## Alpha Resources, Inc. Certificate Of Analysis

## **AR 881**

## CARBON STEEL PIN STANDARD

## LOT # 316ELC997

% CARBON MEAN = 0.0170 ONE SIGMA = 0.0018 TWO SIGMA = 0.0036 RANGE = 0.0144 - 0.0212 % SULFUR
MEAN = 0.0031
ONE SIGMA = 0.0004
TWO SIGMA = 0.0008
RANGE = 0.0024 - 0.0037

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

Standards Employed:

NIST SRM 343a, 348, 2165, 125b

**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 is traceable to the above-mentioned standards. For good laboratory practice it is recommended that all standards be verified prior to use.

Certified September, 1997

Kent Der