



# Certificate of Analysis

EPA Method 200.7

LPC Solution A

Catalog Number: ICM-240A

Lot Number: P00643

Job Number: J00014863

Lot Issue Date: 06/25/2012

Expiration Date: 07/31/2016

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 at the 95% confidence level for each analyte is determined gravimetrically.

| Analyte    | True Value |       |      |                  | Analytical Method | NIST SRM |
|------------|------------|-------|------|------------------|-------------------|----------|
| aluminum   | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3101a    |
| arsenic    | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3103a    |
| barium     | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3104a    |
| beryllium  | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3105a    |
| boron      | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3107     |
| cadmium    | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3108     |
| calcium    | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3109a    |
| cerium     | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3110     |
| chromium   | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3112a    |
| cobalt     | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3113     |
| copper     | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3114     |
| iron       | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3126a    |
| lead       | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3128     |
| lithium    | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3129a    |
| magnesium  | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3131a    |
| manganese  | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3132     |
| * mercury  | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3133     |
| nickel     | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3136     |
| phosphorus | 1000       | $\pm$ | 5    | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3139a    |
| potassium  | 1000       | $\pm$ | 5    | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3141a    |
| selenium   | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3149     |
| * silver   | 25.00      | $\pm$ | 0.13 | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3151     |
| sodium     | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3152a    |
| strontium  | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3153a    |
| thallium   | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3158     |
| * vanadium | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3165     |
| zinc       | 200.0      | $\pm$ | 1.0  | $\mu\text{g/mL}$ | ICP / ICP-MS      | 3168a    |

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

\* *light sensitive*

ULTRA uses purified acids, 18 megohm double deionized water, calibrated Class A glassware & 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



ISO 17025:2005  
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Cert. No. 06-1004

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