

Analytical Results									
Dried Basis Values									
Proximate Analysis		n=	k=	ASTM	Ultimate Analysis		n=	k=	ASTM
% Ash	9.31 ± 0.63	20	2.1	D3174/D7582	% Carbon	72.4 ± 0.69	6	2.6	D5373
% Volatile Matter	35.5 ± 1.3	21	2.1	D3175/D7582	% Hydrogen	4.52 ± 0.75	6	2.6	D5373
% Fixed Carbon (calculated)	(55.2)	--	--	D3172	% Nitrogen	1.42 ± 0.05	6	2.6	D5373
% Sulfur	1.11 ± 0.05	40	2.0	D4239	% Oxygen (calculated)	(11.24)	--	--	D3176
Btu/lb	12723 ± 140	8	2.4	D5865					
Mineral Analysis		n=	k=	ASTM	Sulfur forms		ASTM		
% Silica	47.37 ± 2.39	8	2.4	D4326/D6349	% Pyritic	(0.14)	D2492		
% Alumina	24.79 ± 2.23	8	2.4	D4326/D6349	% Organic (calculated)	(0.91)	D2492		
% Titania	1.11 ± 0.09	8	2.4	D4326/D6349	% Sulfate	(0.06)	D2492		
% Ferric Oxide	12.45 ± 1.01	8	2.4	D4326/D6349	Ash Fusion Temperature		Degrees F	Degrees F	
% Calcium Oxide	4.42 ± 0.29	8	2.4	D4326/D6349	ASTM D1857		Reducing	Oxidizing	
% Magnesium Oxide	1.36 ± 0.13	8	2.4	D4326/D6349	Initial deformation		(2183)	(2468)	
% Potassium Oxide	1.44 ± 0.30	8	2.4	D4326/D6349	Softening		(2370)	(2559)	
% Sodium Oxide	0.64 ± 0.17	8	2.4	D4326/D6349	Hemispherical		(2422)	(2571)	
% Sulfur Trioxide	(4.89)	--	--	D4326/D6349	Fluid/Final		(2505)	(2608)	
% Phosphorus Pentoxide	0.77 ± 0.16	8	2.4	D4326/D6349	% Chlorine D4208/D6721		(0.0185)		
% Strontium Oxide	(0.15)	--	--	D4326/D6349	% Fluorine D3761/D5987		(0.0065)		
% Barium Oxide	0.18 ± 0.02	8	2.4	D4326/D6349					
% Manganese Oxide	(0.11)	--	--	D4326/D6349					
REFERENCES USED: Sulfur - NIST SRM 2692c, 1632d, NCS FC28004f, FC28010e; BTU - NIST 39j(Benzoic Acid); Mineral Analysis – NIST 1632e, 2689, 1634a; Chlorine – SRM 1635a; Fluorine – SRM 1635a. () Indicates reference or information only value.									

**The analytical results above are provided by an accredited reference material manufacturer with a current certification in ISO 17025 and 17034.*

The intended use of this Reference Material (RM) 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 Period of Validity for this RM is 15 years from the date of certification.

This bottle contains 50g of fine coal powder to be used per the test method you follow. Keep sealed tightly and store under normal laboratory conditions. The analytical samples should be dried or corrected for moisture as per the test method you are using.

Refer to your test methods and or manufacturer manual for expanded uncertainties, repeatability/reproducibility factors.

For good laboratory practice, we recommend that all reference materials be verified as fit for purpose prior to use. Remedies for any claimed defect in this product will be limited to product replacement or refund of the purchase price. In no event shall Elemental Microanalysis Ltd. be liable for incidental or consequential damages.

Certified on the 10th of October 2023.

Elemental Microanalysis Ltd