

Certificate of Analysis

Custom Standard**Catalog Number: ICUS-3940****Lot Number: CP-1010****Lot Issue Date: 03/07/2016****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 concentration(s) were prepared and verified by an ISO Guide 34 / ISO 17025 accredited laboratory, and compared to calibration standards independently prepared using NIST SRM(s). The certified value and uncertainty value at the 95% confidence level for each analyte is determined gravimetrically.

Analyte	True Value			Analytical Method		NIST SRM
arsenic	1002	±	5	µg/L	ICP / ICP-MS	3103a
cadmium	100.1	±	0.5	µg/L	ICP / ICP-MS	3108
lead	100.1	±	0.5	µg/L	ICP / ICP-MS	3128
chromium	1001	±	5	µg/L	ICP / ICP-MS	3112a
copper	1001	±	5	µg/L	ICP / ICP-MS	3114
nickel	1000	±	5	µg/L	ICP / ICP-MS	3136
* vanadium	1002	±	5	µg/L	ICP / ICP-MS	3165

Matrix: 2% nitric acid, trace hydrofluoric acid in low TOC water (< 50 ppb)

** light sensitive*

ULTRA uses purified acids, 18 megaohm double deionized water, calibrated Class A glassware, and 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.