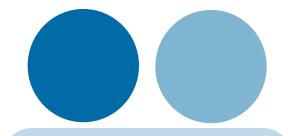
Supporting Water and Environmental Research

State-of-the-art instrumentation, specialized preparation equipment and a skilled professional staff provide high-quality analyses for water and environmental research needs.

The WQRL uses nationally-recognized published methods for sample analysis, and has a quality assurance/quality control program in place to ensure the highest quality data.

Please contact us for your water and environmental analytical needs. Our personnel would be happy to assist you in determining your sample collection, storage, preparation, and analysis requirements.





WQRL Personnel







WQRL Manager Leigh Ann Long E-mail: lalong@iastate.edu Phone: (515)-294-4241



WQRL Research Associate
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Technical and Analytical Support for Water and

Environmental Research

The purpose of ABE's Water Quality Research Laboratory (WQRL) is to facilitate research on water quality, specifically investigating the occurrence, fate, transport, and control of microbiological or chemical pollutants in natural and engineered environmental systems.

The WQRL is located in Sukup Hall, on the west side of the Iowa State University campus.

There are separate spaces in the WQRL dedicated to research on pathogens and pathogen indicators (4205 Sukup), nutrients, pesticides and chemicals of emerging environmental concern in water (4207 Sukup), and a 30-foot long recirculating research flume (0208 Sukup).

WQRL 2016-17 Price List

Water Analysis

Dissolved Nutrient Analysis via Seal Analytical AQ2 autoanalyzer

(\$7.00/sample/analyte)

Ammonia

Indophenol blue method.

Chloride

Mercuric thiocyantate reaction in the presence of ferric nitrate.

Nitrate + Nitrite

Copperized cadmium reduction method. Nitrite can be determined separately for an additional \$7.00/sample charge.



Orthophosphate/dissolved reactive phosphorus

Molybdenum blue method. Filtration through a $0.45~\mu m$ pore filter for DRP preparation available at an additional charge of \$3.00/sample).

Sulfate

Barium chloride turbidimetry.



Total Nutrient Methods

Total Nitrogen/Phosphorus

Alkaline persulfate digestion.

\$14.00/sample/analyte,

Total Kjeldahl Nitrogen/ Phosphorus

Kjeldahl digest with copper catalyst.

\$21.00 for both analytes

Other methods may be available that are not listed here., and new methods are always under development.. Contact Leigh Ann Long, WQRL Manager, for more information.

Other Analytes

| HPLC analysis Varian ProStar with UV Photodiode Array Detector. Does not include charges for sample extraction. | \$14.00/ sample |
|---|--------------------|
| Microbiological testing Fecal indicator bacteria. | \$7.00/ plate |
| pH, conductivity | \$3.00/ sample |
| Chlorophyll-a/phaeophytin | \$20.00/ sample |
| UV/Vis spectroscopy 8454 Agilent UV/Vis spectrophotometer with I cm cuvette. Staff training time required. | \$10.30/ hour |



\$7.00/

Soil/Sediment Analysis

| Antecedent moisture | sample |
|--------------------------------------|--------------------|
| Particle size (texture) | \$25.00/ sample |
| Total Suspended Solids | \$7.00/ |
| Volatile suspended solids also | sample |
| available at an additional charge of | |
| \$3.50/sample. | |

Research Flume

We welcome new collaborative research projects! Please contact Dr. Michelle Soupir about using this space.

