

Alpha Resources, Inc. Certificate Of Analysis

AR-2753

MINERAL ANALYSIS STANDARD

LOT # 781001

LID # 781001

WEIGHT PERCENT MINERAL ANALYSIS OF ASH

SILICON DIOXIDE	=	58.82
ALUMINUM DIOXIDE	=	25.01
TITANIUM DIOXIDE	=	1.74
FERRIC OXIDE	=	6.95
CALCIUM OXIDE	=	1.44
MAGNESIUM OXIDE	=	1.07
POTASSIUM OXIDE	=	2.58
SODIUM OXIDE	=	0.29
SULFUR TRIOXIDE	=	1.23
PHOSPHORUS PENTOXIDE	=	0.15
STRONTIUM OXIDE	=	0.14
BARIUM OXIDE	=	0.14
MANGANESE OXIDE	=	0.05
UNDETERMINED	=	1.20

The ash content of the whole coal is 9.72%

Methods
ASTM D 3174
ASTM D 3682

NOTES:

The above value represents the mean from the data, as reported by Alpha Resources' round robin program.

Normal ASTM procedures should be employed when using this standard. This includes using the reproducibility and repeatability factors. Use the reproducibility factor when establishing the first set of data, and then establish an internal repeatability factor as your guideline.

The material used in production of this standard was sampled in accordance with ARI 031. The above values relate only to the material used to produce this standard.

The overall direction and coordination of the analytical measurements leading to certification were performed by J.R. Shingledecker at Alpha Resources.

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 is traceable to the above-mentioned 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 PURCHASE WHICH
APPEARS ON THE BOTTLE**

J.R. Shingledecker

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