

# Alpha Resources, Inc. Certificate Of Analysis

AR 875

**CARBON & SULFUR RING STANDARD**

**LOT # 33626198**

**% CARBON**  
**MEAN = 0.817**  
**ONE SIGMA = 0.004**  
**TWO SIGMA = 0.008**  
**RANGE = 0.805 – 0.827**

**% SULFUR**  
**MEAN = 0.0035**  
**ONE SIGMA = 0.0010**  
**TWO SIGMA = 0.0020**  
**RANGE = 0.0015 – 0.0055**

Method of Analysis is ASTM E 1019  
(Sections 9 through 19)

Primary Standards Employed:  
NIST SRM 363, 155, 153a, 50c, 16f, 134a

Notes:

The mean analytical values were derived by a number of data sets utilizing various ASTM approved instruments.

The precision values represent the standard deviation, two times the standard deviation, and complete range of analysis.

The statistical analysis of the certification was performed by K.E. Dyer at Alpha Resources. This certificate has been revised to reflect a new certified sulfur value on 6/14/2000.

The overall direction and coordination of the analytical measurements leading to certification were performed by K.E. Dyer 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 should be verified, prior to use, against a primary standard material provided by a governing agency such as N.I.S.T., when available.

Certified January, 1998

