



Certificate of Analysis

Tungsten
AA Standard

Catalog Number: IAA-274
Lot Number: L00213
Job Number: J00011073
Lot Issue Date: 03/05/2010
Expiration Date: 04/30/2017

This Certified Reference Material (CRM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system. The analyte concentrations were verified by our ISO 17025 accredited laboratory to be within $\pm 2.5\%$, when compared to calibration standards independently prepared using NIST SRM(s). The certified value and uncertainty value for each analyte is determined gravimetrically.

Analyte	True Value			Analytical Method	NIST SRM
tungsten	1000	$\pm$	3 $\mu\text{g/mL}$	ICP / ICP-MS	3163

Matrix: trace ammonium hydroxide (0.5%) in low TOC water (< 50 ppb)

ULTRA uses purified acids, 18 megohm double deionized water, calibrated Class A glassware and cleaned bottles in the manufacture of ULTRAgrade standards. Balances used in the manufacture of this standard are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001.



ISO 17025:2005
Accredited
A2LA
Cert. No. 0851.01

ISO 9001:2000
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