

Alpha Resources, Inc. Certificate Of Analysis

AR 649
TITANIUM STANDARD
LOT # 010901

PPM OXYGEN
MEAN = 810
ONE SIGMA = 40
TWO SIGMA = 80
RANGE = 730 - 890

PPM NITROGEN
MEAN = 119
ONE SIGMA = 12
TWO SIGMA = 24
RANGE = 95 - 143

PPM HYDROGEN
MEAN = 200
ONE SIGMA = 7
TWO SIGMA = 14
RANGE = 186 - 214

The certified values were determined by the inert gas fusion techniques only.
Instruments used were:
LECO TC-436, LECO RH-404, LECO TC-136, NRC 917, LECO RO-416DR

The following Primary Standards were used for calibration.

Gas Dose
NIST SRM 352c, 353, 357
China NCS 57003
Belgium BCR CRM 24, 276

Notes

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. K.E. Dyer at Alpha Resources performed the statistical analysis, overall direction, and coordination of the analytical measurements leading to certification.

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 April, 2001

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