

**AR 557**  
**STEEL BALL STANDARD**

**LOT # 52655198**

**PPM OXYGEN**  
**MEAN = 18**  
**ONE SIGMA = 4**  
**TWO SIGMA = 8**  
**RANGE = 10 - 25**

**PPM NITROGEN**  
**MEAN = 425**  
**ONE SIGMA = 8**  
**TWO SIGMA = 16**  
**RANGE = 410 - 440**

**PPM HYDROGEN**  
**MEAN = 3.7**  
**ONE SIGMA = 0.8**  
**TWO SIGMA = 1.6**  
**RANGE = 2.4 - 4.9**

Nominal sample weight = 1.07g +/- 0.002g

The certified values were determined by inert gas fusion, technique ASTM E 1019.

The instruments used were:

LECO TC-136

LECO TC-436

LECO RH-404

The mean values reported are derived from a number of data sets using the instruments listed above.

The precision value is based on the standard deviation, two times the standard deviation, and complete range of analyses.

The following Primary Standards were used for calibration, gas dose.

NIST SRM     1095, 73c

Japanese JSS

GS-1C, SS-5

China SRM     NC20009

German BAM SRM

238-1, 079-1, 284-1

Notes:

The statistical analysis, 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 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 January, 1998

