

Montgomery County Public Schools Lead in Drinking Water Testing Report

**Carderock Springs Elementary School
7401 Persimmon Tree Lane
Bethesda, MD 20817**

Report Date: February 23rd, 2022

LEAD IN DRINKING WATER SAMPLE RESULTS SUMMARY

All Maryland public and nonpublic schools are required to sample all drinking water outlets for the presence of lead pursuant to the Code of Maryland Regulations (COMAR). Montgomery County Public Schools (MCPS) is required to remediate outlets where lead in drinking water concentrations exceed the Montgomery County Action Level (AL) of 5 parts per billion (ppb). A summary of the lead in water initial samples collected by SaLUT are presented in the table below.

Sampling Date	12/03/2021
# of Outlets Tested	69
# of Outlets \geq 5 ppb	3

NEXT STEPS

If an initial sample exceeds the AL (5 ppb), the outlet will be immediately shut-down, a follow-up sample collected, and a remedial plan of action developed for this outlet. No additional sampling or remedial actions are required for schools where all initial samples are below the AL.

HEALTH EFFECTS OF LEAD

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Lead is stored in the bones and it can be released later in life. During pregnancy, the fetus receives lead from the mother's bones, which may affect brain development. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

SOURCES OF HUMAN EXPOSURE TO LEAD

There are many different sources of human exposure to lead. These include: lead-based paint, lead-contaminated dust or soil, some plumbing materials, certain types of pottery, pewter, brass fixtures, food, cosmetics, exposure in the work place and from certain hobbies. According to the Environmental Protection Agency (EPA), 10 to 20 percent of a person's potential exposure to lead may come from drinking water, while for an infant consuming formula mixed with lead-containing water this may increase to 40 to 60 percent.

TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER:

1. Run your water to flush out lead: If water hasn't been used for several hours, run water for 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
2. Use cold water for cooking and preparing baby formula: Lead from the plumbing dissolves more easily into hot water.

**Please note that boiling the water will not reduce lead levels.*

ADDITIONAL INFORMATION

1. For additional information, please contact Brian Mullikin, Environmental Team Leader, at 240.740.2324 or brian_a_mullikin@mcpsmd.org.
2. For additional information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at www.epa.gov/lead.
3. If you are concerned about exposure; contact your local health department or healthcare provider to find out how you can get your child tested for lead.

Please refer to the attachment(s) for additional water sampling information.

Attachment(s) A – Lead in Water Sample Results Table

ATTACHMENT A

Lead in Water Sample Results Table

Sampling Results for Carderock Springs ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
M08626	In classroom 109	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08627	In classroom 109	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08622	In classroom 111	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08623	In classroom 111	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08631	In classroom 112	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08632	In classroom 112	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08619	In classroom 115	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08618	In classroom 115	Classroom Combination Drinking Fountain	1.1	Pass	N/A	Testing Complete
M08628	In classroom 116	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08629	In classroom 116	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08624	In classroom 120	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08625	In classroom 120	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08620	In classroom 124	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08621	In classroom 124	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08652	In classroom 129	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08653	In classroom 129	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08648	In classroom 132	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08649	In classroom 132	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08650	In classroom 136	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08651	In classroom 136	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08654	In classroom 140	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08655	In classroom 140	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08684	In classroom 15	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08685	In classroom 15	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08682	In classroom 16	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08681	In classroom 16	Classroom Combination Drinking Fountain	1.4	Pass	N/A	Testing Complete
M08678	In classroom 19	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08676	In classroom 20	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08677	In classroom 20	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08591	In classroom 202	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete

M08592	In classroom 202	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08593	In classroom 206	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08594	In classroom 206	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08671	In classroom 21	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08672	In classroom 21	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08595	In classroom 212	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08596	In classroom 212	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08674	In classroom 24	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08675	In classroom 24	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08666	In classroom 25	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08667	In classroom 25	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08669	In classroom 28	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08670	In classroom 28	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08694	In classroom 3	Classroom Combination Sink	4.6	Pass	N/A	Testing Complete
M08697	In classroom 30	Classroom Combination Sink	7.1	Fail	<1	Testing Complete
M08696	In classroom 30	Classroom Combination Drinking Fountain	7.3	Fail	<1	Testing Complete
M08643	In exam room 102B by health 102	Nurses Office Sink	5.0	Fail	<1	Testing Complete
LW01931	In hallway adjacent to gym 42	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW01932	In hallway adjacent to gym 42	Drinking Fountain	<1	Pass	N/A	Testing Complete
M08664	In hallway next to 135B office	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M08659	In hallway next to boys bathroom 133	Drinking Fountain	<1	Pass	N/A	Testing Complete
M08660	In hallway next to boys bathroom 133	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10246	In hallway next to CR 212	Bottle Filler	<1	Pass	N/A	Testing Complete
M08597	In hallway next to CR 212	Drinking Fountain	<1	Pass	N/A	Testing Complete
M08598	In hallway next to CR 212	Drinking Fountain	<1	Pass	N/A	Testing Complete
M08636	In hallway next to GBR 108	Drinking Fountain	<1	Pass	N/A	Testing Complete
M08637	In hallway next to GBR 108	Drinking Fountain	<1	Pass	N/A	Testing Complete
M08689	In hallway next to girls bathroom 08	Drinking Fountain	<1	Pass	N/A	Testing Complete
M08690	In hallway next to girls bathroom 08	Drinking Fountain	<1	Pass	N/A	Testing Complete
M08642	In health room 102	Nurses Office Sink	<1	Pass	N/A	Testing Complete
LW01928	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW01929	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW01930	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete

M08705	In kitchen 33	Kitchen Sink	1.3	Pass	N/A	Testing Complete
M08647	In media center 101A	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M08698	In music 34	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M08699	In music 34	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M08718	In staff lounge 40	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
M08646	In work room 100E by admin	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete



**MONTGOMERY COUNTY PUBLIC SCHOOLS
LEAD IN DRINKING WATER TESTING 2018**

**Executive Summary:
Carderock Springs Elementary School**

7401 Persimmon Tree Lane,
Bethesda, MD 20817

Date of Test Report:	6/1/2018
Round of Testing:	Initial
# of Outlets Tested:	67
# of Outlets \geq 20 ppb:	0
Low Value (ppb):	< 1.0
High Value (ppb):	8.4

Project Status

Initial testing complete: All results less than 20 ppb.



June 1, 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: Carderock Springs Elementary School
7401 Persimmon Tree Lane,
Bethesda, MD 20817

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 Carderock Springs Elementary School, located at 7401 Persimmon Tree Lane, Bethesda, MD 20817.

Scope of Services:

PSI conducted lead in water testing at Carderock Springs 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 4/19/18 and 4/20/18 to collect samples from 67 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.

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 no results of the lead in water analysis at or above 20 parts per billion (ppb).

The lead in water sample results < 20 ppb for sample collection date 4/20/18 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.

A handwritten signature in black ink that reads "Nand Kaushik".

Nand Kaushik, P.E.
Department Manager, Environmental Services
Nand.Kaushik@psiusa.com

Attachments: A – Lead in Water Test Summary Table

ATTACHMENT A

Lead in Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Sample Results for Carderock Springs Elementary School

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW01928		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW01929		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW01930		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW01931		Hallway	Across From 42	Cooler	<1.0	Pass	Testing Complete
LW01932		Hallway	Across From 42	Cooler	<1.0	Pass	Testing Complete
LW01933		Break Room		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08591	202	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08592	202	Classroom		Faucet	<1.0	Pass	Testing Complete
M08593	206	Classroom		Faucet	<1.0	Pass	Testing Complete
M08594	206	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08595	212	Classroom		Faucet	<1.0	Pass	Testing Complete
M08596	212	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08597		Hallway	Next to CR 212	Cooler	<1.0	Pass	Testing Complete
M08598		Hallway	Next to CR 212	Cooler	<1.0	Pass	Testing Complete
M08618	115	Classroom		Faucet	<1.0	Pass	Testing Complete
M08619	115	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08620	124	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08621	124	Classroom		Faucet	<1.0	Pass	Testing Complete
M08622	111	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08623	111	Classroom		Faucet	<1.0	Pass	Testing Complete
M08624	120	Classroom		Faucet	<1.0	Pass	Testing Complete
M08625	120	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08626	109	Classroom		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M08627	109	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08628	116	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08629	116	Classroom		Faucet	<1.0	Pass	Testing Complete
M08631	112	Classroom		Faucet	<1.0	Pass	Testing Complete
M08632	112	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08636		Hallway	Next to GBR 108	Cooler	<1.0	Pass	Testing Complete
M08637		Hallway	Next to GBR 108	Cooler	<1.0	Pass	Testing Complete
M08642	102	Health		Faucet	<1.0	Pass	Testing Complete
M08646	100E	Work Room Admin	Inside Admin	Faucet	<1.0	Pass	Testing Complete
M08647	101A	Media Center	Inside IMC	Faucet	<1.0	Pass	Testing Complete
M08648	132	Classroom		Faucet	<1.0	Pass	Testing Complete
M08649	132	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08650	136	Classroom		Faucet	<1.0	Pass	Testing Complete
M08651	136	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08652	129	Classroom		Faucet	<1.0	Pass	Testing Complete
M08653	129	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08654	140	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08655	140	Classroom		Faucet	<1.0	Pass	Testing Complete
M08659		Classroom	Next to BBR 133	Cooler	<1.0	Pass	Testing Complete
M08660		Hallway	Next to BBR 133	Cooler	<1.0	Pass	Testing Complete
M08664		Hallway	Next to 135B Office	Faucet	<1.0	Pass	Testing Complete
M08666	25	Classroom		Faucet	<1.0	Pass	Testing Complete
M08667	25	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08669	28	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08670	28	Classroom		Faucet	1.2	Pass	Testing Complete
M08671	21	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08672	21	Classroom		Faucet	<1.0	Pass	Testing Complete
M08674	24	Classroom		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M08675	24	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08676	20	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08677	20	Classroom		Faucet	<1.0	Pass	Testing Complete
M08678	19	Classroom		Faucet	<1.0	Pass	Testing Complete
M08679	19	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08681	16	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08682	16	Classroom		Faucet	<1.0	Pass	Testing Complete
M08684	15	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08689		Hallway	Next to GBR 08	Cooler	<1.0	Pass	Testing Complete
M08690		Hallway	Next to GBR 08	Cooler	<1.0	Pass	Testing Complete
M08694	3	Counselor		Faucet	5.8	Pass	Testing Complete
M08695	3	Counselor		Bubbler - Indoor	8.4	Pass	Testing Complete
M08698	34	Music		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08699	34	Music		Faucet	<1.0	Pass	Testing Complete
M08705	33	Kitchen		Faucet	<1.0	Pass	Testing Complete
M08718	40	Break Room		Faucet	<1.0	Pass	Testing Complete

*ppb = parts per billion