

Certificate of Analysis

EPA Method 6020A Calibration Standard
Catalog Number: ICM-630
Lot Number: P01113
Job Number: J00015352
Lot Issue Date: 10/25/2012
Expiration Date: 11/30/2015

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	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3101a
antimony	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3102a
arsenic	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3103a
barium	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3104a
beryllium	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3105a
cadmium	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3108
calcium	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3109a
chromium	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3112a
cobalt	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3113
copper	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3114
iron	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3126a
lead	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3128
magnesium	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3131a
manganese	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3132
nickel	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3136
potassium	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3141a
selenium	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3149
* silver	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3151
sodium	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3152a
thallium	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3158
* vanadium	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3165
zinc	20.00	$\pm$	0.10	$\mu\text{g/mL}$	ICP / ICP-MS	3168a

Matrix: 5% nitric acid, trace tartaric acid in low TOC water (< 50 ppb)

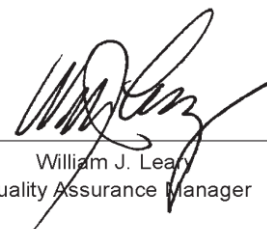
* light sensitive

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 v traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001



ISO 17025:2005
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ISO 9001:2000
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