

Nutrient and Water Analysis Laboratory (NaWA)

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Sample Analysis and Price List: July 2020

All prices include costs of: filters (0.7 μm or 0.2 μm nominal pore size), standards, NIST traceable standards, reagents, eluents and consumables. Blanks, replicate samples, check standards and NIST traceable standards are run every 10th sample for QAQC. **Samples are assumed to have a water matrix.** Matrix issues (extractions with KCl, K₂SO₄ etc., and/or required dilutions incur a 20% surcharge for staff run samples). Student costs include training on making standards, reagents and running the instrument. Students MUST undergo hazard training and present a copy of their certificate before running analysis.

Analysis	Anions (F ⁻ , Cl ⁻ , Br ⁻ , SO ₄ ²⁻)		
Description	Aquion 2000 Ion chromatography w/ suppressed conductivity. Water Matrix only		
Method	Anions EPA #300.1		
Cost per sample	Staff Run	Student Trained and Run	
< 20	\$17	\$14	
21+	\$14	\$12	
Analyte	Units	MDL	Typical Range
F ⁻	mg/L	0.05	0-1
Cl ⁻	mg/L	0.02	0 - 100
Br ⁻	mg/L	0.05	0-1
SO ₄ ²⁻	mg/L	0.04	0 - 10

Analysis	Cations (Na ⁺ , K ⁺ , Mg ²⁺ , Ca ²⁺)		
Description	DIONEX 1000 Ion chromatography w/ suppressed conductivity. Water Matrix only		
Method	Anions EPA #300.1		
Cost per sample	Staff Run	Student Trained and Run	
< 20	\$17	\$13	
21+	\$12	\$9	
Analyte	Units	MDL	Typical Range
Na ⁺	mg/L	0.1	0-300
K ⁺	mg/L	0.05	0-30
Mg ²⁺	mg/L	0.1	0-30
Ca ²⁺	mg/L	0.1	0-30

Analysis	Nitrate-N +Nitrite-N		
Description	Colorimetric with automated Cd-Cu reduction		
Method	EPA 353.2		
Cost per sample	Staff Run	Student Trained and Run	
< 20	\$13	\$11	
21+	\$9	\$7	
Analyte	Units	MDL	Typical Range
NO ₂ -N+NO ₃ -N	mg/L	0.005	0-10

Analysis	NH₄-N Ammonium-N		
Description	Colorimetric Automated Phenate		
Method	EPA 350.1		
Cost per sample	Staff Run	Student Trained and Run	
< 20	\$13	\$11	
21+	\$9	\$7	
Analyte	Units	MDL	Typical Range
NH ₄ -N	mg/L	0.005	0-10

Analysis	Orthophosphate-P/Soluble Reactive Phosphorus (SRP)		
Description	Colorimetric Automated Ascorbic Acid		
Method	EPA #365		
Cost per sample	Staff Run	Student Trained and Run	
< 20	\$13	\$11	
21+	\$9	\$7	
Analyte	Units	MDL	Typical Range
PO ₄ -P	mg/L	0.005	0-5

Analysis	Total Dissolved Nitrogen and Non-Purgeable Dissolved Organic Carbon		
Description	Shimadzu TOC-V HTOCO with chemiluminescent N detection		
Method	EPA 415.1 and Merriam et a. 1996		
Cost per sample	Staff Run	Student Trained and Run	
< 20	\$22	\$17	
21+	\$14	\$10	
Analyte	Units	MDL	Typical Range
TDN	mg/L	0.1	1-100
NPOC	mg/L	0.1	0-200