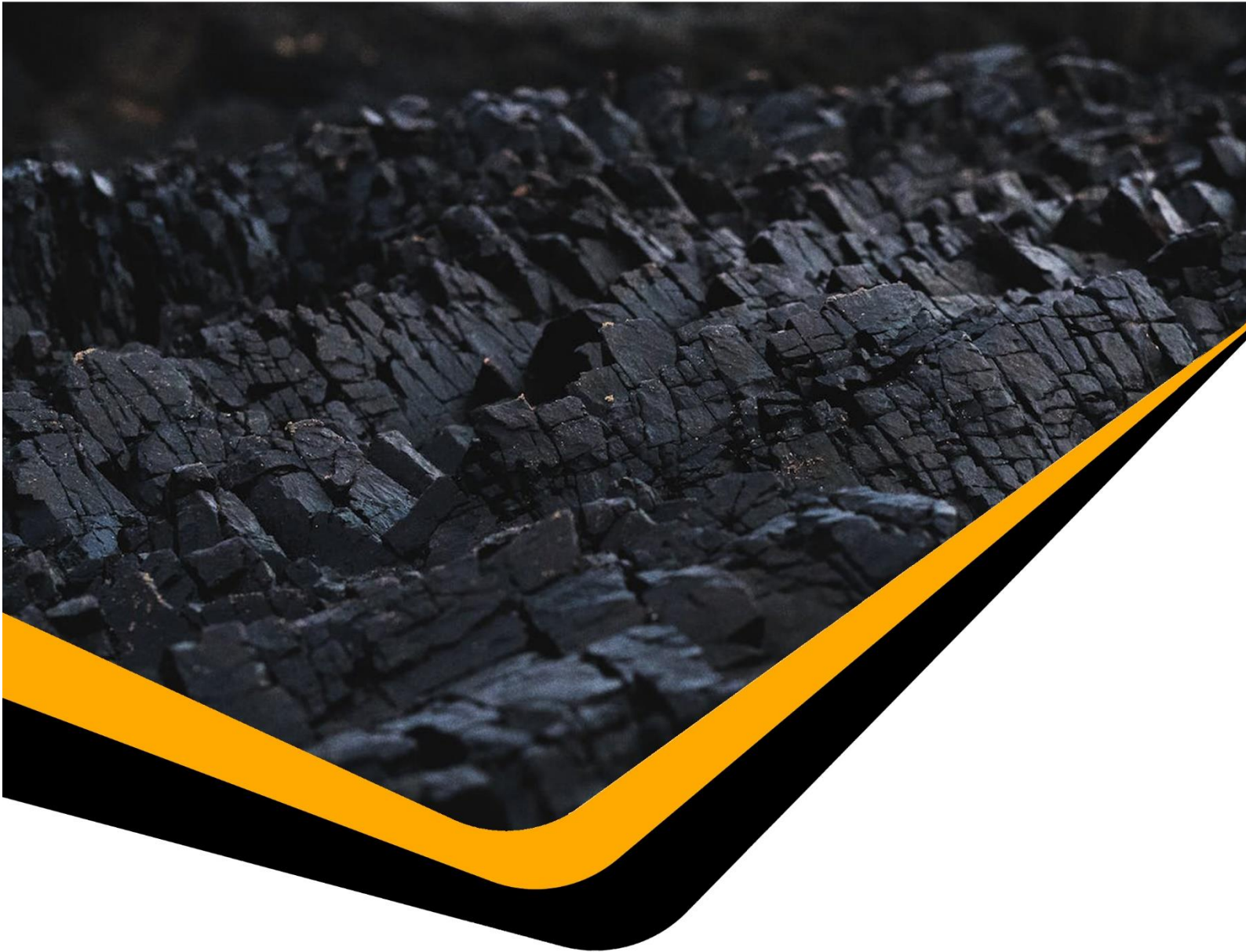
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| STANDARD METHOD |                   | GB/T 212  | GB/T 212              | GB/T 212          | ISO 19579            | GB/T 213                    | GB/T 212              | GB/T 212          | ISO 19579            | GB/T 213                    | GB/T 5448 | GB/T 5447                      |                          |  |
|-----------------|-------------------|-----------|-----------------------|-------------------|----------------------|-----------------------------|-----------------------|-------------------|----------------------|-----------------------------|-----------|--------------------------------|--------------------------|--|
| LAB NO.         | SAMPLE NO.        | DRY BASIS |                       |                   |                      |                             | DRY, ASH-FREE BASIS   |                   |                      |                             |           | Crucible Swelling Number (CSN) | Coal Caking Index (CKIN) |  |
|                 |                   | 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) | 5:1       |                                | 3:3                      |  |
|                 |                   | %         |                       |                   |                      |                             | %                     |                   |                      |                             |           |                                |                          |  |
|                 |                   |           |                       |                   |                      | kcal/kg                     |                       |                   |                      | kcal/kg                     |           |                                |                          |  |
| 58              | ETT_SP_30010-4C   | 19.61     | 25.50                 | 54.90             | 0.89                 | 6653                        | 31.71                 | 68.29             | 1.11                 | 8275                        |           |                                |                          |  |
| 59              | ETT_SP_30010-5A   | 26.23     | 21.54                 | 52.23             | 0.70                 | 6015                        | 29.20                 | 70.80             | 0.95                 | 8153                        |           |                                |                          |  |
| 60              | ETT_SP_30010-5B   | 24.41     | 23.08                 | 52.51             | 0.76                 | 6296                        | 30.53                 | 69.47             | 1.01                 | 8329                        |           |                                |                          |  |
| 61              | ETT_SP_30010-T-5C | 25.77     | 23.91                 | 50.32             | 0.87                 | 6075                        | 32.21                 | 67.79             | 1.17                 | 8184                        |           | 19                             | -                        |  |
| 62              | ETT_SP_30009-T-6A | 27.14     | 23.17                 | 49.69             | 1.51                 | 5980                        | 31.80                 | 68.20             | 2.08                 | 8207                        |           | -                              | 15                       |  |
| 63              | ETT_SP_30009-T-6B | 25.62     | 23.66                 | 50.72             | 1.35                 | 6074                        | 31.81                 | 68.19             | 1.81                 | 8166                        |           | -                              | 15                       |  |
| 64              | ETT_SP_30009-T-6C | 23.16     | 24.04                 | 52.80             | 0.90                 | 6388                        | 31.28                 | 68.72             | 1.17                 | 8313                        |           | 28                             | -                        |  |
| 65              | ETT_SP_30009-T-7A | 18.78     | 23.53                 | 57.69             | 0.70                 | 6804                        | 28.97                 | 71.03             | 0.87                 | 8378                        |           |                                |                          |  |
| 66              | ETT_SP_30009-T-7B | 22.16     | 23.52                 | 54.32             | 0.70                 | 6465                        | 30.22                 | 69.78             | 0.90                 | 8305                        |           |                                |                          |  |
| 67              | ETT_SP_30009-T-7C | 20.15     | 22.40                 | 57.46             | 0.81                 | 6704                        | 28.05                 | 71.95             | 1.01                 | 8396                        |           |                                |                          |  |

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