

Certificate of Analysis

EPA Method 200.7 Mixed Calibration Std #1

Catalog Number: ICM-231

Lot Number: R01144

Lot Issue Date: 10/29/2013

Expiration Date: 11/30/2017

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. The certified value and uncertainty value at the 95% confidence level for each analyte is determined gravimetrically.

Analyte	True Value				Analytical Method	NIST SRM
antimony	50.0	±	0.3	µg/mL	ICP / ICP-MS	3102a
arsenic	100.0	±	0.5	µg/mL	ICP / ICP-MS	3103a
barium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3104a
boron	20.0	±	0.1	µg/mL	ICP / ICP-MS	3107
cadmium	20.0	±	0.1	µg/mL	ICP / ICP-MS	3108
calcium	100.0	±	0.5	µg/mL	ICP / ICP-MS	3109a
copper	20.0	±	0.1	µg/mL	ICP / ICP-MS	3114
manganese	20.0	±	0.1	µg/mL	ICP / ICP-MS	3132
selenium	50.0	±	0.3	µg/mL	ICP / ICP-MS	3149
* silver	5.00	±	0.03	µg/mL	ICP / ICP-MS	3151

Matrix: 2% nitric acid, with trace tartaric 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 ULTRAgrade standards. Balances used in the manufacturing of this standard are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001.