

# Certificate of Analysis

**TCLP Analytes Mixture****Catalog Number: ICM-641****Lot Number: CM-3319****Lot Issue Date: 06/17/2015****Expiration Date: 07/31/2019**

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  | 25.0       | ± | 0.1  | µg/mL             | ICP / ICP-MS | 3103a    |
| barium   | 500.4      | ± | 2.5  | µg/mL             | ICP / ICP-MS | 3104a    |
| cadmium  | 5.01       | ± | 0.03 | µg/mL             | ICP / ICP-MS | 3108     |
| chromium | 25.0       | ± | 0.1  | µg/mL             | ICP / ICP-MS | 3112a    |
| lead     | 25.0       | ± | 0.1  | µg/mL             | ICP / ICP-MS | 3128     |
| selenium | 5.01       | ± | 0.03 | µg/mL             | ICP / ICP-MS | 3149     |
| * silver | 25.0       | ± | 0.1  | µg/mL             | ICP / ICP-MS | 3151     |

**Matrix:** 2% nitric 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.