



MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 25, 2018

Executive Summary:
JoAnn Leleck Elementary School at Broad Acres
710 Beacon Road
Silver Spring, MD 20903

Round of Testing:	Initial
# of Outlets Tested:	95
# of Outlets \geq 20 ppb:	5
Low Value (ppb):	< 1.0
High Value (ppb):	85.7
Follow-Up Testing Required (Samples \geq 20 ppb):	Room 406 (27.9 ppb) Room 309 (20.9 ppb) Room 220 (22.3 ppb) Room 304 (85.7 ppb) Room 304 (37.2 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	5

Project Status **Testing Complete: Remediation Plan**

Art Room 406– Replace fixture (LW07173), in addition to supply line and valve located under sink
 Classroom 309– Replace fixture (LW08787), in addition to supply line and valve located under sink
 Kitchen– Replace fixture (LW08793), in addition to supply line and valve located under sink
 Classroom 304– Replace fixture (LW08846), in addition to supply line and valve located under sink
 Classroom 304– Replace fixture (LW08847), in addition to supply line and valve located under sink



May 25, 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: JoAnn Leleck Elementary School at Broad Acres
710 Beacon Road
Silver Spring, MD 20903

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 JoAnn Leleck Elementary School at Broad Acres, located at 710 Beacon Road in Silver Spring, MD 20903.

Scope of Services:

PSI conducted lead in water testing at JoAnn Leleck Elementary School at Broad Acres 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 4/3/18 and 4/4/18 to collect samples from 95 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. Five 30 second follow-up samples were 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 were five 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)
LW07173	Art Room	4/4/18	27.9	5/8/18	<1.0
LW08787	Classroom	4/4/18	20.9	5/8/18	<1.0
LW08793	Kitchen	4/4/18	22.3	5/8/18	<1.0
LW08846	Classroom	4/4/18	85.7	5/8/18	<1.0
LW08847	Classroom	4/4/18	37.2	5/8/18	3.2

The initial lead in water sample results (4/4/2018) 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

JoAnn Leleck ES at Broad Acres Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for JoAnn Leleck Elementary School at Broad Acres (4/4/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW07168	404	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07169	406	Art		Faucet	1.7	Pass	Testing Complete
LW07170	406	Art		Faucet	1.1	Pass	Testing Complete
LW07171	406	Art		Faucet	3.6	Pass	Testing Complete
LW07173	406	Art		Bubbler - Indoor	27.9	Fail	Follow-Up Testing Needed
LW07175	411	Preschool		Faucet	8.1	Pass	Testing Complete
LW07176	411	Preschool		Bubbler - Indoor	3.5	Pass	Testing Complete
LW07177	110	Office Media Center		Faucet	2.3	Pass	Testing Complete
LW07178	112B	Media Center		Faucet	5.5	Pass	Testing Complete
LW07180		Hallway	In Front of Room 112A	Cooler	<1.0	Pass	Testing Complete
LW07186	101	Work Room		Faucet	<1.0	Pass	Testing Complete
LW07187	100	Administration		Faucet	<1.0	Pass	Testing Complete
LW07188	104	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07189	104	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07190	102	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07191	102	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete
LW07192		Hallway	In Front of 404	Cooler	<1.0	Pass	Testing Complete
LW07193	404	Classroom		Faucet	8.6	Pass	Testing Complete
LW08736		Hallway	In Front of Room 112A	Cooler	<1.0	Pass	Testing Complete
LW08737	114	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08738	114	Classroom		Bubbler - Indoor	2.7	Pass	Testing Complete
LW08739	116	Classroom		Faucet	4.1	Pass	Testing Complete
LW08740	116	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08741	107	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08742	107	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08743	109	Classroom		Faucet	2.5	Pass	Testing Complete
LW08745	111	Classroom		Faucet	14.4	Pass	Testing Complete
LW08746	111	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08747	113	Classroom		Faucet	1.8	Pass	Testing Complete
LW08748	113	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08749	115	Classroom		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW08750	115	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08751	418	Classroom		Faucet	1.2	Pass	Testing Complete
LW08752	418	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08753	416	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08754	416	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08755	414	Classroom		Faucet	3.9	Pass	Testing Complete
LW08756	414	Classroom		Bubbler - Indoor	2.0	Pass	Testing Complete
LW08757	410	Classroom		Faucet	2.0	Pass	Testing Complete
LW08758	410	Classroom		Bubbler - Indoor	7.3	Pass	Testing Complete
LW08759	208	Break Room		Faucet	1.1	Pass	Testing Complete
LW08761	205	Classroom		Faucet	4.7	Pass	Testing Complete
LW08762	417	Kindergarten		Faucet	1.0	Pass	Testing Complete
LW08763	417	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08764	415	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08765	415	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08766	412	Classroom		Faucet	1.2	Pass	Testing Complete
LW08767	412	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW08768	408	Classroom		Faucet	1.4	Pass	Testing Complete
LW08771		Health Room		Faucet	<1.0	Pass	Testing Complete
LW08772		Health Room		Faucet	9.1	Pass	Testing Complete
LW08773		Health Room		Faucet	<1.0	Pass	Testing Complete
LW08774	203	Classroom		Faucet	2.3	Pass	Testing Complete
LW08775	207	Classroom		Faucet	16.5	Pass	Testing Complete
LW08776	335	Classroom		Faucet	3.4	Pass	Testing Complete
LW08777	335	Classroom		Bubbler - Indoor	7.5	Pass	Testing Complete
LW08778	333	Classroom		Faucet	1.6	Pass	Testing Complete
LW08779	331	Classroom		Faucet	2.7	Pass	Testing Complete
LW08780	331	Classroom		Bubbler - Indoor	3.0	Pass	Testing Complete
LW08781	329	Resource Center		Faucet	9.6	Pass	Testing Complete
LW08783		Hallway	Next to 317	Cooler	<1.0	Pass	Testing Complete
LW08784		Hallway	Next to 317	Cooler	<1.0	Pass	Testing Complete
LW08785	311	Art		Faucet	2.5	Pass	Testing Complete
LW08787	309	Classroom		Faucet	20.9	Fail	Follow-Up Testing Needed
LW08788	210	Classroom		Bubbler - Indoor	8.3	Pass	Testing Complete
LW08789	212	Classroom		Faucet	11.4	Pass	Testing Complete
LW08790		Hallway	In Front of Gym	Cooler	<1.0	Pass	Testing Complete
LW08791		Hallway	In Front of Gym	Cooler	<1.0	Pass	Testing Complete
LW08792	220	Kitchen		Faucet	1.6	Pass	Testing Complete
LW08793	220	Kitchen		Faucet	22.3	Fail	Follow-Up Testing Needed
LW08794	220	Kitchen		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW08795	220	Kitchen		Faucet	<1.0	Pass	Testing Complete
LW08796	330	Classroom		Faucet	2.9	Pass	Testing Complete
LW08798	328	Classroom		Faucet	2.3	Pass	Testing Complete
LW08799	326	Classroom		Faucet	2.1	Pass	Testing Complete
LW08814	305	Classroom		Faucet	6.8	Pass	Testing Complete
LW08815	303	Classroom		Faucet	2.4	Pass	Testing Complete
LW08817	301	Classroom		Bubbler - Indoor	4.9	Pass	Testing Complete
LW08818		Health Room		Faucet	4.3	Pass	Testing Complete
LW08819		Health Room		Faucet	<1.0	Pass	Testing Complete
LW08840	322	Classroom		Faucet	4.9	Pass	Testing Complete
LW08842	318	Classroom		Faucet	2.0	Pass	Testing Complete
LW08843	318	Classroom		Bubbler - Indoor	9.1	Pass	Testing Complete
LW08844	316	Classroom		Faucet	3.4	Pass	Testing Complete
LW08846	304	Classroom		Faucet	85.7	Fail	Follow-Up Testing Needed
LW08847	304	Classroom		Bubbler - Indoor	37.2	Fail	Follow-Up Testing Needed
LW08848	302	Classroom		Faucet	12.0	Pass	Testing Complete
LW08850	300	Classroom		Faucet	4.5	Pass	Testing Complete
LW08851	300	Classroom		Bubbler - Indoor	2.2	Pass	Testing Complete
LW08744	109	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M27871	309	Classroom		Bubbler - Indoor	13.9	Pass	Testing Complete
M27876	314	Classroom		Faucet	3.1	Pass	Testing Complete
M27879	328	Classroom		Bubbler - Indoor	13.2	Pass	Testing Complete
M27882	333	Classroom		Bubbler - Indoor	2.6	Pass	Testing Complete

*ppb = parts per billion

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

Follow Up Sample Results for JoAnn Leleck Elementary School at Broad Acres (5/8/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 nd) (PPB)	30 Second Draw (PPB)	Status
LW07173	406	Art Room	Bubbler- Indoor	8.2	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW08787	309	Classroom	Faucet	2.7	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW08793	220	Kitchen	Faucet	1.0	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW08846	304	Classroom	Faucet	7.0	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW08847	304	Classroom	Bubbler- Indoor	6.4	3.2	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.