



## MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 17, 2018

**Executive Summary:**  
**Fallsmead Elementary School**  
1800 Greenplace Terrace  
Rockville, MD 20850

Round of Testing:	Initial
# of Outlets Tested:	77
# of Outlets $\geq$ 20 ppb:	1
Low Value (ppb):	< 1.0
High Value (ppb):	32.7
Follow-Up Testing Required (Samples $\geq$ 20 ppb):	Classroom G5 (32.7 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	1

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

Classroom G5– Replace fixture (LW06981), in addition to supply line and valve located under sink



May 17, 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: Fallsmead Elementary School  
1800 Greenplace Terrace  
Rockville, MD 20850

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 Fallsmead Elementary School, located at 1800 Greenplace Terrace in Rockville, MD 20850.

**Scope of Services:**

PSI conducted lead in water testing at Fallsmead 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 3/12/18 and 3/13/18 to collect samples from 77 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. One 30 second follow-up sample was collected on 5/8/18.

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 was one result 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)
LW06981	Classroom G5	3/13/18	32.7	5/8/18	<1.0

The initial lead in water sample results (3/13/2018) and 30 second follow up results (5/8/18) 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

## Fallsmead ES Water Test Summary Table

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

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

Initial Sample Results for Fallsmead Elementary School (3/13/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW06882	Y1	Classroom		Faucet	3.1	Pass	Testing Complete
LW06883	Y1	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06884	Y3	Classroom		Faucet	2.5	Pass	Testing Complete
LW06885	Y3	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06886	Y4	Classroom		Faucet	1.9	Pass	Testing Complete
LW06887	Y4	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW06888	N4	Kindergarten		Faucet	<1.0	Pass	Testing Complete
LW06889	N4	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06890	N2	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06891	N2	Kindergarten		Faucet	<1.0	Pass	Testing Complete
LW06892	N2	Kindergarten		Faucet	<1.0	Pass	Testing Complete
LW06893	N5	Office		Faucet	1.1	Pass	Testing Complete
LW06894		Hallway	Outside Of N4	Cooler	<1.0	Pass	Testing Complete
LW06895		Hallway	Outside Of N4	Cooler	<1.0	Pass	Testing Complete
LW06896	N14	Music		Faucet	1.8	Pass	Testing Complete
LW06897	N14	Music		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06898	N13	Music		Faucet	2.5	Pass	Testing Complete
LW06899	N13	Music		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06900	N21	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06901	N21	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06902	N22	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06903	N22	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06904	N24	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06905	N24	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06906	N25	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06907	N25	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06908	GYM	Gymnasium		Cooler	<1.0	Pass	Testing Complete
LW06909		Hallway	Ext To Imc	Cooler	<1.0	Pass	Testing Complete
LW06910		Work Room	Media Center	Faucet	4.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW06911		Break Room		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06912		Health Room		Faucet	1.8	Pass	Testing Complete
LW06913		Hallway	Outside Of Green Pod	Cooler	<1.0	Pass	Testing Complete
LW06914		Kitchen		Faucet	3.6	Pass	Testing Complete
LW06915		Kitchen		Faucet	3.3	Pass	Testing Complete
LW06916	B2	Classroom		Faucet	4.2	Pass	Testing Complete
LW06917	B2	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06918	B3	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06919	B3	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06920	B4	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06960	T2	Classroom		Faucet	1.4	Pass	Testing Complete
LW06961	T2	Classroom		Bubbler - Outdoor	1.0	Pass	Testing Complete
LW06962	T3	Classroom		Faucet	13.2	Pass	Testing Complete
LW06963	T3	Classroom		Bubbler - Indoor	2.1	Pass	Testing Complete
LW06964	T4	Classroom		Faucet	2.2	Pass	Testing Complete
LW06965	T4	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06966	T5	Classroom		Faucet	3.2	Pass	Testing Complete
LW06967	T5	Classroom		Bubbler - Indoor	3.1	Pass	Testing Complete
LW06968	T6	Classroom		Faucet	1.9	Pass	Testing Complete
LW06969	T6	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete
LW06970	T7	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
LW06971	T7	Classroom		Faucet	1.3	Pass	Testing Complete
LW06972	T7	Classroom		Faucet	1.0	Pass	Testing Complete
LW06973	G1	Classroom		Faucet	4.4	Pass	Testing Complete
LW06974	G1	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06975	G2	Classroom		Faucet	8.0	Pass	Testing Complete
LW06976	G2	Classroom		Bubbler - Indoor	2.7	Pass	Testing Complete
LW06977	G3	Classroom		Faucet	1.2	Pass	Testing Complete
LW06978	G3	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06979	G4	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06980	G4	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06981	G5	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06981	G5	Classroom		Faucet	5.3	Pass	Testing Complete
LW06981	G5	Classroom		Faucet	32.7	Fail	Follow-Up Testing Needed
LW06982	G5	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW06983	G6	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06984	G6	Classroom		Bubbler - Indoor	2.6	Pass	Testing Complete
LW06985		Kitchen		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW06986	B4	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete
LW06987	B5	Classroom		Faucet	3.2	Pass	Testing Complete
LW06988	B5	Classroom		Bubbler - Indoor	1.8	Pass	Testing Complete
LW06989	B6	Classroom		Faucet	3.1	Pass	Testing Complete
LW06990	B6	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06991	B7	Classroom		Faucet	19.6	Pass	Testing Complete
LW06992	B7	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M12810		Hallway	Across from Principal Office	Cooler	<1.0	Pass	Testing Complete
M12828		Kitchen	Cafeteria	Faucet	1.0	Pass	Testing Complete
M12829		Kitchen	Cafeteria	Faucet	1.6	Pass	Testing Complete

\*ppb = parts per billion

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

Follow Up Sample Results for Fallsmead Elementary School (5/8/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 <sup>nd</sup> ) (PPB)	30 Second Draw (PPB)	Status
LW06981	G5	Classroom	Faucet	5.3	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink

\*ppb = parts per billion

Note: Fixture(s) with elevated test results were immediately removed from service. Subsequent 2nd 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.