



## MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 10, 2018

**Executive Summary:**  
**Lakewood Elementary School**  
2534 Lindley Terrace  
Rockville, MD 20850

Round of Testing:	Initial
# of Outlets Tested:	51
# of Outlets $\geq$ 20 ppb:	1
Low Value (ppb):	< 1.0
High Value (ppb):	27.7
Follow-Up Testing Required (Samples $\geq$ 20 ppb):	Kitchen (27.7 ppb)

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

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

Kitchen – Replace fixture (M41358), in addition to supply line and valve located under sink



May 10, 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: Lakewood Elementary School  
2534 Lindley 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 Lakewood Elementary School, located at 2534 Lindley Terrace in Rockville, MD 20850.

**Scope of Services:**

PSI conducted lead in water testing at Lakewood 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 3/8/18 and 3/9/18 to collect samples from 51 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 4/19/18.

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)
M41358	Kitchen	3/9/18	27.7	4/19/18	<1.0

The initial lead in water sample results (03/09/2018) and 30 second follow up results (4/19/18) 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

## Lakewood ES Water Test Summary Table

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

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

Initial Sample Results for Lakewood Elementary School (3/9/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW07287		Hallway	Next To Gym	Cooler	<1.0	Pass	Testing Complete
LW07288	177	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07289	182	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07290	186	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07291	105	Health Room		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07292	114	Work Room		Faucet	<1.0	Pass	Testing Complete
LW07293	114	Work Room		Icemaker	<1.0	Pass	Testing Complete
LW07294		Hallway	To Left Of Rm 134	Cooler	<1.0	Pass	Testing Complete
LW07295		Hallway	To Left Of Rm 134	Cooler	<1.0	Pass	Testing Complete
LW07296	125	Kitchen		Faucet	<1.0	Pass	Testing Complete
LW07297	125	Kitchen		Faucet	1.2	Pass	Testing Complete
LW07337		Hallway	Next To Gym	Cooler	<1.0	Pass	Testing Complete
LW07338	171	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07339	163	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07340		Hallway	Across From 186	Cooler	<1.0	Pass	Testing Complete
LW07341		Hallway	Across From 186	Cooler	<1.0	Pass	Testing Complete
LW07342	134	Music		Faucet	<1.0	Pass	Testing Complete
LW07343	241	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07344	243	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07345	244	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07346		Hallway	Right Of 232	Cooler	<1.0	Pass	Testing Complete
LW07347		Hallway	Right Of 232	Cooler	<1.0	Pass	Testing Complete
LW07348	213	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07350	237	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07351	235	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07352		Hallway	Between Rms 216 And 214	Cooler	<1.0	Pass	Testing Complete
LW07353		Hallway	Between Rms 216 And 214	Cooler	<1.0	Pass	Testing Complete
LW07354	141	Break Room	Staff Lounge	Faucet	<1.0	Pass	Testing Complete
M41306	156	Office Media Center		Faucet	<1.0	Pass	Testing Complete
M41316	105	Health Room		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
M41326	165	Classroom		Faucet	<1.0	Pass	Testing Complete
M41327	181	Classroom		Faucet	<1.0	Pass	Testing Complete
M41331	168	Classroom		Faucet	<1.0	Pass	Testing Complete
M41333	176	Classroom		Faucet	2.2	Pass	Testing Complete
M41334	174	Classroom		Faucet	<1.0	Pass	Testing Complete
M41341	147	Speech Therapy		Faucet	1.1	Pass	Testing Complete
M41358	125	Kitchen		Faucet	27.7	Fail	Follow Up Test Needed
M41359	125	Kitchen		Faucet	<1.0	Pass	Testing Complete
M41375	247	Classroom		Faucet	<1.0	Pass	Testing Complete
M41376	246	Classroom		Faucet	<1.0	Pass	Testing Complete
M41380	234	Classroom		Faucet	1.1	Pass	Testing Complete
M41381	240	Classroom		Faucet	<1.0	Pass	Testing Complete
M41384	232	Classroom		Faucet	<1.0	Pass	Testing Complete
M41385	222	Classroom		Faucet	<1.0	Pass	Testing Complete
M41387	221	Classroom		Faucet	<1.0	Pass	Testing Complete
M41389	220	Classroom		Faucet	<1.0	Pass	Testing Complete
M41390	218	Classroom		Faucet	<1.0	Pass	Testing Complete
M41391	217	Classroom		Faucet	<1.0	Pass	Testing Complete
M41397	204	Resource Center		Faucet	<1.0	Pass	Testing Complete
M41398	202	Dual Purpose Room		Faucet	1.0	Pass	Testing Complete
M41399	152	Reading		Faucet	<1.0	Pass	Testing Complete

\*ppb = parts per billion

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

Follow Up Sample Results for Lakewood Elementary School (4/19/18)

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
M41358	125	Kitchen	Faucet	7.3	15.5	<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 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.