

Alpha Resources, Inc.

Certificate Of Analysis

AR-1720

PROXIMATE COAL STANDARD

LOT #720612 LID # 775612
DRIED BASIS VALUE

MEAN WEIGHT % SULFUR	=	0.32
STANDARD DEVIATION	=	0.05
MEAN WEIGHT % ASH	=	6.60
STANDARD DEVIATION	=	0.51
MEAN WEIGHT % VOL. MATTER	=	42.77
STANDARD DEVIATION	=	0.70
BTU/BTU MAF	=	11644 12466
STANDARD DEVIATION	=	91 157
FIXED CARBON (calculated)	=	50.63
NIST Standards used: SRM 1633b, 2718, 2692b		
Methods Employed:		
SULFUR	ASTM	D 4239
ASH	ASTM	D 3174, D7582
VOL. MATTER	ASTM	D 3175, D7582
BTU	ASTM	D 5865

Notes:

The material used in production of this standard was sampled in accordance with ARI 031 and ISO Guide 34-2009. The precision values represent the expanded standard deviation (k=2, 95% confidence) obtained through analytical testing, and are given for reference only. Normal ASTM procedures should be employed when using this standard, this includes using the *reproducibility* and *repeatability* factors of the test method for establishing analytical uncertainty. When necessary, professional judgment is applied toward consideration of data and statistical information. The statistical analysis and the overall direction and coordination of the analytical measurements leading to certification were performed by K.E. Dyer at Alpha Resources.

The samples for round robin testing were selected in accordance with ARI 014. The above values relate only to the material used to produce this standard. The analytical samples were dried or corrected for moisture as per the test method(s), or per the SRM certificate.

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 (Working Standard) traceable to the above mentioned NMI standards. For good laboratory practice, it is recommended that all standards be verified prior to use.

EXPIRATION DATE

THIS CRM IS VALID FOR TWO YEARS FROM THE DATE OF OPENING

CERTIFIED December 10, 2012



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www.alpharesources.com