



## 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.