

**AR 890**  
**STEEL PIN STANDARD**  
**LOT # 104923A97**

**% CARBON**  
**MEAN = 0.099**  
**ONE SIGMA = 0.004**  
**TWO SIGMA = 0.008**  
**RANGE = 0.0910 – 0.1080**

**% SULFUR**  
**MEAN = 0.018**  
**ONE SIGMA = 0.001**  
**TWO SIGMA = 0.002**  
**RANGE = 0.0165 – 0.0191**

Method of Analysis  
ASTM E 1019 (Latest Revision)

Standards Employed:

NIST	SRM 15g, 8j, 335
British	SRM BCS 464, 456/1

Notes:

The mean values reported is from a number of data sets acquired over different days, using ASTM E 1019 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 October, 1997

