



FRL Laboratory Manager: Adam J. Baumann  
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### FRESHWATER RESEARCH LAB SAMPLE ANALYSIS PRICING

Parameter	Units	Method Reference	Reporting Limit	Target Holding Time (days)	Filtration	Preservation	Price (\$)	Combo Price (\$)
<b>NUTRIENTS</b>								
Total Phosphorus as P	µg/L	USGS 03-4174, EPA 365.1	1.5	28	n.a.	Freeze or 0.2% H <sub>2</sub> SO <sub>4</sub> (v/v)	20	31
Total Nitrogen as N	µg/L	USGS 03-4174, EPA 353.2	25.0				21	
Soluble Reactive Phosphorus	µg/L	EPA 365.1	0.8		0.45µm		14	23
Nitrate-Nitrite as N	µg/L	EPA 353.2	1.5				15	
Ammonia as N	µg/L	DPA 350.1	1.5			14		
Reactive Silica as SiO <sub>2</sub>	mg/L	EPA 370.1	0.10			14		
Total Organic Carbon	mg/L	EPA 415.1	0.10		n.a.	0.2% H <sub>3</sub> PO <sub>4</sub> (v/v)	13	
Dissolved Organic Carbon	mg/L	EPA 415.1	0.10		0.45µm		13	
<b>COMMON IONS, OTHER</b>								
Chloride	mg/L	EPA 300.1	0.025	28	0.45µm	Freeze or 4°C if analyzed for cations	17	29
Sulfate	mg/L	EPA 300.1	0.040					
Sodium	mg/L	ASTM D6919-03	0.025			0.2% HNO <sub>3</sub> or 4°C if analyzed for anions	17	
Potassium	mg/L	ASTM D6919-03	0.025					
Magnesium	mg/L	ASTM D6919-03	0.025					
Calcium	mg/L	ASTM D6919-03	0.050					
Alkalinity	mg CaCO <sub>3</sub> /L	SM 2320-B	5	14	n.a.	4°C	17	
Total Suspended Solids	mg/L	SM 2540-D	0.2	7			16	
Total Dissolved Solids	mg/L	SM 2540-C	20	7			16	
Turbidity	NTU	SM 2130-B	0.100	48 hours			10	
pH	Units	EPA 150.1	n.a.	48 hours			10	



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<b>BIOMASS</b>								
Chlorophyll-a	µg/L	EPA 445.0	0.10	28	0.45µm	4°C if raw water or Freeze if on filter	16	
Ash Free Dry Mass	mg/L	SM 2540-E	0.5		GF/F		15	
<b>PATHOGENS</b>								
E. Coli	cfu/100mL	HACH 10029	1	24 hours	n.a.	4°C	35	

<b>Filtration:</b>	Prices listed do not include filtration costs. Samples that need to be filtered in the laboratory upon arrival will be charged an additional \$10 per sample (not per parameter). Customers can be trained to field filter as an alternative.
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<b>Bottles/Coolers:</b>	MMW will ship coolers and bottles from FRL at no cost to customers. Return shipping costs are billed at \$15 per cooler. There is no charge to hand deliver samples. *MMW sample analyses funding can be used to pay for shipping costs.
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For assistance from MMW contact Dr. Rachel Malison at [mmw@flbs.umt.edu](mailto:mmw@flbs.umt.edu) or (406) 872-4518, or visit our webpage: <http://flbs.umt.edu/newflbs/outreach/mmw>