

Alpha Resources, Inc. Certificate Of Analysis

AR-2773
ULTIMATE COAL STANDARD
LOT # PRB2000 LID ID 773400

DRIED BASIS VALUES

Proximate Analysis		Ultimate Analysis	
% Ash.....	7.40	% Carbon.....	69.96
% Volatile Matter.....	42.67	% Hydrogen.....	4.83
% Fixed Carbon.....	49.97	% Nitrogen.....	0.92
Btu.....	11,688	% Sulfur.....	0.46
Mineral Analysis			
Silica.....	36.02	Sodium Oxide.....	1.19
Alumina.....	17.11	Potassium Oxide.....	0.57
Titania.....	1.29	Phosphorus pentoxide.....	0.88
Ferric Oxide.....	5.11	Strontium Oxide.....	0.42
Calcium Oxide.....	21.06	Barium Oxide.....	0.50
Magnesium Oxide.....	4.55	Manganese Oxide.....	0.03
Sulfur Trioxide.....	10.78	Undetermined.....	0.000

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	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.

This is a certified reference material (CRM) and should be verified, prior to use, against a primary standard material provided by a governing agency such as N.I.S.T., when available.

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



P.O. Box 199 3090 Johnson Road Stevensville, MI 49127 USA Phone (269) 362-3629

www.alpharesources.com