Alpha Resources, Inc. Certificate Of Analysis

AR 884

CARBON STEEL PIN STANDARD

LOT # 24809897

% CARBON MEAN = 0.441 ONE SIGMA = 0.004 TWO SIGMA = 0.008 RANGE = 0.434 - 0.448 % SULFUR
MEAN = 0.0113
ONE SIGMA = 0.0006
TWO SIGMA = 0.0012
RANGE = 0.0099 - 0.0126

Method of Analysis is Combustion IR Detection ASTM E 1019 (Latest Revision)

Standards Employed:

NIST Japanese SRM 2160, 10f, 11h, 363

JSS 150-8, 151-9

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.

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 November, 1997

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