



# Certificate of Analysis

**CLP ICP Calibration Verification Standard #3**

**Catalog Number: ICM-433**

**Lot Number: CS-1484**

**Lot Issue Date: 03/28/2018**

**Expiration Date: 04/30/2021**

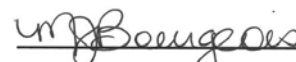
This Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system. The analyte concentration(s) were prepared and verified by an ISO Guide 34 / ISO 17025 accredited laboratory, and compared to calibration standards independently prepared using NIST 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	500.4	±	2.5	µg/mL	ICP / ICP-MS	3103
cadmium	250.1	±	1.3	µg/mL	ICP / ICP-MS	3108
lead	500.4	±	2.5	µg/mL	ICP / ICP-MS	3128
selenium	500.1	±	2.5	µg/mL	ICP / ICP-MS	3149
thallium	500.2	±	2.5	µg/mL	ICP / ICP-MS	3158

**Matrix:** 5% nitric acid in low TOC water (< 50 ppb)

ULTRA uses purified acids, 18 megaohm double deionized water, calibrated Class A glassware, and meticulously cleaned bottles in the manufacturing of ULTRAgrade 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.

  
John Russo  
President

  
Monica Bourgeois  
Director of QA/RA



ISO 9001 Registered Quality System – TUV USA