



## MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 3, 2018

**Executive Summary:**  
**Eastern Middle School**  
300 University Boulevard E  
Silver Spring, MD 20901

Round of Testing:	Initial
# of Outlets Tested:	43
# of Outlets $\geq$ 20 ppb:	4
Low Value (ppb):	< 1.0
High Value (ppb):	64.9
Follow-Up Testing Required (Samples $\geq$ 20 ppb):	Classroom 905 (56.6 ppb) Room (Stage) Between CR 705 and 707 (24.2 ppb) Room Between 804 and 806 (64.9 ppb) Room Between 804 and 806 (34.9 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	4

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

Classroom 905 – Replace fixture (M13005), in addition to supply line and valve located under sink.

Room (Stage) Between CR 705 and 707– Replace fixture (M13017), in addition to supply line and valve located under sink.

Room Between 804 and 806 – Fixture (M13029), not a primary drinking outlet, place signage in room not to drink from outlet

Room Between 804 and 806 – Fixture (M13030), not a primary drinking outlet, place signage in room not to drink from outlet



May 3, 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: Eastern Middle School  
300 University Boulevard  
Silver Spring, MD 20901

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 Eastern Middle School, located at 300 University Boulevard E in Silver Spring, MD 20901.

**Scope of Services:**

PSI conducted lead in water testing at Eastern Middle 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 02/08/18 and 02/09/18 to collect samples from 43 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. Four 30 second follow-up samples were collected on 4/11/18, 4/12/18, and 4/13/19.

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 four 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)
M13005	Classroom 905	2/09/2018	56.6	4/12/18	115.0
M13017	Stage Between CR 705 and 707	2/09/2018	24.2	4/11/18	1.9
M13029	Room Between 804 and 806	2/09/2018	64.9	4/13/18	7.5
M13030	Room Between 804 and 806	2/09/2018	34.9	4/13/18	3.9

The initial lead in water sample results (02/09/18) and 30 second follow up results (4/11/18, 4/12/18, and 4/13/18) 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

## Eastern MS Water Test Summary Table

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

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

Initial Sample Results for Eastern Middle School (2/9/18)

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW02198		Gymnasium		Cooler	<1.0	Pass	Testing Complete
LW02199		Hallway	Next To Main Office	Cooler	<1.0	Pass	Testing Complete
LW02200		Hallway	Next To Main Office	Cooler	<1.0	Pass	Testing Complete
LW02201		Hallway	Across From Laundry Room	Cooler	<1.0	Pass	Testing Complete
LW02202		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
LW02203		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
LW02204		Kitchen Cafeteria		Icemaker	<1.0	Pass	Testing Complete
LW02205		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
LW02206		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
LW02207		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
LW02208		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
LW02209		Kitchen Cafeteria		Faucet	1.0	Pass	Testing Complete
LW02210		Cafeteria		Cooler	<1.0	Pass	Testing Complete
LW02211		Cafeteria		Cooler	<1.0	Pass	Testing Complete
LW02212		Hallway	Next To Room 311	Cooler	<1.0	Pass	Testing Complete
LW02213	107	Break Room	Across From TV Studio	Faucet	6.4	Pass	Testing Complete
LW02215	109	Break Room		Faucet	1.8	Pass	Testing Complete
LW02216		Hallway Music	Next To 115A	Cooler	<1.0	Pass	Testing Complete
LW02217	113	Health Room		Faucet	<1.0	Pass	Testing Complete
LW02218	711	Office		Faucet	4.7	Pass	Testing Complete
LW02219	903	Staff Development		Faucet	3.5	Pass	Testing Complete
LW02220		Hallway	Across From Room 901	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW02221		Hallway	Next To 1001	Cooler	<1.0	Pass	Testing Complete
LW02222	304	Fitness Room		Cooler	1.7	Pass	Testing Complete
LW02223	106	Classroom		Faucet	16.6	Pass	Testing Complete
M12997	601	Classroom		Faucet	17.7	Pass	Testing Complete
M12998		Hallway	Next to Stairwell 1	Cooler	<1.0	Pass	Testing Complete
M13005	905	Classroom		Faucet	56.6	Fail	Follow-Up Testing Needed
M13012	811	Assistant Principal		Faucet	5.3	Pass	Testing Complete
M13017	707	Classroom	Stage Between CR 705 and 707	Faucet	24.2	Fail	Follow-Up Testing Needed
M13019	701	Work Room		Faucet	11.1	Pass	Testing Complete
M13020	707	Classroom	Stage Between CR 705 and 707	Faucet	13.1	Pass	Testing Complete
M13029		Science	Rm Between CR 806 and 804	Faucet	64.9	Fail	Follow-Up Testing Needed
M13030		Science	Rm Between CR 806 and 804	Faucet	34.9	Fail	Follow-Up Testing Needed
M13051		Hallway	Across from CR 800	Cooler	<1.0	Pass	Testing Complete
M13074	503	Music Storage		Faucet	4.3	Pass	Testing Complete
M13087		Media Center Office		Faucet	6.4	Pass	Testing Complete
M13095		Hallway	Across from CR 300	Bubbler - Indoor	7.8	Pass	Testing Complete
M13098		Hallway	Across from CR 300	Bubbler - Indoor	3.5	Pass	Testing Complete
M40630		Girls Locker Room	Across from Gym	Cooler	<1.0	Pass	Testing Complete
M40631		Girls Locker Room	Across from Gym	Cooler	<1.0	Pass	Testing Complete
M41287		Work Room		Faucet	2.8	Pass	Testing Complete
M41294	106	Classroom		Faucet	8.0	Pass	Testing Complete

\*ppb = parts per billion

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

Follow Up Sample Results for Eastern Middle School (4/11/18, 4/12/18, and 4/13/18)

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
M13005	905	Classroom	Faucet	36.5	197.0	115.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
M13017	707	Stage Between CR 705 and 707	Faucet	6.0	29.8	1.9	Remediation required – replace fixture, in addition to supply line and valve located under sink
M13029	-	Room Between CR 806 and 804	Faucet	40.9	79.6	7.5	Remediation not required – not a primary drinking outlet, place signage in room not to drink from outlet
M13030	-	Room Between CR 806 and 804	Faucet	211	57.1	3.9	Remediation not required – not a primary drinking outlet, place signage in room not to drink from outlet

\*ppb = parts per billion

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.