



Certificate of Analysis

AR-2778

ULTIMATE COAL STANDARD

LOT # 778418

LID # 778418

DRIED BASIS VALUES

Table with 5 columns: Proximate Analysis, ASTM, Ultimate Analysis, and ASTM. Rows include % Ash, % Volatile Matter, % Fixed Carbon, % Sulfur, and Btu/lb.

Table with 5 columns: Mineral Analysis Wt.%, ASTM, Sulfur Forms, and two columns for Degrees F. Rows include Silica, Alumina, Titania, Ferric Oxide, Calcium Oxide, Magnesium Oxide, Potassium Oxide, Sodium Oxide, Sulfur Trioxide, Phosphorus Pentoxide, Strontium Oxide, Barium Oxide, Manganese Oxide, and Undetermined (calculated).

REFERENCES USED: Sulfur - NIST SRM 2692c, 2682b, NCS- FC28006j; BTU - NIST 39j; C/H/N - Phenylalanine, EDTA, PC0248; Mineral analysis SRM 2718, 2718a () indicates reference only value

Notes:

The intended use of this standard is for the verification of various tests by the above-mentioned methods. Typical sample size for analytical testing and minimum size is subject to the test method and instrumentation used.

The material used in production of this standard was prepared and sampled in accordance with ARI 041. The samples for round-robin testing were selected in accordance with ARI 031.

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.

EXPIRATION DATE
THIS CRM IS VALID FOR TWO YEARS FROM THE DATE OF OPENING
CERTIFIED July 26, 2018

Handwritten signature of Kent Dyer