

# **Statement of Qualifications**

## **Fredericktowne Labs, Inc.**

**3020 Ventrice Ct.  
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Myersville, MD 21773**

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[Info@Fredericktownelabs.com](mailto:Info@Fredericktownelabs.com)  
301-293-3340**

# **Company Profile**

## **History**

Fredericktowne Labs was founded in 1985 by Dr. Mary L. Miller, an organic chemist with specialties in instrumental techniques and regulatory affairs. Over the years the laboratory has developed into one of the leading comprehensive environmental testing laboratories in the area.

The laboratory is a provider of environmental testing services in the areas of drinking water, wastewater, stormwater, natural waters, process waters, along with soils, and sludges. Our client list has grown over the years and consists of municipal water providers, non-community transient and non-transient facilities (NCT and NCNT's), wastewater treatment plants, NPDES pretreatment permit holders, facilities with specific drinking water and/or process water requirements, organizations with specific interests in natural water quality, real estate agents, and homeowners.

Fredericktowne Labs also provides sampling services. Sigma and ISCO automatic samplers are available for obtaining time-proportional composites, flow-proportional composites and/or grab samples. Temperature, pH, dissolved oxygen and/or flow can be monitored simultaneously. Portable well pumps are available for sampling from drinking water and monitoring water wells.

## **Certification**

Fredericktowne Labs is accredited by the Maryland Department of the Environment as a Maryland Certified Water Quality Laboratory. Reciprocal certification is also maintained in Virginia and West Virginia.

The lab is also certified by MDOT as a MBE/DBE by virtue of being a Woman Business Enterprise (WBE)

## **Mission Statement**

Fredericktowne Labs is dedicated to providing our clients with outstanding professional and personal service. Our primary goal is to meet the needs of our customers. We achieve this by providing data that is accurate, reproducible, defensible and timely. We also provide individual consultation with our clients to ensure that the testing we perform for them is appropriate to their needs and complete in scope.

## **Facilities**

Fredericktowne Labs is located in Myersville Maryland, just off I-70 and close to I-81, about 1 hour from Baltimore, Washington DC, and Harrisburg. A state of the art laboratory is maintained there in a 4500 square foot building.

## **Partners in Quality**

Fredericktowne Labs has formalized a working partnership with Benchmark Analytics, a NELAC certified laboratory in Saucon Valley PA. This partnership enables Fredericktowne Labs to offer an expanded list of capabilities to our clients with total confidence in the quality of the results.

## Experience

### **Drinking water**

- Municipal water systems
- New community well testing for full SDWA compliance
- Public and Private School system testing
- GWUDI testing
- LT2 testing for e-coli and cryptosporidium
- NTNC and TCN testing
- Federal, state, and military water systems
- Residential wells

### **Wastewater / NPDES**

- Influent and effluent testing for municipal WWTP's
- Influent and effluent testing for commercial enterprises having NPDES Pretreatment permits

### **Surface Water / Stormwater**

- Studies on natural bodies of water that are subject to contamination
- Stormwater studies for municipalities and industrial sites.

### **Underground Storage Tanks**

- Testing of drinking water sources and monitoring wells to assess the impact of underground storage tanks.
- Testing to identify potential problems and to track the effectiveness of remediation

### **Hazardous Waste / RCRA**

- Landfill testing
- Dredged material testing
- Mine tailings
- TCLP and SPLP testing

### **Research Projects**

- Projects to track the sources and extent of contamination to drinking water, ground water, and soil.

## **Analytical Services**

At Fredericktowne Labs, our business is providing analytical services to meet the goals of our clients. Whether you need analyses to satisfy the requirements of federal, state, or county requirements, or you are performing investigative research, Fredericktowne Labs stands ready to provide you with customized service to meet your needs. All analyses are performed by carefully trained scientists and technicians using EPA approved methods and state of the art equipment.

To meet the needs of our diverse client base, Fredericktowne Labs places particular emphasis on communicating with our clients so that we may fully understand their needs and can tailor our services to meet those needs. We know that attention to detail and quick turnaround times are of paramount importance. More than 95% of all samples are processed in 6 working days or less.

Fredericktowne Labs offers the following wide range of testing services for drinking water, ground water, waste water, soil and sludge.

### **Microbiologicals**

- Coliforms (total, fecal, and e-coli) (Colilert, MPN, P/A)
- e. coli enumeration for LT2 testing with EPA DCTS reporting
- Cryptosporidium for LT2 testing with EPA DCTS reporting
- Enterococci
- Fecal strep
- Heterotrophic (Standard) plate count

### **Organics**

- Volatile Organics (Regulated, Unregulated, Oxygenates)
- Trihalomethanes (THM's)
- Haloacetic Acids
- Semi-volatile Organics
- Polynuclear Aromatic Hydrocarbons (PAH's)
- Pesticides
- PCBs
- Herbicides
- SOC's
- Petroleum Related Analyses – TPH-GRO, TPH-DRO, BTEX, Oxygenates

### **Metals**

- Metals by ICP and ICP/MS
- Metals by AA/Graphite Furnace
- Mercury by Automated Cold Vapor
- Hexavalent Chromium
- RCRA metals (8)
- Priority Pollutant metals (13)
- Target Analyte Metals (23)
- TCLP metals
- SPLP metals
- Lead in paint, air, and soil

## **Other Inorganics, General Chemistry, and Characterizations**

- Acidity
- Alkalinity (carbonate, bicarbonate, and total)
- Anions (Fluoride, bromide, chloride, nitrate, nitrite, ortho-phosphate, sulfate)
- Ammonia
- Biochemical Oxygen Demand (BOD-5)
- Bromide
- Chemical Oxygen Demand (COD)
- Chloride
- Chlorine (Free and Total)
- Color
- Conductivity
- Cyanide (Total and Amenable)
- Dissolved Oxygen (DO)
- Flash point
- Fluoride
- Hardness
- Ignitability
- Langelier Index (corrosivity)
- Nitrate
- Nitrite
- Nitrogen (Ammonia, Kjeldahl, Nitrate, Nitrite, Organic and Total)
- Oil and Grease (SPE / gravimetric)
- pH
- Phenols, Total
- Phosphates, ortho
- Phosphates, Total
- Silica
- Solids – Total Dissolved Solids (TDS)
- Solids – Settable (SS)
- Solids – Total Suspended Solids (TSS)
- Solids – Total Solids (TS)
- Solids – Fixed and Volatile Solids
- Sulfate
- Sulfide
- Surfactants (MBAS)
- Total Kjeldahl Nitrogen (TKN)
- Total Organic Carbon (TOC)
- Total Organic Halide (TOX)
- Total Petroleum Hydrocarbons / Gasoline (TPH-GRO)
- Total Petroleum Hydrocarbons / Diesel (TPH-DRO)
- Turbidity

## **Radiologicals**

- Radon in air and water
- Gross Alpha and Gross Beta
- Radium 226 & Radium 228

## **Sampling**

- Maryland Department of the Environment Certified Samplers and Technicians
- Autosamplers – ISCO and American Sigma – time and flow proportional composite sampling
- Data logging – pH, DO, temperature, level, and flow

# Quality Assurance / Quality Control

## Overview

Fredericktowne Labs understands that our clients use data generated by this laboratory to make important environmental decisions. The outcome of these decisions often involves the expenditure of large amounts of time and money, and may lead to expensive litigation. To meet the needs of our clients Fredericktowne Labs follows quality assurance procedures that insure the integrity of samples and data throughout the sampling and analysis process and that assure:

- Full compliance with certification requirements
- Full compliance with regulatory agencies
- Full compliance with contract requirements
- Full compliance with EPA approved methodologies
- Full compliance with industry standards.

## Quality Assurance Plan

The Fredericktowne Labs Quality Assurance Plan covers all aspects of the laboratory operation. The document is available for review and is fully compliant with the EPA requirements outlined in the EPA "Manual for the Certification of Laboratories Analyzing Drinking Water".

## Proficiency testing

Fredericktowne Labs participates in EPA proficiency testing programs for drinking water. We also provide DMRQA testing for our clients who have NPDES permits that require it. Additionally, in-house proficiency testing is conducted annually.

## Lab Information Management System (LIMS)

All aspects of data handling from sample request, sample pickup scheduling, sample receipt, chain of custody forms, sample login, sample analysis, data verification and report generation are handled by a comprehensive Laboratory Information Management System (LIMS). Automatic backup of all data occurs daily to an offsite location. Reports are automatically generated in user specified formats, and can be delivered as EDD's or pdf's.

## List of Client References

- AC&T
- Allegheny Power
- Anne Arundel County Public Schools
- Antietam Battlefield National Park
- Aircraft Owners and Pilots Association (AOPA)
- AT&T
- Baltimore City Public School System
- Bioqual
- Boonsboro Quarry
- BP Solar
- Buckeye, Inc.
- Callas Contractors
- City of Rockville
- City of Frederick
- City of Frostburg
- City of Hagerstown
- City of Taneytown
- City of Westminster
- Cracker Barrel Country Stores
- Dept. of Natural Resources
- Dept. of the Navy
- D.C. National Guard
- Environmental Consulting Service, Inc.
- Environmental Systems Analysis, Inc.
- ENSR
- Environmental Resource Management, Inc.
- ERA Realty
- Federal Aviation Administration
- Frederick County Health Department
- Frederick County Public Schools
- Frederick County Water & Sewer
- Frederick Memorial Hospital
- Gannett Fleming, Inc.
- Hahn Transportation
- Harris Smariga & Associates, Inc.
- Heritage Academy
- Hillis Carnes Engineering
- Hood College
- Howard County Public Schools
- Izzak Walton League
- Keyser-Garver Well Drilling
- LaFarge Aggregates

- LaVale Sanitary Commission
- Life Technologies
- Long & Foster Realty
- Lonza Bioscience, Inc.
- Loudoun County Health Department
- Mack Truck
- Maryland Dept. of the Environment (MDE)
- Maryland. Dept. of Natural Resources
- Maryland Environmental Services (MES)
- Maryland. State Highway Administration
- MedImmune, Inc.
- Metalfab, Inc.
- Montgomery County Dept. of Public Works
- Morningstar Foods
- National Institute of Health
- National Park Service
- Project Hope
- Purina Mills, Inc.
- ReMax Realty
- Ryan Homes
- Science Applications International Corp.
- Schnabel Engineering
- St. James School
- St. John's Preparatory School
- St. Thomas Moore Academy
- Southern States Coop
- Southern Research Inc
- The Banner School
- Town of Middletown
- Town of Mt. Airy
- Town of Myersville
- Town of Westernport
- Town of Woodsboro
- University of Maryland
- U. R. S.
- U.S. Army Garrison, Ft. Detrick
- U.S. Naval Academy
- Wal-Mart Stores
- Washington County Health Department
- Washington County. Hospital
- Washington County. Public Schools
- Washington County Water & Sewer
- Wells Fargo Mortgage Co.
- Weston Solutions



# RESUME

Mary Louise Miller, Ph.D.  
President, Fredericktowne Labs, Inc.  
Laboratory Director, Fredericktowne Labs, Inc.

## EDUCATION

1963-67 Bryn Mawr College A.B.(cum laude) Chemistry - major; Biology - minor  
1967-68 Univ. of Wisconsin M.S. Organic Chemistry  
1969-72 Michigan State Univ. Ph.D. Chemistry

## EXPERIENCE

1985 - Present            President  
                              Laboratory Director  
                              Fredericktowne Labs, Inc.  
                              Myersville, Md.

In 1985 Dr. Miller established Fredericktowne Labs as an environmental testing laboratory specializing in the analysis of drinking water, wastewater, and solid wastes for microbiological, inorganic and organic contaminants. Fredericktowne Labs has gained certification as a drinking water laboratory in the states of Maryland, Virginia, and West Virginia and through its partnership with Benchmark Analytics can offer NELAC approved analyses in most of the surrounding states.

Current areas of involvement include:

Sampling and analysis of municipal water samples for compliance with Phase II and V requirements.

Sampling and analysis of industrial wastewater samples for compliance with NPDES requirements.

Analysis of soil samples from under removed fuel tanks (LUST Program) for petroleum fuel contamination.

Also, drinking water and monitoring well samples for petroleum contamination

Baseline studies for impact on run off water at major industrial sites including a large public incinerator.

Analytical support for independent consultants

1981 - 1986            Physical Scientist  
                              U.S. Nuclear Reg. Comm.  
                              Washington, D.C.

1978 - 1981            Consultant in Environmental Chemistry  
                              Everett and Associates  
                              Rockville, Md

1972 - 1978            Chemist  
                              Gillette Research Institute  
                              Rockville, Md.

## MEMBERSHIPS:

American Chemical Society - Environmental Section  
American Water Works Assoc.  
Maryland Environmental Laboratories Association  
Federation of Independent Businesses

PUBLICATIONS: On request