

Alpha Resources, Inc.

Certificate Of Analysis

AR 953
HIGH CARBON STEEL CHIP STANDARD
LOT # WI50703

% CARBON
MEAN = 1.01
ONE SIGMA = 0.01
TWO SIGMA = 0.02
RANGE = 0.99 – 1.03

% SULFUR
MEAN = 0.007
ONE SIGMA = 0.001
TWO SIGMA = 0.002
RANGE = 0.005 – 0.009

PPM NITROGEN
MEAN= 100 PPM
ONE SIGMA= 6 PPM
TWO SIGMA= 12 PPM
RANGE= 88 – 112 PPM

Method of Analysis is ASTM E 1019-02
Primary Standards Employed:

NIST	16f, 50c, 134a, 153a, 155, 163, 341, 337, 368
NCS	HC 11001
BCS	265/3
JSS	602-9, CS11-03

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. When necessary, professional judgment is applied toward consideration of data and statistical information.

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.

The material used in production of this standard was sampled in accordance with ARI 032. The above values relate only to the material used to produce this standard.

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 August, 2003



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