

Water Sciences Laboratory

Analyte/Protocol Price List

2024



Nebraska Water Center
 Daugherty Water for Food Global Institute

Elemental MS :: Water

Nebraska Water Center, a part of the
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Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
<p>Dissolved Elements using ICP-MS (Per Element) Protocol ID: 19_01_01</p> <div style="border: 1px solid black; padding: 2px; margin: 5px 0;"> *Protocol cost is per analyte, 20% discount for >5 analytes </div> <p>Sample Container: 125 mL polyethylene bottle Sample Size: 50 mL Preservation: Add nitric acid to pH < 2, Cool, < 6°C Holding Time: 28 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>Reference: (2007), "EPA 6020A Inductively Coupled Plasma - Mass Spectrometry".</p>	Aluminum	0.1 µg/L	\$18.90*	\$15.12*
	Antimony	0.003 µg/L		
	Arsenic	0.007 µg/L		
	Barium	0.006 µg/L		
	Beryllium	0.07 µg/L		
	Bismuth	Pending		
	Boron	0.3 µg/L		
	Cadmium	0.002 µg/L		
	Cerium	0.003 µg/L		
	Chromium	0.003 µg/L		
	Cobalt	0.004 µg/L		
	Copper	0.004 µg/L		
	Europium	0.002 µg/L		
	Gadolinium	0.002 µg/L		
	Gold	0.02 µg/L		
	Hafnium	Pending		
	Indium	0.003 µg/L		
	Iodide	0.2 µg/L		
	Iron	0.01 µg/L		
	Lanthanum	0.003 µg/L		
	Lead	0.003 µg/L		
	Lithium	0.07 µg/L		
	Manganese	0.005 µg/L		
Molybdenum	0.006 µg/L			
Neodymium	0.002 µg/L			
Nickel	0.003 µg/L			
Phosphorus	0.9 µg/L			
Platinum	Pending			
Praseodymium	0.003 µg/L			

Turnaround times are subject to existing sample queues Reporting Limits are subject to verification

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
	Samarium Scandium Selenium Silicon Silver Strontium Tellurium Thallium Thorium Tin Tungsten Uranium Vanadium Yttrium Zinc Zirconium	0.003 µg/L 0.02 µg/L 0.02 µg/L Pending 0.002 µg/L 0.006 µg/L Pending 0.002 µg/L 0.02 µg/L 0.02 µg/L 0.1 µg/L 0.003 µg/L 0.005 µg/L 0.003 µg/L 0.01 µg/L 0.007 µg/L		
<p>Groundwater Quality Metal Scan Protocol ID: 19_02_01</p> <p>Sample Container: 125 mL polyethylene bottle Sample Size: 50 mL Preservation: Add nitric acid to pH < 2, Cool, < 6°C Holding Time: 28 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>Reference: (2007), "EPA 6020A Inductively Coupled Plasma - Mass Spectrometry".</p>	Arsenic Cadmium Chromium Copper Iron Manganese Selenium Uranium Zinc	0.007 µg/L 0.002 µg/L 0.003 µg/L 0.004 µg/L 0.01 µg/L 0.005 µg/L 0.02 µg/L 0.003 µg/L 0.01 µg/L	\$120.00	\$96.00
<p>Semi-Quantitative Elemental Analysis using ICP-MS Protocol ID: 19_05_01</p> <p>Sample Container: 125 mL polyethylene bottle Sample Size: 250 mL Preservation: Add nitric acid to pH < 2, Cool, < 6°C Holding Time: 28 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>Reference:</p>	Individual elements		\$69.30	\$55.44

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Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
(1994), "EPA 200.8 Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma - Mass Spectrometry".				
<p>Arsenic/Selenium Speciation using IC-ICP-MS Protocol ID: 19_07_01</p> <p>Sample Container: 125 mL polyethylene bottle Sample Size: 50 mL Preservation: Edta 500 Holding Time: 28 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>References: Ammann, A. A. (2002), "Speciation of heavy metals in environmental water by ion chromatography coupled to ICP-MS", <i>Anal. Bioanal. Chem.</i> 372, 448-452. Barrero Moreno, J. M.; Garcia Alonso, J. I.; Arbore, P.; Nicolaou, G.; Koch, L. (1996), "Characterization of Spent Nuclear Fuels by Ion Chromatography-Inductively Coupled Plasma Mass Spectrometry", <i>J. Anal. At. Spectrom.</i> 11, 929-935.</p>	<p>Arsenic (III) Arsenic (V) Selenium (IV) Selenium (VI)</p>	<p>0.1 µg/L 0.07 µg/L 0.2 µg/L 0.2 µg/L</p>	<p>\$105.00</p>	<p>\$84.00</p>
<p>Acid-Leachable Elements in Water using ICP-MS Protocol ID: 19_08_01</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>*Protocol cost is per analyte, 20% discount for >5 analytes &Add digestion charge of \$9.40/sample</p> </div> <p>Sample Container: 125 mL polyethylene bottle Sample Size: 125 mL Preservation: Add nitric acid to pH < 2, Cool, < 6°C Holding Time: 28 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>References: A.E. Greenberg; L.S. Clesceri; A.D. Eaton, Eds.; American Public Health Association; American Water Works Association; Water Environment Federation (1992), "Standard Methods for the Examination of Water and Wastewater", 18th Edition,</p>	<p>%Indium Aluminum Antimony Arsenic Barium Cadmium Chromium Cobalt Copper Gold Indium Iodide Iron Lanthanum Lead Lithium Manganese Mercury Molybdenum</p>	<p>0.2 % 0.5 µg/L 0.1 µg/L 0.7 µg/L 0.5 µg/L 0.3 µg/L 0.1 µg/L 0.2 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 0.1 µg/L 0.5 µg/L 0.5 µg/L 0.2 µg/L 0.5 µg/L</p>	<p>\$18.90*&</p>	<p>\$15.12*&</p>

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Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
<p>A.E. Greenberg; L.S. Clesceri; A.D. Eaton, Eds.; American Public Health Association; American Water Works Association; Water Environment Federation (1992), "Standard Methods for the Examination of Water and Wastewater", 18th Edition,</p>	<p>Neodymium Nickel Platinum Praseodymium Samarium Scandium Selenium Silver Strontium Tellurium Thallium Thorium Tin Tungsten Uranium Vanadium Yttrium Zinc Zirconium</p>	<p>0.5 µg/L 0.3 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 4 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L</p>		
<p>Inorganic Mercury using ICP-MS Protocol ID: 19_09_01</p> <p>Sample Container: 125 mL polyethylene bottle Sample Size: 50 mL Preservation: Add nitric acid to pH < 2, Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>Reference: Kulomaki, S.; Permaki, S.; Vaisanen, A. (2020), "Addition of thiourea and hydrochloric acid: Accurate nanogram level analysis of mercury in humic-rich natural waters by inductively coupled plasma mass spectrometry", <i>Talanta</i> 218, 121125.</p>	<p>Mercury</p>	<p>0.2 µg/L</p>	<p>\$18.90</p>	<p>\$15.12</p>

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Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
<p>Mercury Species using IC-ICP-MS Protocol ID: 19_10_01</p> <p>Sample Container: 125 mL polyethylene bottle Sample Size: 10 mL Preservation: Add nitric acid to pH < 2, Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>References: Amde, M.; Yin, Y.; Zhang, D.; Liu, J. (2016), "Methods and recent advances in speciation analysis of mercury chemical species in environmental samples: a review", <i>Chem. Spec. & Bioavailability</i> 28(1-4), 51-65.</p> <p>Chen, D.; Jing, M.; Wang, X. (2005), "Determination of Methyl Mercury in Water and Soil by HPLC-ICP-MS", <i>Agilent Application Note</i></p>	<p>Ethylmercury Inorganic Mercury Methylmercury</p>	<p>Pending Pending Pending</p>	<p>\$80.00</p>	<p>\$64.00</p>
<p>Major Elements in Water using ICP-OES Protocol ID: 21_01_01</p> <p>Sample Container: 125 mL polyethylene bottle Sample Size: 50 mL Preservation: Add nitric acid to pH < 2, Cool, < 6°C Holding Time: 28 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>Reference: (2018), "EPA 6010D Inductively Coupled Plasma-Optical Emission Spectrometry (ICP-OES)".</p>	<p>Aluminum Boron Calcium Copper Iron Lithium Magnesium Manganese Potassium Sodium</p>	<p>0.003 mg/L Pending 0.002 mg/L 0.008 mg/L 0.006 mg/L Pending 0.005 mg/L 0.002 mg/L 0.002 mg/L 0.002 mg/L</p>	<p>\$30.00</p>	<p>\$24.00</p>
<p>Acid-Leachable Elements using ICP-OES (Water) Protocol ID: 21_01_04</p> <div style="border: 1px solid black; padding: 2px; margin: 5px 0;"> <p>&Add digestion charge of \$9.40/sample</p> </div> <p>Sample Container: 125 mL polyethylene bottle Sample Size: 125 mL Preservation: Add nitric acid to pH < 2, Cool, < 6°C Holding Time: 28 Days</p>	<p>Aluminum Calcium Copper Iron Magnesium Manganese Potassium Sodium</p>	<p>0.01 mg/L 0.01 mg/L 0.01 mg/L 0.01 mg/L 0.01 mg/L 0.01 mg/L 0.01 mg/L 0.01 mg/L</p>	<p>\$30.00&</p>	<p>\$24.00&</p>

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Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
Estimated Turnaround Time: 6-8 Weeks				

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