

Alpha Resources, Inc. Certificate Of Analysis

AR-1723

COAL STANDARD

LOT# 704607 LID# 704607

DRIED BASIS VALUES

| | | |
|---------------------------|---|--------|
| MEAN WEIGHT % SULFUR | = | 0.98 |
| STANDARD DEVIATION | = | 0.04 |
| MEAN WEIGHT % ASH | = | 9.52 |
| STANDARD DEVIATION | = | 0.05 |
| MEAN WEIGHT % VOL. MATTER | = | 32.26 |
| STANDARD DEVIATION | = | 0.66 |
| BTU | = | 14,006 |
| STANDARD DEVIATION | = | 65 |
| % FIXED CARBON | = | 58.27 |
| STANDARD DEVIATION | = | 0.61 |

Methods Employed:

| | | |
|-------------|------|-----------------|
| SULFUR | ASTM | D 4239 METHOD C |
| ASH | ASTM | D 3174 |
| VOL. MATTER | ASTM | D 3175 |
| BTU | ASTM | D 5865 |

Notes:

Sulfur, Ash, and BTU were traced to NIST SRM 2692b.

The material used in production of this standard was sampled in accordance with ARI 031. The above values relate only to the material used to produce this standard.

The overall direction and coordination of the analytical measurements leading to certification was performed by J.R. Shingledecker at Alpha Resources.

Remedies for any claimed defect in this product will be limited to product replacement or refund of the purchase price. In no event shall Alpha Resources be liable for incidental or consequential damages.

This is a Certified Reference Material (CRM). For good laboratory practice it is recommended that all standards be verified prior to use.

Alpha Resources is an ISO/IEC 17025 accredited laboratory. For more information concerning our scope of accreditation contact Alpha Resources.

EXPIRATION DATE
THIS CRM IS VALID FOR TWO YEARS FROM THE DATE OF PURCHASE WHICH
APPEARS ON THE BOTTLE

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Page 1 Of 1