

# Montgomery County Public Schools Lead in Drinking Water Testing Report

John T. Baker Middle School  
25400 Oak Drive  
Damascus, MD 20872

Report Date: February 18<sup>th</sup>, 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	10/27/2021
# of Outlets Tested	28
# 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](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 John T. Baker MS

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
M27591	In "kitchen" of work room at back of media center	Teachers Lounge Sink	1.1	Pass	N/A	Testing Complete
LW06019	In cafeteria	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06025	In classroom 117A	Classroom Sink	<1	Pass	N/A	Testing Complete
LW06024	In classroom 117B	Classroom Sink	<1	Pass	N/A	Testing Complete
LW06017	In classroom 121	Classroom Combination Sink	2	Pass	N/A	Testing Complete
M10394	In classroom 214	Classroom Sink	3.9	Pass	N/A	Testing Complete
LW06020	In hallway across from CR 134	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06021	In hallway across from CR 134	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06034	In hallway across from CR 225	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06035	In hallway across from CR 233	Drinking Fountain	<1	Pass	N/A	Testing Complete
M27606	In hallway across from CR 233 & 234	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06022	In hallway Close to CR 105	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06018	In hallway outside cafeteria	Drinking Fountain	2.6	Pass	N/A	Testing Complete
LW06026	In hallway outside of CR 117b	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06033	In hallway outside of CR 208	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06030	In health room by administration	Nurses Office Sink	1.3	Pass	N/A	Testing Complete
LW06031	In health room by administration	Drinking Fountain	<1	Pass	N/A	Testing Complete
E52753	In kitchen	Ice Machine	<1	Pass	N/A	Testing Complete
M10144	In kitchen	Kitchen Sink	1.8	Pass	N/A	Testing Complete
M10145	In kitchen	Kitchen Sink	5.3	Fail	1.8	Testing Complete
M10151	In kitchen	Kitchen Sink	2.7	Pass	N/A	Testing Complete
M11477	In kitchen	Kitchen Sink	2.5	Pass	N/A	Testing Complete
LW06027	In locker room - boys	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06023	In locker room - girls	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06028	In office by administration	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10985	In room 121	Classroom Combination Drinking Fountain	8.3	Fail	9	Testing Complete
LW06032	In work room at back of media center	Teachers Lounge Sink	6.2	Fail	26.6	Testing Complete
LW06029	In work room by administration	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete



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

November 13, 2019

**Executive Summary:**

**John T. Baker Middle School**  
25400 Oak Drive,  
Damascus, MD 20872

<b>Round of Testing:</b>	<b>Post-Remediation Follow-up</b>
Sample Date	02/01/2019
# of Outlets Tested:	1
# of Outlets $\geq$ 5 ppb:	1
Low Value (ppb):	12.30
High Value (ppb):	12.30

**Project Status**

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

Classroom 125 (Home Economics) – Outlet (M10176) will have signage affixed.



November 13, 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: John T. Baker Middle School  
25400 Oak Drive,  
Damascus, MD 20872

Dear Mr. Mullikin:

Intertek-PSI, Inc. is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of post-remediation lead in water testing at John T. Baker Middle School, located at 25400 Oak Drive, Damascus, MD 20872.

**Scope of Services:**

One (1) drinking water outlet was remediated at John T. Baker Middle School due to initial 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 02/01/2019 to collect post-remediation follow-up samples from 1 of 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
M10176	125	Home Economics		Faucet	195	35.3	12.3	Fail	Post-remediation follow-up testing complete. Outlet will have signage affixed

\*ppb = parts per billion

### **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.**

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:

#### John T. Baker Middle School

25400 Oak Drive

Damascus, Maryland 20872

Round of Testing:	Initial
# of Outlets Tested:	37
# of Outlets $\geq 20$ ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	195
Follow-Up Testing Required (Samples $\geq 20$ ppb):	Home Economics (195 ppb)

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

### Project Status:

#### Testing Complete: Remediation Plan

Home Economics - Replace fixture (M11076), 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 #1214634191

**Location: John T. Baker Middle School**

25400 Oak Drive  
Damascus, Maryland 20872

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 John T. Baker Middle School, located at 25400 Oak Drive in Damascus, Maryland 20872.

**SCOPE OF SERVICES**

KCI conducted lead in water testing at John T. Baker Middle 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 3/19/2018 and 3/20/2018 to collect samples from 37 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 4/13/2018, 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>
M11076	Faucet - Home Economics	3/20/2018	195	4/13/2018	35.3

The initial lead in water sample results (3/20/2018) and 30 second follow up results (4/13/2018) 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 John T. Baker Middle School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
E52753		Kitchen Cafeteria		Icemaker	<1.0	Pass	Testing Complete
LW06014		Kitchen Cafeteria		Faucet	8.7	Pass	Testing Complete
LW06015		Kitchen Cafeteria		Faucet	8.4	Pass	Testing Complete
LW06016		Kitchen Cafeteria		Faucet	5.1	Pass	Testing Complete
LW06017	121	Classroom		Faucet	2.2	Pass	Testing Complete
LW06018		Hallway	Outside Of Café	Cooler	1.2	Pass	Testing Complete
LW06019		Cafeteria		Cooler	<1.0	Pass	Testing Complete
LW06020		Hallway	Across From Cr 134	Cooler	<1.0	Pass	Testing Complete
LW06021		Hallway	Across From Cr 134	Cooler	<1.0	Pass	Testing Complete
LW06022		Hallway	Close To Cr 105	Cooler	1.8	Pass	Testing Complete
LW06023		Locker Room - Girls		Cooler	<1.0	Pass	Testing Complete
LW06024	117B	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06025	117A	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06026		Hallway	Outside Of Cr 117b	Cooler	<1.0	Pass	Testing Complete
LW06027		Locker Room - Boys		Cooler	<1.0	Pass	Testing Complete
LW06028		Office Administration		Cooler	<1.0	Pass	Testing Complete
LW06029		Work Room Administration		Faucet	<1.0	Pass	Testing Complete
LW06030		Health Room Administration		Faucet	1.1	Pass	Testing Complete
LW06031		Health Room Administration		Cooler	<1.0	Pass	Testing Complete
LW06032		Work Room Media Center		Faucet	8.7	Pass	Testing Complete
LW06033		Hallway	Outside Of Cr 208	Cooler	<1.0	Pass	Testing Complete
LW06035		Hallway	Across From Cr 233	Cooler	<1.0	Pass	Testing Complete
M10144		Kitchen Cafeteria		Faucet	3.2	Pass	Testing Complete
M10145		Kitchen Cafeteria		Faucet	3.9	Pass	Testing Complete
M10149		Kitchen Cafeteria		Faucet	12.4	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M10151		Kitchen Cafeteria		Faucet	4.0	Pass	Testing Complete
M10174		Break Room Cafeteria	Next to Dining Rm	Faucet	10.6	Pass	Testing Complete
M10176	125	Home Economics		Faucet	195	Fail	Follow-Up Testing Needed
M10177	125	Home Economics		Faucet	5.5	Pass	Testing Complete
M10178	125	Home Economics		Faucet	3.0	Pass	Testing Complete
M10179	125	Home Economics		Faucet	5.8	Pass	Testing Complete
M10180	125	Home Economics		Faucet	5.5	Pass	Testing Complete
M10181	125	Home Economics		Faucet	1.7	Pass	Testing Complete
M10394	214	Classroom		Faucet	2.5	Pass	Testing Complete
M11477		Kitchen Cafeteria	to the right of M10151	Faucet	1.5	Pass	Testing Complete
M27591		Kitchen Work Room	Media Center	Faucet	3.2	Pass	Testing Complete
M27606		Hallway	Across from CR 233 & 234	Cooler	<1.0	Pass	Testing Complete

\*PPB = parts per billion

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

Follow Up Sample Result for John T. Baker Middle School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)*	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)	Status
M10176	125	Home Economics	Faucet	NA	536	35.3	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.