Alpha Resources, Inc.
Certificate Of Analysis

AR 558
HYDROGEN IN STEEL PIN STANDARD
LOT # 112904

PPM HYDROGEN
MEAN= 7.3 PPM
ONE SIGMA= 0.3 PPM
TWO SIGMA= 0.6PPM
RANGE= 6.7 – 7.9 PPM

Method of Analysis:

1. **Thermal Conductivity by Induction**
2. **Thermal Conductivity by Inert Gas Fusion**

Primary Standards Employed:
Gas Dosing

JSS	**SS-5-18**
NCS	**NS20002**

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 samples for round robin testing were selected in accordance with ARI 014. 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.

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 February, 2005

Kent Dyer - Technical Manager

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