

ALF Fly ash



COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 630-953-9300 FAX: 630-953-9306

SINCE 1908*



Member of the SGS Group (Société Générale de Surveillance)

May 30, 2002

ADDRESS ALL CORRESPONDENCE TO:
4665 PARIS STREET
SUITE B-200
DENVER, CO 80239
TEL: (303) 373-4772
FAX: (303) 373-4791
www.comteco.com

TENNESSEE VALLEY AUTHORITY
1101 Market Street PSC 1A
Chattanooga TN 37402
RENEE B. MERRELL

SAMPLE No.: 257738
SAMPLE TYPE: FLY ASH
REMARKS: FLY

Date Received March 5, 2002
Analysis report no. 72-470135

PROXIMATE ANALYSIS

	As Received	Dry Basis
% Moisture	1.61	xxxxxxx
% Ash	62.54	63.56
% Volatile	< 0.01	< 0.01
% Fixed Carbon	35.84	36.43
	100.00	100.00
Btu/lb	5084	5167
% Sulfur	0.86	0.87
MAF Btu/lb	14179	

ULTIMATE ANALYSIS

	As Received	Dry Basis
% Moisture	1.61	xxxxxxx
% Carbon	32.39	32.92
% Hydrogen	0.24	0.24
% Nitrogen	0.32	0.33
% Sulfur	0.86	0.87
% Ash	62.54	63.56
% Oxygen	2.04	2.08
	100.00	100.00

ANALYSIS OF ASH

% Weight Ignited Basis

Silica, SiO ₂	36.31
Alumina, Al ₂ O ₃	18.38
Titania, TiO ₂	1.37
Ferric Oxide, Fe ₂ O ₃	7.72
Lime, CaO	22.29
Magnesia, MgO	4.65
Potassium Oxide, K ₂ O	0.80
Sodium Oxide, Na ₂ O	3.68
Sulfur Trioxide, SO ₃	2.76
Phosphorous Pentoxide, P ₂ O ₅	1.16
Strontium Oxide, SrO	0.20
Barium Oxide, BaO	0.61
Manganese Oxide, Mn ₃ O ₄	0.07
Undetermined	0.00
Alks. as Na ₂ O, Dry Coal Basis	2.67
Base:Acid Ratio	0.70
T250 Temperature	2107

Silica Value	51.16
Type of Ash	LIGNITIC
Fouling Index	3.68
Slagging Index	0.00
% MAF Fixed Carbon	99.97
% MAF Volatile	0.03
lb SO ₂ /mm Btu	3.38
lb Sulfur/mm Btu	1.69
% Air Dry Loss	1.16
As Received Net Sample Wt.	136.20 g



Certificate No. 7061/1

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Denver Laboratory

