Alpha Resources, Inc. Certificate Of Analysis

AR-303

CAST IRON STANDARD

LOT # 80902

% CARBON MEAN = 3.90 ONE SIGMA = 0.03 TWO SIGMA = 0.06 RANGE = 3.84 - 3.96

> NIST IRSID

% SULFUR MEAN = 0.012 ONE SIGMA = 0.001 TWO SIGMA = 0.002 RANGE = 0.010 - 0.014

Method of Analysis is ASTM E 1019 (Latest Revision) Primary Standards Employed:

JSS 111-12 Notes: The certified mean values were derived by a number of data sets provided by various laboratories over different days by separate analysts utilizing ASTM approved instruments.

SRM 4L, 341

FB-10-1, 502-1

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

The statistical analysis and 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, 2002

Kent Der

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