



MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 10, 2018

Executive Summary:
Stone Mill Elementary School
1423 Stonebridge View Dr.
North Potomac, MD 20878

Round of Testing:	Initial
# of Outlets Tested:	82
# of Outlets \geq 20 ppb:	2
Low Value (ppb):	< 1.0
High Value (ppb):	35.4
Follow-Up Testing Required (Samples \geq 20 ppb):	Kitchen (23.0 ppb) Classroom 1 (35.4 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	2

Project Status **Testing Complete: Remediation Plan**

Kitchen – Replace fixture (M05733), in addition to supply line and valve located under sink
Classroom 1 – Replace fixture (LW07131), 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: Stone Mill Elementary School
1423 Stonebridge View Dr.
North Potomac, MD 20878

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 Stone Mill Elementary School, located at 1423 Stonebridge View Dr. in North Potomac, MD 20878.

Scope of Services:

PSI conducted lead in water testing at Stone 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 3/14/18 and 3/15/18 to collect samples from 82 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. Two 30 second follow-up sample were collected on 4/18/18.

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)
M05733	Kitchen	3/15/18	23.0	4/18/18	Non Detect
LW07131	Classroom 1	3/15/18	35.4	4/18/18	Non Detect

The initial lead in water sample results (03/15/2018) and 30 second follow up results (4/18/18) 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

Stone Mill ES Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

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

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW07129		Work Room Office		Faucet	<1.0	Pass	Testing Complete
LW07130		Health Room		Faucet	<1.0	Pass	Testing Complete
LW07131	1	Classroom		Faucet	35.4	Fail	Follow-Up Testing Needed
LW07132	1	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
LW07133	1	Classroom		Faucet	8.4	Pass	Testing Complete
LW07134	3	Classroom		Faucet	4.4	Pass	Testing Complete
LW07135	3	Classroom		Faucet	2.0	Pass	Testing Complete
LW07136	3	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07137	5	Classroom		Faucet	1.4	Pass	Testing Complete
LW07138	5	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07139	5	Classroom		Faucet	11.2	Pass	Testing Complete
LW07140	7	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07141	7	Classroom		Faucet	6.1	Pass	Testing Complete
LW07142	7	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete
LW07143	8	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07144	9	Classroom		Faucet	1.7	Pass	Testing Complete
LW07145	9	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete
LW07146	11	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07147	11	Classroom		Faucet	1.5	Pass	Testing Complete
LW07148	12	Classroom		Faucet	2.1	Pass	Testing Complete
LW07149	12	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07150	13	Classroom		Faucet	4.6	Pass	Testing Complete
LW07151	13	Classroom		Bubbler - Indoor	18.4	Pass	Testing Complete
LW07152	15	Classroom		Faucet	1.3	Pass	Testing Complete
LW07154	17	Classroom		Bubbler - Indoor	2.4	Pass	Testing Complete
LW07155	28	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07158	27	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07184	26	Classroom		Faucet	1.7	Pass	Testing Complete
LW07185	26	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW07229	2	Classroom		Faucet	2.2	Pass	Testing Complete
LW07230	2	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07231	4	Dual Purpose Room		Faucet	1.9	Pass	Testing Complete
LW07416		Material Prep Area		Faucet	1.6	Pass	Testing Complete
LW07418	10	Classroom		Faucet	2.3	Pass	Testing Complete
LW07419	10	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW07420		Hallway	Across From Rm 12	Cooler	<1.0	Pass	Testing Complete
LW07421		Hallway	Across From Rm 12	Cooler	<1.0	Pass	Testing Complete
LW07422		Hallway	Across From Rm 15	Cooler	<1.0	Pass	Testing Complete
LW07423		Hallway	Across From Rm 15	Cooler	<1.0	Pass	Testing Complete
LW07424	16	Classroom		Faucet	4.5	Pass	Testing Complete
LW07425	16	Classroom		Bubbler - Indoor	2.1	Pass	Testing Complete
LW07426	18	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07428	17	Classroom		Faucet	1.5	Pass	Testing Complete
LW07429	19	Classroom		Faucet	1.0	Pass	Testing Complete
LW07430	19	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07431	21	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07432	21	Classroom		Faucet	1.5	Pass	Testing Complete
LW07433	23	Classroom		Faucet	2.7	Pass	Testing Complete
LW07434	23	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07435		Hallway	Across From Rm 20	Cooler	<1.0	Pass	Testing Complete
LW07436		Hallway	Across From Rm 20	Cooler	<1.0	Pass	Testing Complete
LW07437		Hallway	Across From Rm 20	Cooler	<1.0	Pass	Testing Complete
LW07438		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW07439		Hallway	Hall Across From 31	Cooler	<1.0	Pass	Testing Complete
LW07440	39	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07441	39	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07443	37	Classroom		Faucet	1.4	Pass	Testing Complete
LW07444	35	Classroom		Faucet	2.1	Pass	Testing Complete
LW07445	35	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07446	33	Classroom		Faucet	2.7	Pass	Testing Complete
LW07447	31	Classroom		Faucet	4.6	Pass	Testing Complete
LW07449	29	Classroom		Bubbler - Indoor	1.9	Pass	Testing Complete
LW07450	29	Classroom		Faucet	3.9	Pass	Testing Complete
LW07451		Hallway	Across From Room 27	Cooler	<1.0	Pass	Testing Complete
LW07452	RES.	Resource Center		Faucet	9.4	Pass	Testing Complete
LW07454	22	Music		Faucet	3.4	Pass	Testing Complete
LW07455	38	Classroom		Faucet	1.9	Pass	Testing Complete
LW07457	36	Classroom		Faucet	1.2	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW07458	36	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07459	34	Classroom		Faucet	1.2	Pass	Testing Complete
LW07461	32	Classroom		Faucet	1.0	Pass	Testing Complete
LW07462	32	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW07463	24	Classroom		Faucet	1.4	Pass	Testing Complete
LW07465	25	Classroom		Faucet	6.9	Pass	Testing Complete
LW07466	25	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
M05731		Kitchen		Faucet	1.0	Pass	Testing Complete
M05732		Kitchen		Faucet	<1.0	Pass	Testing Complete
M05733		Kitchen		Faucet	23.0	Fail	Follow-Up Testing Needed
M05804	20	Break Room		Faucet	<1.0	Pass	Testing Complete
M05805	20	Break Room		Instant Hot Water	<1.0	Pass	Testing Complete
M05814		Hallway	Hall Across From 31	Cooler	<1.0	Pass	Testing Complete
M05821	33	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete

*ppb = parts per billion

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

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

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 nd) (PPB)	Initial draw (3 rd) (PPB)	30 Second Draw (PPB)	Status
M05733		Kitchen	Faucet	ND	55.0	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07131	1	Classroom	Faucet	2.2	5.8	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink

*ppb = parts per billion
 ND = Non Detect

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.