

Alpha Resources, Inc. Certificate Of Analysis

AR 637

TITANIUM STANDARD

LOT # 29C97

PPM OXYGEN
MEAN = 1250
ONE SIGMA = 26
TWO SIGMA = 52
RANGE = 1202 - 1297

PPM NITROGEN
MEAN = 122
ONE SIGMA = 9
TWO SIGMA = 18
RANGE = 104 - 140

PPM HYDROGEN
MEAN = 25
ONE SIGMA = 4
TWO SIGMA = 8
RANGE = 18 - 32

The certified values were determined by inert gas fusion and vacuum hot extraction techniques.

Instruments used were:

LECO TC-136, TC-436, RH-404
NRC Model 917

The following primary standards were used for calibration.
Gas dose, NIST SRM 3532c, China NCS, Belgium BCR CRM 24

Notes

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


The precision values are 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 and statistical data 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 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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