

Alpha Resources, Inc.

Certificate Of Analysis

AR 650

TITANIUM STANDARD

LOT # 860625

PPM OXYGEN
MEAN = 1913
ONE SIGMA = 65
TWO SIGMA = 130
RANGE = 1799 - 2027

PPM NITROGEN
MEAN = 330
ONE SIGMA = 36
TWO SIGMA = 72
RANGE = 270 - 391

PPM HYDROGEN
MEAN = 62
ONE SIGMA = 5
TWO SIGMA = 10
RANGE = 52 - 72

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

The following Primary Standards were used for calibration (Gas Dose).

NIST SRM 352c, 355, 176, 356

China NCS 57004

Belgium BCR CRM 24

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.

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 is traceable to the above-mentioned standards. For good laboratory practice it is recommended that all standards be verified prior to use.

Certified July, 1998

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