

Alpha Resources, Inc. Certificate Of Analysis

**AR-2776
ULTIMATE COAL STANDARD**

LOT #7761097

LID ID 277697

DRIED BASIS VALUES

Proximate Analysis

% Ash..... 8.78
% Volatile Matter..... 36.14
% Fixed Carbon..... 52.25
% Sulfur..... 1.03
Btu..... 13,234

Ultimate Analysis

% Carbon..... 74.84
% Hydrogen..... 5.01
% Nitrogen..... 1.52
% Chlorine..... 0.113

Sulfur Forms

% Pyritic..... 0.21
% Organic..... 0.74
% Sulfate..... 0.01
% Total..... 0.96

Mineral Analysis

Silica..... 54.08	Sodium Oxide..... 0.29
Alumina..... 34.47	Sulfur Trioxide..... 0.62
Titania..... 1.15	Phosphorus Pentoxide..... 0.59
Ferric Oxide..... 4.41	Strontium Oxide..... 0.24
Calcium Oxide..... 1.44	Barium Oxide..... 0.15
Magnesium Oxide..... 0.57	Manganese Oxide..... 0.014
Potassium Oxide..... 1.24	Undetermined..... 0.00

The Following ASTM Procedures Were Employed In The Analysis Of All Samples:

Preparation..... ASTM D 2013	Ash Analysis..... ASTM D 3682
Carbon & Hydrogen..... ASTM D 3178	Chlorine..... ASTM D 2361
Volatile Matter..... ASTM D 3175	Fusibilities..... ASTM D 1857
Sulfur..... ASTM D 3177	BTU..... ASTM D 2015
Nitrogen..... ASTM D 3179	Sulfur Forms..... ASTM D 2492
Ash..... ASTM D 3174	

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.

REVISION: JANUARY 2002 TO REFLECT CORRECTED ASH AND SULFUR VALUES

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

