

# Montgomery County Public Schools Lead in Drinking Water Testing Report

**Winston Churchill High School  
11300 Gainsborough Rd  
Potomac, MD 20854**

**Report Date: March 30<sup>th</sup>, 2020**

## 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	3/10/2020
# of Outlets Tested	57
# of Outlets $\geq$ 5 ppb	1

## 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. Due to the Stay-at-Home Order to combat the spread of COVID-19 (coronavirus), no follow-up samples were collected. 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](mailto: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](http://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 Winston Churchill HS

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW04827	In hallway 156 across from	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04828	In hallway 156 across from	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04829	In kitchen 158 by cafeteria	Kitchen Sink	1.9	Pass	N/A	Testing Complete
LW04830	In work room 107I by counselor	Classroom Sink	<1	Pass	N/A	Testing Complete
LW04831	In hallway 138A next to	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04832	In math 138 by office	Classroom Sink	<1	Pass	N/A	Testing Complete
LW04833	In classroom 155	Classroom Sink	1.6	Pass	N/A	Testing Complete
LW04834	In classroom 155	Classroom Sink	<1	Pass	N/A	Testing Complete
LW04835	In office 239	Classroom Sink	<1	Pass	N/A	Testing Complete
LW04836	In hallway 238A next to	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04837	In hallway 236 next to	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04838	In hallway 245 across from	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04839	In hallway 249 next to	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04840	In hallway 250 across from	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04841	In locker room - girls 139A across from	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04842	In locker room - girls 139A	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04843	In training room 137A	Classroom Sink	<1	Pass	N/A	Testing Complete
LW04844	In hallway 176 next to	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04845	In hallway 176 across from	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04846	In hallway 137A outside of	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04848	In hallway 127G outside of	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04849	In hallway 127G outside of	Drinking Fountain	<1	Pass	N/A	Testing Complete
M39539	In kitchen 158 by kitchen	Ice Machine	<1	Pass	N/A	Testing Complete
M39540	In classroom 154C	Classroom Sink	<1	Pass	N/A	Testing Complete

M39595	In office 132A	Classroom Sink	<1	Pass	N/A	Testing Complete
M39780	In office 142	Classroom Sink	<1	Pass	N/A	Testing Complete
M39793	In work room 144J by administration	Classroom Sink	<1	Pass	N/A	Testing Complete
M39796	In health room 100	Nurses Office Sink	<1	Pass	N/A	Testing Complete
M39799	In break room 232	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
M39801	In english office 235	Classroom Sink	<1	Pass	N/A	Testing Complete
M39839	In hallway 264 next to	Drinking Fountain	<1	Pass	N/A	Testing Complete
M42491	In hallway 136 next to	Drinking Fountain	3.6	Pass	N/A	Testing Complete
M42492	In hallway 150 across from CR 150	Drinking Fountain	<1	Pass	N/A	Testing Complete
M42552	In classroom 130	Classroom Sink	<1	Pass	N/A	Testing Complete
M42563	In social studies 238 by office	Classroom Sink	<1	Pass	N/A	Testing Complete
M42591	In copy room 242a	Classroom Sink	<1	Pass	N/A	Testing Complete
M42616	In office 203c	Classroom Sink	<1	Pass	N/A	Testing Complete
M42671	In Language office 262 by office	Classroom Sink	<1	Pass	N/A	Testing Complete
M42672	In media center office 245A	Classroom Sink	<1	Pass	N/A	Testing Complete
M42799	In hallway 132 next to CR 132	Drinking Fountain	<1	Pass	N/A	Testing Complete
M42800	In hallway 132 next to CR 132	Drinking Fountain	<1	Pass	N/A	Testing Complete
M45538	In kitchen 158 by kitchen	Kitchen Sink	4.5	Pass	N/A	Testing Complete
M45539	In kitchen 158 by kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M45540	In kitchen 158 by kitchen	Kitchen Sink	4.2	Pass	N/A	Testing Complete
M45542	In kitchen 158 by cafeteria	Kitchen Sink	<1	Pass	N/A	Testing Complete
M45543	In kitchen 158 by cafeteria	Kitchen Sink	<1	Pass	N/A	Testing Complete
M45545	In kitchen 158 by cafeteria	Kitchen Sink	<1	Pass	N/A	Testing Complete
M45546	In kitchen 158 by cafeteria	Kitchen Sink	<1	Pass	N/A	Testing Complete
M45541	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M45544	In kitchen 7 of 10 LTR	Kitchen Sink	193	Fail	NC	Remediation Action Plan
Lw07756	In hallway adjacent to 146 LTR	Drinking Fountain	<1	Pass	N/A	Testing Complete

Lw07757	In hallway adjacent to 146 2 of 2 LTR	Drinking Fountain	<1	Pass	N/A	Testing Complete
Lw07755	In office 203A	Classroom Sink	<1	Pass	N/A	Testing Complete
Lw07753		Drinking Fountain	<1	Pass	N/A	Testing Complete
Lw07752	In hallway adjacent to 176	Drinking Fountain	<1	Pass	N/A	Testing Complete
Lw07750	In hallway adjacent to 278	Drinking Fountain	<1	Pass	N/A	Testing Complete
Lw07751	In hallway adjacent to 278 2of 2 LTR	Drinking Fountain	<1	Pass	N/A	Testing Complete

NC - Not Collected (No follow-up sample collected due to COVID-19 (Coronavirus) Stay-at-Home Order.)



**MONTGOMERY COUNTY PUBLIC SCHOOLS LEAD IN DRINKING WATER  
POST-REMEDATION FOLLOW-UP TESTING 2019**

August 29, 2019

**Executive Summary:**  
**Winston Churchill High School**  
11300 Gainsborough Road, Potomac, MD 20854

<b>Round of Testing:</b>	<b>Post-Remediation Follow-Up</b>
Sample Date	01/24/2019
# of Outlets Tested:	1
# of Outlets $\geq$ 5 ppb:	0
Low Value (ppb):	<1.0
High Value (ppb):	<1.0

**Project Status**

**Testing Complete:** Post-remediation follow-up testing completed for following rooms:

Training Room 137A: Outlet (LW04843) will be placed back into service



August 29, 2019

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 Post-remediation follow-up Testing Service

Location: Cannon Road Elementary School  
901 Cannon Road,  
Silver Spring, MD 20904

Dear Mr. Mullikin:

Intertek-PSI Inc. is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of the post-remediation follow-up lead in water testing at Winston Churchill High School, located at 11300 Gainsborough Road, Potomac, MD 20854.

**Scope of Services:**

One (1) drinking water outlet was remediated at Winston Churchill High School due to initial lead levels that exceeded the lead action level of 5 parts per billion (ppb). Intertek-PSI conducted lead in water post-remediation follow-up testing in accordance with the Maryland Code of Regulations (COMAR) 26.16.07 - Lead in Drinking Water - Public and Nonpublic Schools.

Intertek-PSI visited the site on 01/23/2019 and 01/24/2019 to collect post-remediation follow-up sample from 1 drinking water outlet that had been replaced. 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:**

The initial, flush, and post-remediation follow-up results are highlighted in the summary table below:





Barcode ID	Room Number	Location	Notes	Equipment Type	Initial (ppb)	Flush (ppb)	Post-remediation follow-up (ppb)	Post-remediation follow-up Pass/Fail	Status
LW04843	137A	Training Room		Faucet	20.4	2.4	<1.0	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service

**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. The Environmental Protection Agency (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.

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,

**INTERTEK-PSI**

Nan Lin  
Department Manager, Environmental Services  
[nan.lin@intertek.com](mailto:nan.lin@intertek.com)



## Montgomery County Public Schools Lead in Drinking Water Testing 2018

April 27, 2018

### Executive Summary:

#### Winston Churchill High School

11300 Gainsborough Road

Potomac, Maryland 20854

Round of Testing:	Initial
# of Outlets Tested:	52
# of Outlets $\geq 20$ ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	20.4
Follow-Up Testing Required (Samples $\geq 20$ ppb):	Training Room (20.4 ppb)

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

### Project Status:

#### Testing Complete: Remediation Plan

Training Room - Replace fixture (LW0483), in addition to supply line and valve located under sink



April 27, 2018

Mr. Brian Mullikin, MS  
Environmental Team Leader  
Montgomery County Public Schools  
Division of Maintenance  
Gaithersburg, Maryland 20879

Re: Drinking Water Testing

KCI Job #1214634189

**Location: Winston Churchill High School**

11300 Gainsborough Road  
Potomac, Maryland 20854

Dear Mr. Mullikin:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of initial and follow-up lead in water testing at Winston Churchill High School, located at 11300 Gainsborough Road in Potomac, Maryland 20854.

**SCOPE OF SERVICES**

KCI conducted lead in water testing at Winston Churchill High 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.

KCI visited the site on 3/8/2018 and 3/9/2018 to collect samples from 52 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. On 4/12/2018, one 30 second follow-up sample was collected.

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.

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## **RESULTS**

There was one result of the 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:

<b>Barcode ID</b>	<b>Sample Location</b>	<b>Date Collected</b>	<b>Initial Sample Result (ppb)</b>	<b>Date Collected</b>	<b>30 Second Follow Up Sample Result (ppb)</b>
LW0483	Faucet - Training Room	3/9/2018	20.4	4/12/2018	2.0

The initial lead in water sample results (3/9/2018) and 30 second follow up results (4/12/2018) 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.

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Respectfully Submitted,  
KCI Technologies, Inc.



Kamau McAbee  
MDE Certified Water Sampler #8281KM

Attachment:

A- Lead in Water Test Summary Table

# ATTACHMENT A

## Lead in Water Test Summary Table

## ATTACHMENT A

### Lead in Water Test Summary Table

**Contractor:** KCI Technologies, Inc.

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

#### Initial Sample Results for Winston Churchill High School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04827	156	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
LW04828	156	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
LW04829	158	Kitchen Cafeteria		Faucet	1.5	Pass	Testing Complete
LW04830	107I	Work Room Counselor		Faucet	<1.0	Pass	Testing Complete
LW04831	138A	Hallway	Next To	Cooler	<1.0	Pass	Testing Complete
LW04832	138	Math Office		Faucet	<1.0	Pass	Testing Complete
LW04833	155	Classroom		Faucet	2.0	Pass	Testing Complete
LW04834	155	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04835	239	Office		Faucet	2.1	Pass	Testing Complete
LW04836	238A	Hallway	Next To	Cooler	<1.0	Pass	Testing Complete
LW04837	236	Hallway	Next To	Cooler	<1.0	Pass	Testing Complete
LW04838	245	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
LW04839	249	Hallway	Next To	Cooler	<1.0	Pass	Testing Complete
LW04840	250	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
LW04841	139A	Locker Room - Girls	Across From	Cooler	<1.0	Pass	Testing Complete
LW04842	139A	Locker Room - Girls		Cooler	<1.0	Pass	Testing Complete
LW04843	137A	Training Room		Faucet	20.4	Fail	Testing Complete
LW04844	176	Hallway	Next To	Cooler	<1.0	Pass	Testing Complete
LW04845	176	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
LW04846	137A	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW04847	128A4	Band Office		Faucet	<1.0	Pass	Testing Complete
LW04848	127G	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW04849	127G	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M39539	158	Kitchen		Ice Maker	<1.0	Pass	Testing Complete
M39540	154C	Classroom		Faucet	<1.0	Pass	Testing Complete
M39595	132A	Office		Faucet	<1.0	Pass	Testing Complete
M39780	142	Office		Faucet	<1.0	Pass	Testing Complete
M39793	144J	Work Room Administration		Faucet	<1.0	Pass	Testing Complete
M39796	100	Health Room		Faucet	<1.0	Pass	Testing Complete
M39799	232	Break Room		Faucet	<1.0	Pass	Testing Complete
M39801	235	English Office		Faucet	<1.0	Pass	Testing Complete
M39838	264	Hallway	Next To	Cooler	<1.0	Pass	Testing Complete
M39839	264	Hallway	Next To	Cooler	<1.0	Pass	Testing Complete
M42491	136	Hallway	Next To	Cooler	<1.0	Pass	Testing Complete
M42492	150	Hallway	Across from CR 150	Cooler	<1.0	Pass	Testing Complete
M42552	130	Classroom		Faucet	1.0	Pass	Testing Complete
M42563	238	Social Studies Office		Faucet	<1.0	Pass	Testing Complete
M42591	242a	Copy Room		Faucet	1.2	Pass	Testing Complete
M42616	203c	Office		Faucet	<1.0	Pass	Testing Complete
M42671	262	Language Office		Faucet	<1.0	Pass	Testing Complete
M42672	245A	Media Center Office		Faucet	<1.0	Pass	Testing Complete
M42799	132	Hallway	Next to CR 132	Cooler	<1.0	Pass	Testing Complete
M42800	132	Hallway	Next to CR 132	Cooler	<1.0	Pass	Testing Complete
M45538	158	Kitchen		Faucet	1.1	Pass	Testing Complete
M45539	158	Kitchen		Faucet	1.0	Pass	Testing Complete
M45540	158	Kitchen		Faucet	1.2	Pass	Testing Complete
M45541	158	Kitchen Cafeteria		Faucet	6.2	Pass	Testing Complete
M45542	158	Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
M45543	158	Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete



Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M45544	158	Kitchen Cafeteria		Faucet	7.7	Pass	Testing Complete
M45545	158	Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
M45546	158	Kitchen Cafeteria		Faucet	1.7	Pass	Testing Complete

\*PPB = parts per billion

**Contractor:** KCI Technologies, Inc.  
**Certified Laboratory:** Microbac Laboratories, Inc.

Follow Up Sample Result for Winston Churchill High School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
LW04843	137A	Training Room	Faucet	2.4	333	2.0	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.