

# Certificate of Analysis

**CLP Graphite Furnace AA Standard #1**

**Catalog Number: ICM-461**

**Lot Number: K01192Z**

**Job Number: J00010573**

**Lot Issue Date: 03/24/2015**

**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  $\pm 5.0\%$ , 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
antimony	100.0	$\pm$	0.5	$\mu\text{g/mL}$	ICP / ICP-MS	3102a
arsenic	50.00	$\pm$	0.25	$\mu\text{g/mL}$	ICP / ICP-MS	3103a
cadmium	10.00	$\pm$	0.05	$\mu\text{g/mL}$	ICP / ICP-MS	3108
lead	50.00	$\pm$	0.25	$\mu\text{g/mL}$	ICP / ICP-MS	3128
selenium	100.0	$\pm$	0.5	$\mu\text{g/mL}$	ICP / ICP-MS	3149
thallium	50.00	$\pm$	0.25	$\mu\text{g/mL}$	ICP / ICP-MS	3158

Matrix: 5% nitric acid, trace tartaric acid in low TOC water (< 50 ppb)

ULTRA uses purified acids, 18 megohm double deionized water, calibrated Class A glassware & meticulously cleaned bottles in the manufacturing of ULTRA grade standards. Balances used in the manufacturing 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  
Registered  
TUV USA, Inc.  
Cert. No. 06-1004



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