



## MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

April 24, 2018

**Executive Summary:**  
**Watkins Mill Elementary School**  
19001 Watkins Mill Road  
Montgomery Village, MD 20886

Round of Testing:	Initial
# of Outlets Tested:	97
# of Outlets $\geq$ 20 ppb:	5
Low Value (ppb):	< 1.0
High Value (ppb):	107
Follow-Up Testing Required (Samples $\geq$ 20 ppb):	Classroom 13 (20.2 ppb) Classroom 12 (46.6 ppb) Work Room 16 (55.7 ppb) Classroom 10 (95.4 ppb) Classroom 1 (107 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	5

### **Project Status** **Testing Complete: Remediation Plan**

Classroom 13 – Replace fixture (LW00487), in addition to supply line and valve located under sink  
Classroom 12 – Replace fixture (LW06691), in addition to supply line and valve located under sink  
Work Room 16 – Replace fixture (LW00452), in addition to supply line and valve located under sink  
Classroom 10 – Replace fixture (LW06689), in addition to supply line and valve located under sink  
Classroom 1 – Replace fixture (LW06680), in addition to supply line and valve located under sink



April 24, 2018

Mr. Brian Mullikin  
Environmental Team Leader  
Montgomery County Public Schools  
8301 Turkey Thicket Drive  
Building A, First Floor  
Gaithersburg, Maryland 20879

Re: Lead in Water Testing Service

Location: Watkins Mill Elementary School  
19001 Watkins Mill Road  
Montgomery Village, MD 20886

Dear Mr. Mullikin:

Professional Services Industries (PSI), Inc. is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of initial lead in water testing at Watkins Mill Elementary School, located at 8720 Carroll Avenue in Silver Spring, MD 20903.

**Scope of Services:**

PSI conducted lead in water testing at Watkins Mill Elementary School in accordance with the Environmental Protection Agency (EPA) and Maryland House Bill (HB) 270. State regulation established an action level of 20 parts per billion (ppb) to evaluate lead levels in school buildings, a concentration EPA recommends that schools take action to reduce lead below this action level. Maryland requires periodic testing for the presence of lead in drinking water in occupied public and nonpublic school buildings. EPA developed the 3T's (Training, Testing, and Telling) to assist schools in reducing the lead concentrations in their drinking water. More information about 3T's can be found on the EPA website.

PSI visited the site on 02/22/18, 02/23/18, 02/28/18, and 03/01/18 to collect samples from 97 drinking water outlets in accordance with current criteria described by the Maryland Department of the Environment (MDE) Draft Lead in Drinking Water—Public and Nonpublic Schools, Title 26, Subtitle 16 Lead, Chapter 07. Five 30 second follow-up samples were collected on 4/12/18.

Samples were submitted to a laboratory for lead in water analysis using current US EPA methodology. The laboratory has been certified by the Maryland Department of the Environment to analyze drinking water for lead.

**Results:**

There were two results of the initial lead in water analysis at or above 20 parts per billion (ppb) and subsequent follow up 30 second results are highlighted in the summary table below:



Barcode ID	Sample Location	Date Collected	Initial Sample Result (ppb)	Date Collected	30 Second Follow Up Sample Result (ppb)
LW00452	Work Room	2/23/2018	55.7	4/12/18	1.3
LW00487	Classroom	2/23/2018	20.2	4/12/18	Non Detect
LW06680	Classroom	2/23/2018	107.0	4/12/18	1.1
LW06689	Classroom	2/23/2018	95.4	4/12/18	Non Detect
LW06691	Classroom	2/23/2018	46.6	4/12/18	7.3

The initial lead in water sample results (02/23/18 and 3/1/18) and 30 second follow up results (4/12/18) are shown in Attachment A.

**Discussion:**

Lead is a naturally occurring element that can be harmful to humans when ingested or inhaled, particularly to children under the age of six. Lead can adversely affect the development of children’s brain potentially leading to detrimental alterations in intelligence and behavior. Lead has been historically used in plumbing, paint and other building materials. Lead is released into the environment from industrial sources and fuel combustion. Lead may also be found in consumer products (imported candy, medicines, toys, dishes, etc.).

Most lead leaches into drinking water from contact with plumbing components such as faucets and valves made of brass or lead-containing solder. The physical and chemical interaction that occurs between the plumbing and water directly contributes to the amount of lead that is released into the water. Although plumbing components installed prior to the 1990’s could contain more lead than newer materials, the amount of lead in the drinking water cannot be predicted by the age of building. The purpose of this regulation is to establish a program to minimize the risk of exposure to lead in drinking water outlets at schools.

Simple steps like keeping your home clean and well-maintained will go a long way in preventing lead exposure. These steps include inspecting and maintaining all painted surfaces to prevent paint deterioration, using only cold water to prepare food and drinks, flushing water outlets used for drinking or food preparation, and cleaning around painted areas where friction can generate dust, such as doors, windows, and drawers. Wipe these areas with a wet sponge or rag to remove paint chips or dust, and wash children’s hands, bottles, pacifiers and toys often.

Respectfully Submitted,

**PROFESSIONAL SERVICE INDUSTRIES, INC.**

Nand Kaushik, P.E.  
Department Manager, Environmental Services  
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Attachments: A – Lead in Water Test Summary Table

# ATTACHMENT A

## Watkins Mill ES Water Test Summary Table

**Contractor:** Professional Services Industries, Inc.

**Certified Laboratory:** Microbac Laboratories, Inc.

Initial Sample Results for Watkins Mill Elementary School (2/23/18 and 3/1/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW00452	16	Work Room		Faucet	55.7	Fail	Follow-Up Testing Needed
LW00453	16	Work Room		Bubbler - Indoor	15.7	Pass	Testing Complete
LW00454	15	Preschool		Bubbler - Indoor	4.4	Pass	Testing Complete
LW00455	15	Preschool		Faucet	3.0	Pass	Testing Complete
LW00484	14	Classroom		Bubbler - Indoor	3.3	Pass	Testing Complete
LW00485	14	Classroom		Faucet	3.5	Pass	Testing Complete
LW00486	13	ESOL		Faucet	9.9	Pass	Testing Complete
LW00487	13	ESOL		Bubbler - Indoor	20.2	Fail	Follow-Up Testing Needed
LW00488		Health Room		Faucet	1.1	Pass	Testing Complete
LW00489		Work Room		Faucet	3.4	Pass	Testing Complete
LW00490		Hallway	Left Of Main Office	Cooler	1.0	Pass	Testing Complete
LW00491	R	Work Room	SBLC Across From Conference Room 3	Faucet	3.6	Pass	Testing Complete
LW00492		Break Room	Staff Lounge Across From Cafeteria	Faucet	1.9	Pass	Testing Complete
LW00493		Kitchen Cafeteria		Faucet	2.7	Pass	Testing Complete
LW00494	K 2	Kindergarten		Bubbler - Indoor	2.1	Pass	Testing Complete
LW02445	K 2	Kindergarten		Faucet	2.4	Pass	Testing Complete
LW02446	K 1	Kindergarten		Bubbler - Indoor	5.1	Pass	Testing Complete
LW02447	K 1	Kindergarten		Faucet	1.8	Pass	Testing Complete
LW02449	CR-7	Classroom		Faucet	3.1	Pass	Testing Complete
LW02452		Hallway	Next To Gym	Cooler	<1.0	Pass	Testing Complete
LW02453	4	Work Room		Faucet	6.3	Pass	Testing Complete
LW02454	4	Work Room		Bubbler - Indoor	4.0	Pass	Testing Complete
LW02455	5	Classroom		Bubbler - Indoor	7.1	Pass	Testing Complete
LW02456	5	Classroom		Faucet	5.2	Pass	Testing Complete
LW02458	CR-6	Work Room		Faucet	8.7	Pass	Testing Complete
LW02459	CR-6	Work Room		Bubbler - Indoor	8.7	Pass	Testing Complete
LW06661	22	Music		Faucet	7.6	Pass	Testing Complete
LW06662	22	Music		Bubbler - Indoor	10.7	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW06663	21	Classroom		Faucet	2.3	Pass	Testing Complete
LW06664	21	Classroom		Bubbler - Indoor	2.6	Pass	Testing Complete
LW06665	20	Classroom		Faucet	6.3	Pass	Testing Complete
LW06666	20	Classroom		Bubbler - Indoor	8.1	Pass	Testing Complete
LW06669	18	Classroom		Faucet	1.9	Pass	Testing Complete
LW06670	18	Classroom		Bubbler - Indoor	1.8	Pass	Testing Complete
LW06671	17	Classroom		Faucet	17.2	Pass	Testing Complete
LW06673	17	Classroom		Bubbler - Indoor	5.9	Pass	Testing Complete
LW06674		Work Room Media Center		Faucet	3.8	Pass	Testing Complete
LW06675	3	Special Ed		Faucet	3.2	Pass	Testing Complete
LW06676	3	Special Ed		Bubbler - Indoor	5.9	Pass	Testing Complete
LW06677		Hallway	Across From Room 2 Special Ed	Cooler	<1.0	Pass	Testing Complete
LW06678	2	Special Ed		Bubbler - Indoor	5.2	Pass	Testing Complete
LW06679	2	Special Ed		Faucet	5.3	Pass	Testing Complete
LW06680	1	Special Ed		Faucet	107	Fail	Follow-Up Testing Needed
LW06682	8	Classroom		Bubbler - Indoor	9.2	Pass	Testing Complete
LW06683	8	Classroom		Faucet	4.1	Pass	Testing Complete
LW06684	8	Hallway	Across From Room 8	Cooler	<1.0	Pass	Testing Complete
LW06685	11	Classroom		Faucet	11.6	Pass	Testing Complete
LW06686	11	Classroom		Bubbler - Indoor	16.7	Pass	Testing Complete
LW06687	9	Classroom		Bubbler - Indoor	17.2	Pass	Testing Complete
LW06688	9	Classroom		Faucet	13.1	Pass	Testing Complete
LW06689	10	Classroom		Faucet	95.4	Fail	Follow-Up Testing Needed
LW06691	12	Classroom		Bubbler - Indoor	46.6	Fail	Follow-Up Testing Needed
LW06692	12	Classroom		Faucet	10.5	Pass	Testing Complete
M01533		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
M01534		Kitchen Cafeteria		Faucet	5.2	Pass	Testing Complete
M05004		Hallway	Across From Room 21	Cooler	2.7	Pass	Testing Complete
M27533	65	Classroom		Faucet	<1.0	Pass	Testing Complete
M27534	65	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27535	63	Classroom		Faucet	<1.0	Pass	Testing Complete
M27536	63	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27537	66	Classroom		Faucet	1.0	Pass	Testing Complete
M27538	66	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27540	61	Kindergarten		Faucet	1.0	Pass	Testing Complete
M27541	61	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
M27542	59	Kindergarten		Faucet	<1.0	Pass	Testing Complete
M27543	59	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27544	70	Speech Therapy		Faucet	1.2	Pass	Testing Complete
M27545	70	Speech Therapy		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27550		Hallway	Outside Of Room 59	Cooler	<1.0	Pass	Testing Complete
M27551		Hallway	Outside Of Room 59	Cooler	<1.0	Pass	Testing Complete
M27552	56	Kindergarten		Faucet	<1.0	Pass	Testing Complete
M27553	56	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27555	54	Kindergarten		Faucet	<1.0	Pass	Testing Complete
M27556	54	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27563	47	Kindergarten		Faucet	<1.0	Pass	Testing Complete
M27564	47	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27566	45	Kindergarten		Faucet	<1.0	Pass	Testing Complete
M27567	45	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27568	32	Special Ed	Grade 4 - SBLC	Faucet	<1.0	Pass	Testing Complete
M27569	32	Special Ed	Grade 4 - SBLC	Bubbler - Indoor	<1.0	Pass	Testing Complete
M27570	30	Special Ed	Grade 5	Faucet	<1.0	Pass	Testing Complete
M27571	30	Special Ed	Grade 5 - SBLC	Bubbler - Indoor	<1.0	Pass	Testing Complete
M27572	33	Classroom		Faucet	<1.0	Pass	Testing Complete
M27573	33	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27575	35	Classroom		Faucet	<1.0	Pass	Testing Complete
M27576	35	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27577	29	Classroom		Faucet	<1.0	Pass	Testing Complete
M27578	29	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27579	27	Classroom		Faucet	<1.0	Pass	Testing Complete
M27580	27	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27585		Hallway	Across from BRs Downstairs	Cooler	<1.0	Pass	Testing Complete
M27586		Hallway	Across from BRs Downstairs	Cooler	<1.0	Pass	Testing Complete
M27587	25	Classroom		Faucet	<1.0	Pass	Testing Complete
M27588	25	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27589	23	Classroom		Faucet	<1.0	Pass	Testing Complete
M27590	23	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

\*ppb = parts per billion

**Contractor:** Professional Services Industries, Inc.  
**Certified Laboratory:** Microbac Laboratories, Inc.

Follow Up Sample Results for Watkins Mill Elementary School (4/12/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 <sup>nd</sup> ) (PPB)	Initial draw (3 <sup>rd</sup> ) (PPB)	30 Second Draw (PPB)	Status
LW00452	16	Work Room	Faucet	13.3	19.4	1.3	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW00487	13	Classroom	Bubbler	DNS	13.9	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW06680	1	Classroom	Faucet	DNS	9.3	1.1	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW06689	10	Classroom	Faucet	16.4	13.7	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW06691	12	Classroom	Bubbler	126.0	21.0	7.3	Remediation required – replace fixture, in addition to supply line and valve located under sink

\*ppb = parts per billion  
 ND = Non Detect  
 DNS = Did Not Sample

Note: Fixture(s) with elevated test results were immediately removed from service. Subsequent 2nd and 3rd round testing was performed on these fixture(s) for further diagnostics for remediation. Because the fixture was shut off after the first test, the subsequent test results may not be representative of an in-use fixture because of stagnant water in the supply line and the operation of shut off valves prior to the tests. All fixtures with elevated test results are to be remediated. After remediation, post remediation testing will be conducted before the fixture is returned to service.