

# Alpha Resources, Inc. Certificate Of Analysis

AR 310

IRON STANDARD

LOT # 61298

**% CARBON**  
**MEAN = 3.43**  
**ONE SIGMA = 0.04**  
**TWO SIGMA = 0.08**  
**RANGE = 3.35 – 3.51**

**% SULFUR**  
**MEAN = 0.100**  
**ONE SIGMA = 0.003**  
**TWO SIGMA = 0.006**  
**RANGE = 0.094 – 0.107**

Method of Analysis is ASTM E 1019  
(Latest Revision)

The certified mean values were derived by a number of data sets provided by different analysts over separate days.

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

Primary Standards Employed were:

NIST	107c, 8j, 122f, 4k
French	CTIF FB-12

Notes:

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 secondary standard reference material, 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 October, 1999

