# Alpha Resources, Inc. Certificate Of Analysis

#### **AR 669**

## OXYGEN & NITROGEN PIN STANDARD

#### LOT # 182510

PPM OXYGEN
MEAN = 291
ONE SIGMA = 11
TWO SIGMA = 22
RANGE = 269 - 313
PPM NITROGEN
MEAN = 658
ONE SIGMA = 13
TWO SIGMA = 26
RANGE = 632 - 684

Method of analysis is ASTM E 1019 (Latest revision)

The following Primary Standards were used for calibration:

NIST NCS 343a, 1090, 1091a

20017, 20018

## Notes:

The mean values reported were derived from a number of data sets utilizing ASTM approved instruments.

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

The statistical analysis of the certification was performed by K.E. Dyer at Alpha Resources.

The overall direction and coordination of the analytical measurements leading to certification was 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 June, 2001

Kent Dyer