

# Certificate of Analysis

**CLP ICP Calibration Standard #3**

**Catalog Number: ICM-413**

**Lot Number: CR-4872**

**Lot Issue Date: 10/27/2017**

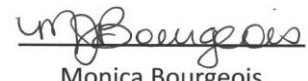
**Expiration Date: 11/30/2021**

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	
cadmium	500.8	±	2.5	µg/mL	ICP / ICP-MS	3108
arsenic	1001	±	5	µg/mL	ICP / ICP-MS	3103a
thallium	1001	±	5	µg/mL	ICP / ICP-MS	3158
lead	1002	±	5	µg/mL	ICP / ICP-MS	3128
selenium	1002	±	5	µg/mL	ICP / ICP-MS	3149

**Matrix:** 2% 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