# Alpha Resources, Inc. Certificate Of Analysis

#### **AR-1648**

# OXYGEN & NITROGEN PIN STANDARD

## **LOT # STP502**

PPM OXYGEN	PPM NITROGEN
MEAN = 180	$\mathbf{MEAN} = 73$
ONE SIGMA = 17	ONE SIGMA = 2
TWO SIGMA = 34	TWO SIGMA = 4
RANGE = 146 - 214	$\mathbf{RANGE} = 69 - 77$

Method of Analysis is inert gas fusion ASTM E 1019 (Latest revision)

Standard Reference Materials employed were:

NIST SRM 50c, 163, 368, 1754

JSS GS 5c

NCS NS 20012, 20013

IPT 73

BAM 079-1

## Notes:

The mean value reported is from a number of data sets acquired over different days by different analysts utilizing ASTM E 1019 approved instruments.

The precision value is based on 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.

Certified September, 2002

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