Alpha Resources, Inc. Certificate Of Analysis

AR 319

CAST IRON STANDARD

LOT # 113001

% CARBON MEAN = 3.28 ONE SIGMA = 0.03 TWO SIGMA = 0.06 RANGE = 3.22 - 3.34

% SULFUR MEAN = 0.055 ONE SIGMA = 0.003 TWO SIGMA = 0.006 RANGE = 0.049 - 0.061

Method of Analysis is ASTM E 1019-00

Primary Standards Employed:

NIST	SRM 4i, 4j, 4l, 107c
IRSID	502-1, FB10-1
CKD	230
NCS	HC16011
1.6	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.

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.

This standard was produced in accordance to Guide 34. Alpha Resources has become accredited under the ISO Guide 34:2009 for RMP and holds a ISO 17025 accreditation. Refer to certificate and scope of accreditation for details.

Certified April, 2002

Kent Dyer - Technical Manager

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