

Volunteer Monitoring Lab Analysis Monitoring Suite and Prices –2023

Shipping:	Energy Lab will ship bottles and coolers free of charge. The cost to ship samples to Energy Lab is \$35 per cooler and shipping costs must be included in your analytical budget, if applicable. Depending on the quantity of samples collected per sampling event, more than one cooler may be necessary and shipping costs should be calculated accordingly. There is no shipping cost if samples are hand-delivered.
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Parameter	Required Method	Required Reporting Limit (µg/L)	Holding Time (days unless noted)	Bottle	Preservative	Price (\$)
WATER - Nutrients						
Total Persulfate Nitrogen (TN)	A4500-N C	40	28	250 ml HDPE	≤6°C on ice	22.40
Total Phosphorus as P	EPA 365.1	3	28	250 ml HDPE	H ₂ SO ₄ ; ≤6°C on ice	17.60
Nitrate-Nitrite as N	EPA 353.2	10				20
Total Ammonia as N	EPA 350.1	50				16
Dissolved Orthophosphate	EPA 365.1	1	45 if frozen; 2 if on ice	250 ml HDPE	Field filter 0.45 µm; freeze or ≤6°C on ice	17.60
WATER - Common Ions, Miscellaneous						
Total Suspended Solids (TSS)	A2540 D	4000	7	1000 ml or 500 ml HDPE	≤6°C on ice	14.40
Total Dissolved Solids (TDS)	A2540 C	4000	7			17.60
Volatile Suspended Solids (VSS)	A2540 E	4000	7			16
Alkalinity (Bicarb., Carb.)	A2320 B	1000	14	250 ml HDPE	≤6°C on ice	9.60
Sulfate	EPA 300.0	50	28			9.60
Chloride	EPA 300.0	50	28			9.60
Bromide	EPA 300.0	50	28			9.60
Fluoride	EPA 300.0	50	28			9.60
Sulfide	A4500-S2 D	1000	7	250 ml HDPE	Zinc Acetate + NaOH to pH >9; ≤6°C on ice	52
Biochemical Oxygen Demand (BOD ₅)	A5210 B	2000	2	1000 ml HDPE	≤6°C on ice	48
Carbonaceous Biochemical Oxygen Demand (CBOD ₅)	A5210 B	2000	2			48
Total Organic Carbon (TOC)	A5310 C	500	28	125ml amber glass	H ₂ SO ₄ ; ≤6°C on ice	32
Dissolved Organic Carbon (DOC)	A5310 B	500	28	125ml amber glass	Field filter 0.45 µm, H ₂ SO ₄ ; ≤6°C on ice	32
Calcium	EPA 200.7	1000	180	250 ml HDPE	HNO ₃ ; ≤6°C on ice	9.60
Magnesium	EPA 200.7	1000				9.60
Sodium	EPA 200.7	1000				9.60
Potassium	EPA 200.7	1000				9.60
Total Hardness as CaCO ₃	A2340 B (Calculated)	1000				No charge if Ca and Mg are analyzed.

Parameter	Required Method	Required Reporting Limit (µg/L)	Holding Time (days unless noted)	Bottle	Preservative	Price (\$)
Sodium Adsorption Ratio (SAR)	Calculated					No charge if Ca, Mg and Na are analyzed.
WATER - Pathogens						
E. Coli	A9223 B	1 MPN/100 ml	6 hours	100 ml HDPE	≤10°C; avoid freezing	44
WATER - Dissolved Metals						
Aluminum	EPA 200.7	9	180	250 ml HDPE	Field filter 0.45 µm; HNO ₃ ; ≤6°C on ice	9.60
Arsenic	EPA 200.8	1				9.60
Barium	EPA 200.7	3				9.60
Cadmium	EPA 200.8	0.03				9.60
Chromium	EPA 200.8	1				9.60
Copper	EPA 200.8	1				9.60
Iron	EPA 200.7	20				9.60
Lead	EPA 200.8	0.3				9.60
Selenium	EPA 200.8	1				9.60
Silver	EPA 200.8	0.2				9.60
Uranium	EPA 200.8	0.2				9.60
Zinc	EPA 200.7	8				9.60
WATER - Total Recoverable Metals (must include TR metals digestion if any of these analytes are included)						
Total Recoverable Metals Digestion	EPA 200.2	N/A	180	250 ml HDPE	HNO ₃ ; ≤6°C on ice	13.60
Arsenic	EPA 200.8	1				9.60
Barium	EPA 200.7	3				9.60
Cadmium	EPA 200.8	0.03				9.60
Chromium	EPA 200.8	1				9.60
Copper	EPA 200.8	1				9.60
Iron	EPA 200.7	20				9.60
Lead	EPA 200.8	0.3				9.60
Selenium	EPA 200.8	1				9.60
Silver	EPA 200.8	0.2				9.60
Uranium	EPA 200.8	0.2				9.60
Zinc	EPA 200.7	8				9.60
Beryllium	EPA 200.7	0.8				9.60
Boron	EPA 200.7	10				9.60
Manganese	EPA 200.7	5				9.60
Nickel	EPA 200.7	2				9.60
Strontium	EPA 200.7	20				9.60
Thallium	EPA 200.8	0.2				9.60
Mercury	EPA 245.1	0.05	28	100 ml glass	HNO ₃	40
Mercury, Ultra low level	EPA 245.7	0.005	28	100 ml glass	0.5 ml 12N HCl; ≤6°C on ice	40
SEDIMENT - Total Recoverable Metals (must include sediment metals digestion if any of these analytes are included)						

Parameter	Required Method	Required Reporting Limit (µg/L)	Holding Time (days unless noted)	Bottle	Preservative	Price (\$)
Sediment Metals Digestion	A2340 B (Calculated)	1000	180	2000 ml HDPE, widemouth	≤6°C on ice	13.60
Arsenic	EPA 200.8	1 mg/kg dry weight				9.60
Cadmium	EPA 200.8	0.2 mg/kg dry weight				9.60
Chromium	EPA 200.8	9 mg/kg dry weight				9.60
Copper	EPA 200.8	15 mg/kg dry weight				9.60
Iron	EPA 200.7	10 mg/kg dry weight				9.60
Lead	EPA 200.8	5 mg/kg dry weight				9.60
Mercury	EPA 7471B	0.05 mg/kg dry weight				38.40
Zinc	EPA 200.7	20 mg/kg dry weight				9.60
PCBs	EPA 8082A	0.033 mg/kg dry weight	28	125 ml glass with teflon lid	≤6°C on ice	96
ALGAE						
Benthic or FA Chlorophyll-a	A 10200 H		45	Hoop in ziplock, core in centrifuge tube, template in petri dish; covered in foil	Freeze	56
Ash Free Dry Weight (AFDW) benthic or FA algae	A 10300 C (5)					52
PHYTOPLANKTON						
Phytoplankton Chlorophyll-a	A10200H			Filter in Petri dish; covered in foil	Freeze	56
Phytoplankton Ash Free Dry Weight (AFDW)	A10300 C(5)					52