

Alpha Resources, Inc. Certificate Of Analysis

AR-2775
ULTIMATE COAL STANDARD
LOT # 7751000 LID ID 77500
DRIED BASIS VALUES

Proximate Analysis

% Ash.....	5.898
% Volatile Matter.....	42.74
% Fixed Carbon.....	51.54
% Sulfur.....	0.29
Btu.....	12,054

Ultimate Analysis

% Carbon.....	69.71
% Hydrogen.....	4.26
% Nitrogen.....	0.84
% Sulfur.....	0.29
% Chlorine.....	-----
% Oxygen.....	17.22

Mineral Analysis

Silica.....	32.93
Alumina.....	17.78
Titania.....	1.39
Ferric Oxide.....	4.96
Calcium Oxide.....	23.95
Magnesium Oxide.....	5.56
Potassium Oxide.....	0.39
Sodium Oxide.....	1.85
Sulfur Trioxide.....	8.93
Phosphorus Pentoxide.....	1.03
Strontium Oxide.....	0.27
Barium Oxide.....	0.65
Manganese Oxide.....	0.07
Undetermined.....	-----

Sulfur Forms

% Pyritic.....	0.014
% Organic.....	0.26
% Sulfate.....	0.01
% Total.....	0.29

Ash Fusion Temperature

Initial Deformation Red.....	2107
Initial Deformation Oxd.....	2140
Softening-Red H=W.....	2126
Softening-Oxd H=W.....	2163
Softening-Red H=1/2w.....	-----
Softening-Oxd H=1/2w.....	-----
Fluid-Reducing.....	2164
Fluid-Oxidizing.....	2154
Temperature In Degrees F	

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.

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

